# BUYING GREEN

## A Multifunctional Approach to Pollution Prevention

**January 2011**

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Department of Defense

# INSTRUCTION

NUMBER 4715.4

June 18,1996

Administrative Reissuance Incorporating Change 1, July 6, 1998

USD(A&T)

SUBJECT: Pollution Prevention

References: (a) DoD Directive 4715.1, “Environmental Security,” February 24, 1996
(b) *DoD 5025.1-M, "DoD Directives System Procedures," August 1994, authorized by DoD Directive 5025.1, June 24, 1994*
(c) DoD Instruction 4715.5, “Management of Environmental Compliance at Overseas Installation,” April 22, 1996
(d) Overseas Environmental Baseline Guidance Document, October 1992[1]
(e) DoD Directive 5000.1, “Defense Acquisition,” March 15, 1996
(f) through (kk) see enclosure E1.

## 1. PURPOSE

This Instruction:

1.1. Implements policy, assigns responsibility, and prescribes procedures under reference (a) for implementation of pollution prevention programs throughout the Department of Defense.

1.2. Designates Executive Agents to lead DoD implementation of key pollution prevention programs. Executive Agents are specified in enclosure E2.

1.3. *Authorizes the publication of "Guide for Qualified Recycling Programs", in accordance with reference (b)."*

[1] This reference can be found on the Defense Environmental Network Information Exchange (DENIX) electronic bulletin board.

## 2. APPLICABILITY AND SCOPE

This Instruction:

2.1. Applies to the Office of the Secretary of Defense (OSD); the Military Departments (including the Coast Guard when it is operating as a Military Service in the Navy); the Chairman of the Joint Chiefs of Staff; the Unified Combatant Commands, as appropriate; the Inspector General of the Department of Defense; the Defense Agencies; and the DoD Field Activities; including other integral DoD organizational entity or instrumentality established to perform a governmental function (hereafter referred to collectively as “the DoD Components"). The term "Military Services," as used herein, refers to the Army, the Navy, the Air Force and the Marine Corps.

2.2. Applies to DoD operations, activities, and installations in the United States, Puerto Rico, and territories or possessions over which the United States has jurisdiction, including Government-owned, contractor-operated (GOCO) facilities, and facilities supported by appropriated and non-appropriated funds. Outside the United States, section 4 and paragraph 6.2.3. of this Instruction shall apply, consistent with DoD Instruction 4715.5 (reference (*c*)), international agreements, status of forces agreements, and Final Governing Standards issued for host nations (or the Overseas Environmental Baseline Guidance Document (reference (*d*)) where no Final Governing Standards have been issued).

2.3. Applies to Program Executive Officers, Program Managers, and all other Material Developers, consistent with the policies, requirements, and procedures of DoD Directive 5000.1 (reference (*e*)) and DoD 5000.2-R (reference (*f*)).

2.4. Does not apply to:

2.4.1. Procurement, use, generation, storage, processing, disposal, or management in any sense of radioactive materials subject to regulation under E.O. 12344 (reference (*g*)), 42 U.S.C. 7158 (reference (*h*)); the Atomic Energy Act, 42 U.S.C. 2011 (reference (*i*)); or the Low Level Radioactive Waste Policy Act, 42 U.S.C. 2021b (reference (*j*)).

2.4.2. Additional pollution prevention requirements for transportation-related onshore and offshore facilities and vessels that are regulated by the U.S. Coast Guard. See 33 C.F.R. 154-156 (reference (*k*)) and 33 U.S.C. 1901-1912 (reference (*l*)).

2.4.3. The civil works function of the Department of the Army.

## 3. DEFINITIONS

To maintain consistency throughout the DoD Components, the terms and definitions in enclosure E3. apply for this Instruction, and shall be used for any supplemental or delegated regulations, instructions, or publications promulgated by the DoD Components.

## 4. POLICY

4.1. It is DoD policy to:

4.1.1. Ensure installations in the United States comply with applicable Federal, State, interstate, regional, and local environmental laws, regulations, and standards, and with relevant Executive Orders; or in the case of installations located outside the United States, with applicable Executive Orders, international agreements, Federal statutes with extraterritorial effect, and either the Final Governing Standards or the Overseas Environmental Baseline Guidance Document (reference (*d*)) where no Final Governing Standards have been issued.

4.1.2. Reduce the use of hazardous materials, the generation or release of pollutants, and the adverse effects on human health and the environment caused by DoD activities.

4.1.3. Reduce pollution through improvements in energy and water efficiency, the use of alternative fuels, and other activities that improve resource utilization.

4.2. It is DoD policy to accomplish the objectives using a management approach that:

4.2.1. Emphasizes pollution prevention, including improvements in energy and resource utilization, as the alternative of “first choice” in achieving compliance with applicable environmental requirements and Executive Orders.

4.2.2. Incorporates pollution prevention at installations, and into all phases of acquisition, operations, maintenance, support and ultimate disposal of weapon systems over the system life-cycle.

4.2.3. Uses the environmental management hierarchy to develop

environmental solutions. In descending order of preference, the Department of Defense will:

4.2.3.1. Prevent pollution at the source to eliminate or minimize adverse health effects while protecting, preserving, restoring, and enhancing the quality of the environment.

4.2.3.2. Reuse pollutants that cannot be eliminated. Recycle, in an environmentally safe manner, pollutants that cannot be reused.

4.2.3.3. Treat, in an environmentally safe manner, pollutants that cannot be eliminated or recycled.

4.2.3.4. Dispose or release pollutants into the environment only as a last recourse and only where such disposal or release can be controlled and conducted in a manner that is safe for human health and the environment and consistent with applicable legal requirements.

4.2.4. Reduces the life cycle costs of weapon systems by avoiding the use of hazardous materials.

4.2.5. Plans, programs and budgets to achieve the policies in this Instruction. Component budgeting procedures shall utilize the environmental quality classes defined in enclosure E3. and the following definitions for environmental compliance and pollution prevention:

4.2.5.1. Environmental compliance includes all activities and projects that utilize end-of-pipe treatment or disposal methods to meet applicable environmental requirements.

4.2.5.2. Compliance-type requirements that are satisfied by source reduction (pollution elimination or reduction), pollutant minimization, or recycling approaches are pollution prevention requirements and shall be funded as “pollution prevention.”

4.2.6. Instills knowledge and understanding by all personnel (military and civilian) of pollution prevention requirements through comprehensive education, training, career development, and awareness programs.

4.2.7. Promotes pollution prevention through positive relations and partnerships with Federal, State, Indian tribal, regional, and local government officials

as well as host country, other private, and public stakeholders.

4.2.8. Develops, demonstrates, and implements innovative pollution prevention technologies and business practices.

## 5. RESPONSIBILITIES

5.1. The Deputy Under Secretary of Defense For Environmental Security, under the Under Secretary of Defense for Acquisition and Technology, shall:

5.1.1. Consistent with the policies in DoD Directive 4715.1 (reference (a)), provide guidance, oversight, advocacy, and representation for environmental security pollution prevention programs.

5.1.2. Integrate the Department of Defense's pollution prevention program with other environmental, safety, and health programs.

5.1.3. Coordinate interaction with the Congress and Federal, State, Indian tribal, regional, host country, and local offices on pollution prevention issues.

5.1.4. Serve as the Department of Defense Environmental Executive in accordance with E.O. 12873 (reference (*m*)).

5.1.5. As the Principal Staff Assistant, ensure that the Defense Environmental Security Corporate Information Management (DESCIM) program management office develops and deploys systems that have the capability to support compliance with all applicable environmental laws and Executive Orders referenced by this Instruction, and allow for inventory management.

5.1.6. Monitor compliance with this Instruction, including progress toward achieving the appropriate measures of merit (enclosure E4.), and periodically review the DoD Component's pollution prevention programs.

5.1.7. Actively participate and support weapon system integrated product teams to ensure environmental, safety, and health (ESH) requirements are adequately addressed.

5.1.8. Advise the Defense Acquisition Board and the overarching integrated product teams on ESH issues.

5.1.9. In coordination with the DoD Components, designate a Service or Defense Agency as lead or Executive Agent for special pollution prevention-related issues or areas.

5.1.10. Develop and promulgate Environmental Security pollution prevention goals and objectives, and approve the means of measurement, in coordination with the DoD Components, for attaining those goals and objectives.

5.2. The Director, Defense Research and Engineering, under the Under Secretary of Defense for Acquisition and Technology, shall:

5.2.1. Develop an integrated, coordinated Science and Technology Program to address the pollution prevention technology requirements defined by the Deputy Under Secretary of Defense (DUSD(ES)).

5.2.2. Issue guidance to the DoD Components concerning pollution prevention Science and Technology Programs.

5.3. The Deputy Under Secretary of Defense for Logistics, under the Under Secretary of Defense for Acquisition and Technology, shall:

5.3.1. Develop policy and guidance to incorporate pollution prevention into all logistics activities, including support of weapon systems and hazardous material management systems.

5.3.2. Ensure that all environmental compliance statutory and Executive Order requirements that apply to DoD non-tactical vehicles are properly reflected in DoD 4500.36-R (reference (*n*)).

5.4. The Assistant Secretary of Defense for Economic Security, under the Under Secretary of Defense for Acquisition and Technology, shall:

5.4.1. Ensure that the DoD Components revise appropriate specifications, standards, and other standardization documents to eliminate or reduce the use of extremely hazardous substances, toxic chemicals, ozone-depleting substances, and other hazardous materials consistent with the safety, health, and reliability requirements of each Component's mission, as required by E.O. 12856 (reference (*o*)).

5.4.2. Promote the use of environmentally preferable products to the maximum extent practicable by revising specifications and standards, as appropriate,

as required by E.O. 12873 (reference (*m*)).

5.4.3. Promote pollution prevention by assisting the DoD Components to develop programs for energy conservation and use of energy from renewable sources, where cost effective.

5.4.4. Establish programs and policies for DoD-owned or leased buildings and facilities that promote sustainable development goals in accordance with E.O. 12902 (reference (*p*)), and coordinate policy and implementation oversight with DUSD(ES) to ensure program environmental goals are achieved.

5.5. The Director, Defense Logistics Agency, under the Under Secretary of Defense for Acquisition and Technology, shall:

5.5.1. Establish procedures and controls that ensure that when recyclable materials are consigned for disposal to the Defense Reutilization and Marketing Service (DRMS) on behalf of a qualified recycling program, 100% of any proceeds, less the costs of sales and handling, are returned to installations in accordance with established accounting procedures.

5.5.2. Operate and manage the DoD Ozone Depleting Substances Reserve including preparation of reports if required by Congress, through DUSD(ES), in accordance with 10 U.S.C. 2301 (reference (*q*)). Establish procedures governing operation of the Reserve.

5.6. The Heads of the DoD Components shall:

5.6.1. Ensure compliance with this Instruction.

5.6.2. Ensure pollution prevention is incorporated into all acquisition phases and across the entire life cycle (from concept exploration through system demilitarization and disposal) of all weapon systems. Pollution prevention for an active acquisition program shall be done in accordance with DoD Directive 5000.1 (reference (*e*)) and DoD 5000.2-R (reference (*f*)). Pollution prevention for fielded weapon systems not included within the scope of an active acquisition program shall be done in accordance with this Instruction.

5.6.3. Plan, program, and budget for pollution prevention programs in accordance with DoD guidance and fiscal policies.

5.7. The Secretaries of the Military Departments, the Directors of the Defense

Agencies and the DoD Field Activities shall:

5.7.1. Implement programs to monitor and achieve progress toward the Department's pollution prevention measures of merit. Measures of merit are given in enclosure E4.

5.7.2. Establish an affirmative procurement program in accordance with 42 U.S.C. 6962 (reference (*r*)) and E.O. 12873 (reference (*m*)).

5.7.3. Establish a program to purchase and operate alternative-fueled vehicles to reduce the emission of pollutants associated with non-tactical vehicles, as required by P.L. 102-486 (reference (*s*)), E. O. 12844 (reference (*t*)), and DoD 4500.36-R (reference (*n*)).

5.7.4. Research and develop innovative pollution prevention technologies in accordance with Director, Defense Research and Engineering guidance through partnerships among Federal agencies, Government laboratories, and the private sector.

5.7.5. Establish and execute cost-effective waste prevention and qualified recycling programs to reduce the volume of non-hazardous solid waste in accordance with 10 U.S.C. 2577 (reference (*u*)) and E.O. 12873 (reference (*m*)). Establish procedures governing qualified recycling programs.

5.7.6. Execute strategies to eliminate reliance on Ozone Depleting Substances (ODS) in accordance with E.O. 12843 (reference (*v*)) and 10 U.S.C. 2301 (reference (*q*)).

5.7.7. Provide necessary data to the Defense Logistics Agency so as to allow it to manage the DoD ODS Reserve and meet any reporting requirements, including those in DoD 4160.21-M (reference (*w*)).

5.7.8. Participate in periodic pollution prevention in-progress reviews (IPRs) as required by DUSD(ES).

5.7.9. Carry out the responsibilities of a lead or DoD Executive Agent for specific pollution prevention-related areas when designated by DUSD(ES) under paragraph 5.1.9., above. Designated DoD Executive Agents are in enclosure E2. The lead or Executive Agent shall:

5.7.9.1. Develop a charter outlining functions and responsibilities, to be approved by DUSD(ES) and coordinated with the DoD Components.

5.7.9.2. Report as appropriate, but at a minimum semi-annually, to the appropriate Defense Environmental Security Council (DESC) committee.

5.7.9.3. Ensure all policy issues are coordinated by the appropriate DoD Component and OSD chains of command.

5.7.10. Raise emerging DoD pollution prevention issues through the DESC, the Environment, Safety and Occupational Health Policy Board, or the DESC Pollution Prevention Committee, as established under DoD Directive 4715.1 (reference (a)).

## 6. PROCEDURES

6.1. The Heads of the DoD Components shall establish procedures that ensure that fielded weapon systems, not included within the scope of an active acquisition program, establish and maintain a pollution prevention program. The scope of the pollution prevention program shall, at a minimum, include the requirements that are applicable to active acquisition programs as required in DoD 5000.2-R (reference (*f*)), paragraphs 3.3.6, 4.3.7.2, 4.3.7.4, and 4.3.7.5.

6.2. The Secretaries of the Military Departments, the Directors of the Defense Agencies and the DoD Field Activities shall:

6.2.1. Participate in annual pollution prevention reviews as required by DUSD(ES). The review shall include, at a minimum, a progress report on the measures of merit outlined in enclosure E4.

6.2.2. Report to DLA estimates for ODS Defense requirements and provide them the data necessary to prepare any required reports, including those in 10 U.S.C. 2301 (reference (*q*)).

6.2.3. Ensure that all installations worldwide:

6.2.3.1. Maintain inventory management and control processes that minimize the use of hazardous materials, as appropriate, in the most economical manner.

6.2.3.2. Maintain and execute pollution prevention plans that identify goals and cost-effective management processes or technologies to eliminate or reduce the use and disposal of hazardous materials.

6.2.3.3. Establish recycling programs and procedures that:

6.2.3.3.1. Ensure, where cost effective, that all installations and activities have, or participate in, qualified recycling programs, and that installation recycling programs are available to serve all host and tenant organizations occupying space on the installation, including leased space.

6.2.3.3.2. Ensure, where cost effective, that contracts, awarded after the effective date of this Instruction, that provide for contractor operation of a government-owned or leased facility located within the United States, its territories, or possessions, include provisions that obligate the contractor to participate in a recycling program. Where cost effective, existing contracts covering GOCO facilities should be modified to incorporate recycling provisions. The DoD Components should require participation by contractors operating government-owned or leased facilities overseas where recycling programs are available.

6.2.3.3.3. Ensure that qualified recycling program procedures address recyclable materials, excluded materials, and other qualified recycling program materials. See definitions.

6.2.3.3.4. Divert recyclable materials (see definition) from the non-hazardous solid waste stream where economically feasible. Individual types of recyclable materials that make up a substantial percentage of the non-hazardous waste stream should be included in recycling programs unless doing so will make the overall recycling program unprofitable. Recyclable materials do not require informal screening as defined in DoD 4160.21-M (reference (*w*)).

6.2.3.3.5. Establish controls that ensure excluded materials (see definition), including those listed in 32 C.F.R. 172.2(b)(3) (reference (*x*), are not sold through a qualified recycling program.

6.2.3.3.6. Authorize installation commanders, as appropriate, to sell directly recyclable and other qualified recycling program materials, or to consign them to the DRMS for sale.

6.2.3.3.6.1. Installations must implement Component procedures that ensure U.S. trade security control policies are followed in accordance with DoD Instruction 4160.27 (reference (*y*) and DoD 4160.21-M-1 (reference (*z*), prior to directly selling firing-range-expended brass or mixed metals gleaned from firing range cleanup that do not require demilitarization and that are Munitions List

Items (MLI) or Strategic List Items (SLI). Expended brass shall be crushed, shredded, or otherwise destroyed prior to public sale.

6.2.3.3.6.2. Reuse Screening: Prior to selling directly other qualified recycling program materials, installations shall implement Component procedures for local reuse screening to consider reutilization, transfer, and donation programs in accordance with DoD 4160.21-M (reference (*w*)).

6.2.3.3.6.3. Ensure that outside the United States, disposition of recyclable and other qualified recycling program materials, derived from goods that have been imported duty-free, is accomplished, if at all, consistent with the provisions contained in status of forces, surplus or excess property agreements, or other international agreements with host nations

6.2.3.3.7. Ensure that distribution of recycling proceeds is consistent with 10 U.S.C. 2577 (reference (*u*)).

6.2.3.3.7.1. Sale proceeds shall first be used to cover the costs directly attributable to all installation recycling programs, including, but not limited to, manpower, facilities, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50% of the remaining proceeds for pollution abatement, pollution prevention, composting and alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects, with first consideration given to projects included in the installation's pollution prevention plan. Any remaining proceeds may be transferred to the non-appropriated Morale, Welfare and Recreation account for any approved programs.

6.2.3.3.7.2. An accounting and control system shall be established for recycling programs that provides detailed management and audit information, tracks material quantity handled, calculates sales and handling costs for recycled material, and tracks expenditures made for appropriate projects and Morale, Welfare and Recreation programs. Integrity of the audit trail will be a priority concern.

6.2.3.3.7.3. Materials: Ensure that appropriate management controls are in place for recyclable materials that may be hazardous, such as lead-acid batteries.

6.2.3.4. Operate a composting program or participate in a regional

composting program, if it is practicable to do so.

6.2.4. Ensure all installations in customs territory of the United States and Guam meet the following additional requirements:

6.2.4.1. Comply with the Toxic Release Inventory and Pollution Prevention Act Reporting requirements of section 3-304 of Executive Order 12856 (reference (*o*)).

6.2.4.2. Comply with the Emergency Planning and Community Right-to-Know Reporting Responsibilities requirements of section 3-305 of Executive Order 12856 (reference (*o*)).

6.2.4.3. Ensure that pollution prevention plans required by subparagraph 6.2.3.2., above, also comply with sections 3-302(d), 5-505, and 5-508 of Executive Order 12856 (reference (*o*)). In addition, the pollution prevention plans shall describe how the installation will contribute to meeting the goals of the Pollution Prevention Measures of Merit contained in enclosure E4.

6.2.5. Ensure all installations in the United States establish and execute a program to reduce the emission of air pollutants by DoD non-tactical vehicles by:

6.2.5.1. Acquiring alternative-fueled vehicles to meet the requirements of P.L. 102-486 (reference (*s*)), Executive Order 12844 (reference (*t*)), and DoD 4500.36-R (reference (*n*)), ensuring that such alternative-fueled vehicles meet mission needs.

6.2.5.2. Ensuring sufficient supporting infrastructure for alternative-fueled vehicles, relying on commercial infrastructure where feasible.

6.2.5.3. Planning placement of alternative-fueled vehicles to obtain maximum air quality benefits, including Clean Air Act credits under 42 U.S.C. 7401-7671 (reference (*aa*)).

6.3. The Director, Defense Logistics Agency, under the Under Secretary of Defense for Acquisition and Technology, shall:

6.3.1. Ensure that a uniform control system is established by the DRMS for recyclable materials consigned for disposal. This system shall be sufficiently detailed to provide management audit information to permit the DRMS to properly calculate sales and handling costs, and reimburse installations and organizations 100% of the

proceeds, net of costs, for materials sold.

6.3.2. Prepare ODS report for DoD submission to Congress as required by 10 U.S.C. 2301 (reference (*q*)). The report control symbol (RCS) is (DD-A&T(Q)1958).

## 7. INFORMATION REQUIREMENTS

7.1. Emergency Planning and Community Right-to-Know Act (EPCRA) Reporting. All DoD facilities within the customs territory of the United States and Guam meeting the 42 U.S.C. 11049(4) (reference (*bb*)) definition of "facility," regardless of Standard Industrial Classification Code, shall meet all requirements of Executive Order 12856 (reference (*o*)). All DoD facilities exceeding the Section 313 of 42 U.S.C. 11023 (reference (*cc*)) toxic chemical thresholds must file a Toxic Chemical Release Inventory report, Form R, to the Environmental Protection Agency (EPA) and appropriate State regulatory agency for each toxic chemical meeting threshold requirements, even if no releases or off-site transfers have occurred. Each DoD Component shall submit a copy of each Form R from their installations to DUSD(ES).

7.2. Alternative-Fueled Vehicle Reporting. The DoD Components shall provide required information to Department of Energy's (DoE) Energy Information Administration (Form EIA 886, Part III), the General Services Administration (GSA Standard Form 82), and will prepare an annual report as required by Section 6 of E.O. 12844 (reference (*t*)). Each Component will forward a copy of its annual report to DUSD(ES).

7.3. Alternative Fuels Reporting. The DoD Components shall report directly to the ASD(ES) on DoE's Federal Energy Management Program (DoE Form 6200.2).

7.4. Office of Federal Procurement Policy and E. O. 12873 (reference (*m*)) The DoD Components are required annually to provide data to DUSD(ES) that summarizes their purchases of commodities not purchased through other government agencies meeting the EPA guideline requirements and other actions they are taking to meet the intent of the Executive Order. See 42 U.S.C. 6962 (reference (*r*)) and E.O. 12873 (reference (*m*)).

7.5. Annual Pollution Prevention Review. The DoD Components will present an IPR on their program (per subparagraph 5.7.8., above) to DUSD(ES).

7.6. Executive Order 12856 (reference (*o*)). The DoD Components are required

to provide information annually to DUSD(ES) that summarizes their actions taken to implement the requirements of reference (*o*).

8. EFFECTIVE DATE

This Instruction is effective immediately.

Paul Kaminski
Under Secretary of Defense
for Acquisition and Technology

Enclosures - 4

1. References
2. Executive Agents for Environmental Media and Specialty Areas
3. Definitions
4. DoD Pollution Prevention Measures of Merit

# E1. ENCLOSURE 1

## REFERENCES

(f) DoD 5000.2-R "Mandatory Procedures for Major Acquisition Programs (MDAPS) and Major Automated Information System (MAIS) Acquistion Programs, March 15, 1996

(g) Executive Order 12344, "Naval Nuclear Propulsion Program," February 1, 1982

(h) Section 7158 of title 42, United States Code

(i) Section 2011 of title 42, United States Code

(j) Section 2021 of title 42, United States Code

(k) Title 33, Code of Federal Regulations, Section 154-156

(l) Sections 1901-1912 of title 33, United States Code

(m) Executive Order 12873, "Federal Acquisition, Recycling, and Waste Prevention," October 20, 1993

(n) DoD 4500.36-R "Management, Acquisition, and Use of Motor Vehicles," March 29, 1994

(o) Executive Order 12856, "Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements," August 3, 1993

(p) Executive Order 12902, "Energy Efficiency and Water Conservation at Federal Facilities," March 8, 1994

(q) Section 326 of Public Law 102-484, section 2301 of title 10, United States Code, note [2]

(r) Section 6962 of title 42, United States Code

(s) Public Law 102-486, "Energy Policy Act of 1992," October 24, 1992 [3]

(t) Executive Order 12844, "Federal Use of Alternative Fueled Vehicles," April 21, 1993

(u) Section 2577 of title 10, United States Code

(v) Executive Order 12843, "Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances," April 21, 1993

(w) DoD 4160.21-M, "Defense Reutilization and Marketing Manual," March 23, 1990, authorized by DoD Directive 4160.21, December 5, 1980

(x) Title 32, Code of Federal Regulations, Part 172

(y) DoD Instruction 4160.27, "Demilitarization of Materiel," December 14, 1988

(z) DoD 4160.21-M-1, "Defense Demilitarization Manual," October 21, 1991, authorized by DoD Directive 4160.21, December 5, 1980

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2 10 U.S.C. 2301 has been repealed, but the requirement remains in the note and still applies.

3 Refers to multiple parts of the law.

(aa) Sections 7401-7671 of title 42, United States Code
(bb) Section 11049 of title 42, United States Code
(cc) Section 11023 of title 42, United States Code
(dd) Section 6374 of title 42, United States Code
(ee) Section 1401 of title 19, United States Code
(ff) Sections 4321-4370 of title 42, United States Code
(gg) Title 40, Code of Federal Regulations, Part 302
(hh) Section 7671 of title 42, United States Code
(ii) Federal Register, Volume 57, page 33753, July 30, 1992
(jj) Sections 13101-13109 of title 42, United States Code
(kk) Section 6903 of title 42, United States Code

# E2. ENCLOSURE 2

## EXECUTIVE AGENTS FOR ENVIRONMENTAL MEDIA AND SPECIALTY AREAS

### E2.1.1. Navy-Ozone Depleting Substances

# E3. ENCLOSURE 3

## DEFINITIONS

E3.1.1. Acquisition Program. A directed, funded effort that is designed to provide a new, improved, or continuing weapons system or automated information system (AIS) capability in response to a validated operational need. Acquisition programs are divided into categories, which are established to facilitate decentralized decision-making and execution and compliance with statutory requirements. (DoD Directive 5000.1 (reference (*e*)).

E3.1.2. Alternative Fuel. A fuel as defined in 42 U.S.C. 6374 (g)(2) (reference (*dd*)).

E3.1.3. Alternative Fueled Vehicle. A vehicle as defined in Section 6374 (g)(3) of reference (*dd*).

E3.1.4. Composting. A controlled process for managing the degradation of plant and other organic wastes to produce a useful product that can be used as mulch or soil conditioner.

E3.1.5. Customs Territory. "All Territories and possessions of the United States except the Virgin Islands, American Samoa, Wake Island, Midway Island, Kingman Reef, Johnston Island and the Island of Guam." (from 19 U.S.C. 1401(h) (reference (*ee*))).

E3.1.6. Environment. The term "environment" includes water, air, and land and the interrelationship which exist among and between water, air, and land and all living things. (from 42 U.S.C. 11049(2) (reference (*bb*))).

E3.1.7. Environmental Security. A program that enhances readiness by institutionalizing the Department of Defense's environmental, safety and occupational health awareness, making it an integral part of the Department's daily activities. Environmental Security is comprised of cleanup, compliance, conservation, pollution prevention, safety, occupational health, explosives safety, fire and emergency services, pest management, environmental security technology and international activities.

E3.1.8. Environmentally Preferable. Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw

materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service. (from Executive Order 12873, section 201 (reference (*m*))).

E3.1.9. Environmental Quality Classes. This includes the following designations:

E3.1.9.1. Class 0 - Includes activities needed to cover the recurring administrative, personnel and other costs associated with managing environmental programs that are necessary to meet applicable compliance requirements (Federal, State, and local laws, regulations, E.O.s, DoD policies, and Final Governing Standards overseas or the "Overseas Environmental Baseline Guidance Document" (reference (*d*)) or which are in direct support of the military mission. Also, includes environmental management activities associated with the operation of facilities, installations and deployed weapon systems. Recurring costs consist of manpower, training, supplies, hazardous waste disposal, operating recycling activities, permits, fees, testing and monitoring and/or sampling and analysis, reporting and record keeping (e.g., Toxic Release Inventory reporting), maintenance of environmental equipment, and compliance self assessments.

E3.1.9.2. Class I - Projects and activities needed that are currently out of compliance (have received an enforcement action from a duly authorized Federal, State, or local authority; have a signed compliance agreement or received a consent order; and/or have not met requirements based on applicable Federal, State, and local laws, regulations, E.O.s, DoD policies, and Final Governing Standards overseas or the Overseas Environmental Baseline Guidance Document (reference (*d*)). This class also includes projects and activities needed that are not currently out of compliance (deadlines or requirements have been established by applicable requirements, but deadlines have not passed or requirements are not in force) but shall be if projects or activities are not implemented within the current program year. Those activities include the preparation of plans (e.g., National Environmental Policy Act, 42 U.S.C. 4321-4370(d) (reference (*ff*)), documentation, master plans, emergency response plans, integrated natural and cultural resource management plans, pollution prevention plans; etc.), opportunity assessments and inventories. The preferred approach is to use pollution prevention projects or activities, if cost effective, to bring a facility into compliance. Overseas, that class includes projects and activities necessary to alleviate the human health threats to ongoing operations or necessary to comply with applicable treaties and agreements.

E3.1.9.3. Class II - Projects and activities needed that are not currently out of compliance (deadlines or requirements have been established by applicable Federal,

State, and local laws, regulations, E.O.s, DoD policies and Final Governing Standards overseas or reference (*d*), but deadlines have not passed or requirements are not in force) but shall be if projects or activities are not implemented in time to meet an established deadline beyond the current program year. The preferred approach is to use pollution prevention projects or activities, if cost effective, as the means of maintaining or bringing a facility into compliance. Overseas, that class includes projects and activities identified using risk based prioritization practices that meet the long term objective of full implementation of the Final Governing Standards for each foreign country where DoD maintains substantial installations.

E3.1.9.4. Class III - Includes projects and activities that are not explicitly required by law but are needed to address overall environmental goals and objectives.

E3.1.10. Excluded Materials. Excluded Prohibited materials may not be sold through a qualified recycling program, and the proceeds from their sale SHALL NOT be returned to a qualified recycling program. Excluded items USC 2577 and 32 CFR 172 include, but are not limited to:

E3.1.10.1. Government-furnished material;

E3.1.10.2. Precious metal bearing scrap;

E3.1.10.3. Hazardous waste (including household hazardous waste);

E3.1.10.4. Ozone depleting substances;

E3.1.10.5. Electrical components;

E3.1.10.6. Unopened containers of solvents, paints, or oil;

E3.1.10.7. Fuels;

E3.1.10.8. Material that can be sold (as is) as a usable item;

E3.1.10.9. Repairable items that may be used again for their original purposes or functions; e.g., used vehicles, vehicle or machine parts, etc.;

E3.1.10.10. Ships, aircraft, weapons, and other material required to be demilitarized or mutilated, and scrap resulting from demilitarization;

E3.1.10.11. All Munitions List Items (MLI) and Strategic List Items (SLI) as

defined in DoD 4160.21-M-1 (reference (*z*)), except firing range expended brass and mixed metals gleaned from firing range cleanup;

E3.1.10.12. Types of surplus personal property whose sales proceeds must be deposited to accounts other than a qualified recycling program per 32 CFR 172, Appendix B (reference (*x*)).

E3.1.10.12.1. Scrap generated from Defense Business Operations Fund (DBOF) activities;

E3.1.10.12.2. Usable personal property purchased by DBOF activities;

E3.1.10.12.3. Property purchased with commissary surcharge funds;

E3.1.10.12.4. Automatic data processing equipment owned by the General Services Administration;

E3.1.10.12.5. Property purchased for the Military Assistance Program or purchased with Foreign Military Sales Administrative funds;

E3.1.10.12.6. Coast Guard property;

E3.1.10.12.7. Property owned by nonappropriated fund activities;

E3.1.10.12.8. Lost, abandoned, or unclaimed privately owned personal property;

E3.1.10.12.9. Property owed by a country or international organization;

E3.1.10.12.10. Bones, fats, and meat trimmings generated by a commissary.

E3.1.11. Extremely Hazardous Substances. A substance as defined 42 U.S.C. 11049(3) (reference (*bb*)).

E3.1.12. GOCO. Government-owned/contractor-operated facility that is owned by the Federal Government but all or portions of which are operated by private contractors.

E3.1.13. Government Furnished Material. Property that may incorporated into or attached to a deliverable end item or that may be consumed or expensed in performing a contract. It includes assemblies, component parts, raw and processed

materials and small tools and supplies that may be consumed in normal use in performing a contract.

E3.1.14. Hazardous Substance. Any substance listed in Table 302.4 of 40 CFR Part 302 (reference (*gg*)).

E3.1.15. Other Qualified Recycling Program Materials. Materials that fit neither the definition of recyclable materials nor the definition of excluded materials are classified as other qualified recycling program materials.

E3.1.16. Ozone Depleting Substances. Means the substances controlled internationally under the Montreal Protocol and nationally under Title VI of the Clean Air Act Amendments (reference (*hh*)). This includes both Class I and Class II substances as follows:

E3.1.16.1. “Class I substance” means any substance designated as Class I in 57 FR 33753 (reference (*ii*)), including chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform and any other substance so designated by the Environmental Protection Agency (EPA) by regulation at a later date.

E3.1.16.2. “Class II substance” means any substance designated as class II in 57 FR 33753 (reference (*ii*)), including hydrochlorofluorocarbons and any other substance so designated by the EPA by regulation at a later date.

E3.1.17. Pollution and/or Pollutants. The terms "pollution" and "pollutant" refer to all nonproduct outputs, irrespective of any recycling or treatment that will or may reasonably be anticipated to cause deleterious affects to the public health or the environment.

E3.1.18. Pollution Prevention. "Pollution prevention" means "source reduction," as defined in the Pollution Prevention Act (PPA) of 1990, 42 U.S.C. Sections 13101-13109 (reference (*jj*)), and other practices that reduce or eliminate the creation of pollutants through: (a) increased efficiency in the use of raw materials, energy, water, or other resources; or (b) protection of natural resources by conservation. (Also See "Source Reduction.")

E3.1.19. Procurement. The acquiring by contract with appropriated funds for supplies or services by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated and evaluated.

E3.1.20. Qualified Recycling Program (QRP). Organized operations that require concerted efforts to divert or recover scrap or waste, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials in order to maintain or enhance their marketability. If the program is administered by a DoD component, a QRP includes adherence to a control process providing accountability for all materials processed through program operations.

E3.1.21. Recovered Material. Waste materials and by-products that have been recovered or diverted from solid waste, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process. (42 U.S.C. 6903(19) (reference (*kk*))).

E3.1.22. Recyclable Materials. Recyclable materials can include, but *are not limited to*: high-quality paper and paper products; mixed paper; newspaper; cardboard; plastic; metal cans; glass; used oil (except when hazardous waste*)*; batteries; and *tires*. In addition, scrap (including ferrous and non-ferrous scrap) and firing range expended brass and mixed metals gleaned from firing range cleanup that do not require demilitarization may be included in a qualified recycling program.

E3.1.23. Recycling. The series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion (from Executive Order 12873, Section 207 (reference (*m*))).

E3.1.24. Source Reduction. As defined in the Federal Pollution Prevention Act (reference (*jj*)), source reduction is "any practice that a.) reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, and disposal; and b.) reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modification, process or procedure modification, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. " Source reduction does not entail any form of waste management (e.g., recycling and treatment).

E3.1.25. Standardization Document. A generic term for a document used to standardize on an item of supply, process, procedure, method, data, practice, or

engineering approach. Standardization documents include military specifications, standards handbooks and bulletins; Federal specifications and standards; guide specifications; Commercial Item Descriptions; and Non-Government Standards.

E3.1.26. Toxic Chemical. A chemical as defined in 42 U.S.C. 11023(c) (reference (*cc*)).

E3.1.27. Waste Minimization. Source reduction and the following types of recycling: (a.) beneficial use/reuse and (b.) reclamation. Waste minimization does not include recycling activities whose uses constitute disposal and burning for energy recovery.

# E4. ENCLOSURE 4

## DoD Pollution Prevention Measures of Merit

E4.1.1. By the end of Calendar Year (CY) 1999, reduce total releases and off-site transfers of toxic chemicals 50% from the 1994 toxic release inventory baseline. The amount of toxic releases and off-site transfers will be measured and reported in pounds.

E4.1.2. By the end of CY 1999, reduce the disposal of hazardous waste 50% from the 1992 baseline. The amount of hazardous waste disposal will be measured and reported in pounds.

E4.1.3. By the end of CY 1999, reduce the disposal of non-hazardous solid waste 50% from the 1992 baseline. The amount of solid waste disposal will be measured and reported in pounds.

E4.1.4. By the end of CY 1999, ensure that 50% of non-hazardous solid waste generated will be recycled. The amount of non-hazardous solid waste recovered and sold DoD-wide for reuse will be measure and reported in pounds.

E4.1.5. By the end of CY 1999, ensure that 75% of DoD Acquisitions of new, non-tactical vehicles are alternatively fueled vehicles.

# FEDERAL LOGISTICS INFORMATION SYSTEM

## FLIS PROCEDURES MANUAL

## MULTIPLE APPLICATION REFERENCES/INSTRUCTIONS / TABLES AND GRIDS

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# TABLE 194
# ENVIRONMENTAL ATTRIBUTE CODES (ENAC)

ASBESTOS ALTERNATIVE PRODUCTS

DEFINITION: A product that contains less than 1.0 percent asbestos by weight or area and is a substitute or alternative for a product that normally contains asbestos in accordance with EPA Test Method, Appendix E - 40 CFR, 763.163, Subpart E.

| ENAC | Name |
|---|---|
| JG | Asbestos Alternative Products |

BIOBASED PRODUCTS

DEFINITION: As defined by Farm Security and Rural Investment Act of 2002, "biobased products" are products determined by the U.S. Secretary of Agriculture to be commercial or industrial goods (other than food or feed) composed in whole or in significant part of biological products, forestry materials, or renewable domestic agricultural materials, including plant, animal, or marine materials. Biopreferred catalog: http://www.biopreferred.gov/Catalog.aspx

| ENAC | Name |
|---|---|
| AT | 2-Cycle Engine Oils |
| AV | Adhesive and Mastic Removers |
| CF | Bathroom and Spa Cleaners |
| KU | Bedding, Bed Linens, and Towels |
| CG | Carpet and Upholstery Cleaners - General Purpose |
| CH | Carpet and Upholstery Cleaners - Spot Removers |
| CE | Carpets |
| AU | Composite Panels – Acoustical |
| BL | Composite Panels - Interior Panels |
| BS | Composite Panels - Plastic Lumber |
| BY | Composite Panels - Structural Interior Panels |

| | |
|---|---|
| BZ | Composite Panels - Structural Wall Panels |
| CJ | Concrete and Asphalt Release Fluids |
| CK | De-Icers - General Purpose |
| KS | Diesel Fuel Additives |
| AW | Disposable Containers |
| LC | Disposable Cutlery |
| AY | Dust Suppressants |
| CL | Fertilizers |
| BQ | Films - Non-Durable |
| BV | Films - Semi-Durable Films |
| AZ | Firearm Lubricants |
| BA | Floor Strippers |
| BB | Fluid-Filled Transformers - Synthetic Ester-Based |
| BC | Fluid-Filled Transformers - Vegetable Oil-Based |
| BF | Glass Cleaners |
| BG | Graffiti and Grease Removers |
| BH | Greases-general |
| BD | Greases - Food Grade |
| BP | Greases – Multipurpose |
| BU | Greases - Rail Track |
| CA | Greases – Truck |
| BJ | Hand Cleaners |
| BK | Hand Sanitizers |
| KQ | Hydraulic Fluids - Mobile Equipment |
| BX | Hydraulic Fluids - Stationary Equipment |
| BE | Laundry Products - General Purpose |
| BT | Laundry Products - Pretreatment/Spot Removers |
| BM | Lip Care Products |
| CM | Metalworking Fluids - General Purpose Soluble, Semi-Synthetic, and Synthetic Oils |
| CN | Metalworking Fluids - High Performance Soluble, Semi-Synthetic, and Synthetic Oils |
| CP | Metalworking Fluids - Straight Oils |
| KR | Penetrating Lubricants |
| BR | Plastic Insulating Foam for Residential and Commercial Construction |
| KT | Roof Coatings |
| BW | Sorbents |

**10.3-477**

| | |
|---|---|
| KV | Water Tank Coatings |
| BN | Wood and Concrete Sealers - Membrane Concrete Sealers |
| CB | Wood and Concrete Sealers - Penetrating Liquids |

ENERGY EFFICIENT PRODUCTS

DEFINITION: Product meets or exceeds the Department of Energy's (DOE) Energy-Efficient Products Standards – Federal Energy Management Program (FEMP), or Energy Star label listed. FEMP: http://www1.eere.energy.gov/femp/procurement/ and Energy Star: http://www.energystar.gov/

| **ENAC** | **Category** | **Name** |
|---|---|---|
| | FEMP-Lighting | |
| HL | | Compact Fluorescent Lamps |
| GE | | Fluorescent Tube Lamps |
| GF | | Fluorescent Ballasts |
| GN | | Fluorescent Luminaires |
| HK | | Downlight Luminaires |
| HJ | | Industrial HID Luminaires |
| HM | | Lighting Controls |
| | FEMP-Commercial and Industrial Equipment | |
| GL | | Commercial Unitary Air Conditioners |
| JS | | Air-Cooled Chillers |
| JU | | Water-Cooled Chillers |
| GM | | Commercial Heat Pumps |
| JT | | Ground-Source Heat Pumps |
| HF | | Boilers |
| GJ | | Distribution Transformers Medium |
| GH | | Electric Motors |
| HH | | Centrifugal Pumping System |
| | FEMP-Food Service Equipment | |
| JR | | Refrigerators and Freezers |
| JM | | Griddles |
| JN | | Fryers |
| JP | | Hot Food Holding Cabinets |
| JQ | | Non Pressure Steamers |
| CR | | Beverage Vending Machines |

**10.3-478**

| | | |
|---|---|---|
| FC | | Ice Machines |
| DN | | Pre-Rinse Spray Valves |
| | FEMP-Office Equipment | |
| FW | | Computers |
| FX | | Monitors |
| FY | | Printers |
| FZ | | Copiers |
| GA | | Fax Machines |
| | FEMP-Appliances | |
| FJ | | Refrigerators |
| G6 | | Freezers |
| FH | | Dishwashers |
| HN | | Clothes Washers |
| FG | | Room Air Conditioners |
| | FEMP-Residential Equipment | |
| FK | | Central Air Conditioners |
| FP | | Air Source Heat Pumps |
| JV | | Ground-Source Heat Pumps |
| FL | | Gas Furnaces |
| FM | | Electric Water Heaters |
| FN | | Gas Water Heaters |
| | FEMP-Plumbing | |
| FR | | Faucets |
| FS | | Showerheads |
| FV | | Urinals |
| | FEMP-Construction Products | |
| GG | | Residential Windows |
| GP | | Roof Products |
| | FEMP-Low Standby Power- Office Equipment | |
| HR | | Desktop Computer |
| G3 | | Integrated Computer |
| HS | | Laptop Computer |
| JW | | Workstation |
| HT | | Computer Monitor |
| HU | | Printer |
| HW | | Copier |
| JZ | | Scanner |
| HV | | Fax/Printer |
| JY | | Multifunction Devices |
| JX | | Docking Station |

**10.3-479**

| | | |
|---|---|---|
| | FEMP-Low Standby Power- Audio/Video Products | |
| HX | | TV |
| HY | | VCR |
| HZ | | TV/VCR/DVD Combo |
| F1 | | DVD Players |
| H1 | | Consumer Audio |
| | FEMP-Low Standby Power- Major Appliances | |
| F9 | | Microwave Oven |
| | Energy Star-Appliances | |
| CS | | Battery Chargers |
| GK | | Clothes Washers |
| J3 | | Dehumidifiers |
| LL | | Dishwashers |
| LK | | Refrigerators & Freezers |
| LM | | Room AC |
| CT | | Room Air Cleaners |
| | Energy Star-Heating & Cooling | |
| LE | | Air-source Heat Pumps |
| LN | | Boilers |
| LP | | Central AC |
| J4 | | Ceiling Fans |
| HG | | Furnaces |
| FQ | | Geothermal Heat Pumps |
| J6 | | Home Sealing (Insulation) |
| G8 | | Light Commercial Heating and Cooling |
| CU | | Programmable Thermostats |
| J7 | | Ventilating Fans |
| | Energy Star-Water Heaters | |
| DJ | | Gas Condensing |
| DK | | Heat Pump |
| DL | | High-Efficiency Gas Storage |
| DS | | Solar |
| DM | | Whole-Home Gas Tankless |
| | Energy Star-Home Envelope | |
| DZ | | Windows, Doors, & Skylights |
| | Energy Star-Home Electronics | |
| CV | | Battery Charging Systems |

**10.3-480**

| | | |
|---|---|---|
| J8 | | Cordless Phones |
| KG | | Combination Units |
| CW | | Digital-to-Analog Converter Boxes (DTAs) |
| KH | | DVD Products |
| CX | | External Power Adapters |
| KJ | | Home Audio |
| CY | | Set-top Boxes |
| KK | | Televisions |
| | Energy Star-Office Equipment | |
| LF | | Computers |
| LJ | | Copiers and Fax Machines |
| CZ | | Digital Duplicators |
| DB | | Notebook Computers/Tablet PCs |
| KB | | Mailing Machines |
| LG | | Monitors |
| LH | | Printers, Scanners, and All-in-Ones |
| KP | | Water Coolers |
| | Energy Star-Lighting | |
| LQ | | Light Bulbs (CFLs) |
| DC | | Light Fixtures |
| DD | | Decorative Light Strings |
| | Energy Star-Commercial Food Service | |
| DE | | Commercial Dishwashers |
| HE | | Commercial Fryers |
| HD | | Commercial Hot Food Holding Cabinets |
| GC | | Commercial Ice Machines |
| FU | | Commercial Solid Door Refrigerators & Freezers |
| JQ | | Commercial Steam Cookers |
| | Energy Star-Other Commercial Products | |
| DF | | LED Lighting |
| DG | | Battery Charging Systems |
| GD | | Exit Signs |
| EC | | Roof Products |
| KE | | Vending Machines |

ELECTRONIC PRODUCT ENVIRONMENTAL ASSESSMENT TOOL PRODUCTS

DEFINITION: Products registered under the Electronic Product Environmental Evaluation Assessment Tool

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(EPEAT) referring to the IEEE 1680 standard for verification of registration. Products are composed of Desktops, Integrated Desktop Computers, Monitors, Notebooks, and WorkStations. http://www.epeat.net/Search.aspx

| ENAC | Name |
|---|---|
| AG | Gold-EPEAT Registered Products |
| AF | Silver- EPEAT Registered Products |
| AB | Bronze- EPEAT Registered Products |

NON-CADMIUM CONTAINING PRODUCTS

DEFINITION: A product that is made without cadmium and that contains no added cadmium. These products are replacements for products that traditionally contained cadmium.

| ENAC | Name |
|---|---|
| AK | Non-Cadmium Product |

NON-MERCURY CONTAINING PRODUCTS

DEFINITION: A non-mercury alternative is a product that is made without mercury and that contains no added mercury. These products are replacements for products that traditionally contained mercury.

| ENAC | Category | Name |
|---|---|---|
| | Medical Products | |
| KW | | Thermometers |
| KX | | Sphygmomanometers |
| KY | | Esophageal Dilators |
| KZ | | Cantor Tubes and Miller Abbott Tubes |
| K1 | | Feeding Tubes |
| | Laboratory Chemicals | |
| K2 | | Fixatives, Stains, Reagents, Preservatives |
| | Dental Products | |
| K3 | | Dental Amalgam |
| | Consumer Products | |
| K4 | | Float Switches |
| K5 | | Electrical Switches |

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| | | |
|---|---|---|
| K6 | | Thermometers |
| K7 | | Pressure Gauges |
| K8 | | Barometers |
| K9 | | Flow Meters |
| | Vehicles | |
| LA | | Passenger Motor Vehicles |
| LB | | Engine Electrical System Components, Non Aircraft |

RECYCLED CONTENT PRODUCTS

DEFINITION: Products that have recovered content and meet or exceed the Environmental Protection Agency Comprehensive Procurement Guidelines (CPG) – Recovered Materials Advisory Notices (RMAN). http://www.epa.gov/epawaste/conserve/tools/cpg/products/index.htm.

| **ENAC** | **Category** | **Name** |
|---|---|---|
| | Construction Products | |
| EF | | Building insulation products |
| EM | | Carpet (polyester) |
| GT | | Carpet cushion |
| EH | | Cement and concrete containing Coal fly ash |
| EJ | | Cement and concrete containing Ground granulated blast furnace slag |
| G1 | | Cement and concrete containing Cenospheres |
| G2 | | Cement and concrete containing Silica fume |
| EQ | | Consolidated and reprocessed latex paint |
| EN | | Floor tiles |
| DP | | Flowable fill |
| EL | | Laminated paperboard |
| DQ | | Modular threshold ramps |
| DR | | Nonpressure pipe |
| EP | | Patio blocks |
| DT | | Railroad grade crossing surfaces |
| DU | | Roofing materials |
| FD | | Shower and restroom dividers/partitions |
| EK | | Structural fiberboard |
| | Landscaping Products | |
| DV | | Compost and fertilizer made from recovered organic materials |
| FA | | Garden and soaker hoses |
| FE | | Hydraulic mulch |

| | | |
|---|---|---|
| FB | | Lawn and garden edging |
| GU | | Plastic lumber landscaping timber and posts |
| | Nonpaper Office Products | |
| E5 | | Binders, clipboards, file folders, clip portfolios, and presentation folders |
| DW | | Office furniture |
| E1 | | Office recycling containers |
| E2 | | Office waste receptacles |
| E3 | | Plastic desktop accessories |
| E8 | | Plastic envelopes |
| E7 | | Plastic trash bags |
| E6 | | Printer ribbons |
| E4 | | Toner cartridges |
| | Paper and Paper Products | |
| JF | | Commercial/industrial sanitary tissue products |
| JH | | Miscellaneous papers |
| JJ | | Newsprint |
| JK | | Paperboard and packaging products |
| JL | | Printing and writing papers |
| | Park and Recreation Products | |
| GV | | Park benches and picnic tables |
| EZ | | Plastic fencing |
| HC | | Playground equipment |
| EX | | Playground surfaces |
| EY | | Running tracks |
| | Transportation Products | |
| EU | | Channelizers |
| EV | | Delineators |
| EW | | Flexible delineators |
| ET | | Parking stops |
| ER | | Traffic barricades |
| ES | | Traffic cones |
| | Vehicular Products | |
| EE | | Engine coolants |
| G4 | | Rebuilt vehicular parts |
| EB | | Re-refined lubricating oils |
| ED | | Retread tires |
| | Miscellaneous Products | |
| GW | | Awards and plaques |
| DX | | Bike racks |
| DY | | Blasting grit |

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| | |
|---|---|
| GX | Industrial drums |
| HB | Manual-grade strapping |
| GY | Mats |
| E9 | Pallets |
| GZ | Signage |
| HA | Sorbents |

LOW VOLATILE ORGANIC COMPOUND PRODUCTS

DEFINITION: Low volatile organic compound (VOC) products that meets the volatile organic limits for its product class as listed by California Air Resources Board (CARB) regulation for reducing VOC emissions from consumer products (17 CCR94509). The volatile organic content is determined by CARB Method 310.

| **ENAC** | **Category** | **Name** |
|---|---|---|
| | Coatings | |
| GR | | Architectural Coatings |
| JC | | Marine Operations Coatings |
| JD | | Aerospace Operations Coatings |
| JE | | Metal Parts Coatings |
| | Household Consumer Products | |
| GQ | | Household Consumer Product |
| | Industrial Cleaners | |
| HP | | Water Based Cleaning Materials |

MISCELLANEOUS ENACS

DEFINITION: The following codes are used for administrative purposes to facilitate record keeping or data gathering on green products.

| **ENAC** | **Name** |
|---|---|
| NR | Reviewed -- does not meet some ENAC criteria |
| ZZ | Machine generated output on the transaction when the NSN contains more than three (3) ENACs. ENACs will be |

listed in Segment A. Review characteristics data for more information.

# APPENDIX B
# HAZARD CHARACTERISTIC CODES AND DEFINITIONS

1. Number of Characters: Two

2. Type of Code: Alpha/Numeric

3. The Hazard Characteristic Code (HCC) is a two digit alpha-numeric code that is used to provide a means of categorizing hazardous materials (HM). It is an identification and tracking mechanism which links the stock number with details of the product hazards. HCCs are assigned by trained scientific or engineering personnel using the data provided on the Material Safety Data Sheet (MSDS), thereby, uniformly identifying hazardous materials managed by all Government activities. This information is captured in the DoD Hazardous Materials Information System (HMIS) and it allows the systemic tracking and identification for any regulatory purpose. HCCs allow relatively untrained personnel to properly receive, handle, store, process and manage hazardous materials at a high level and are most effective when used in conjunction with the detailed regulations of Title 10, 29, 40, and 49 of the Code of Federal Regulations. The HCC also serves as an identifier for automated processing of hazardous materials transactions, space utilization management, and compatible storage.

4. Every effort has been made to associate the HCC definitions with a specific regulatory definition, principally Title 49, but with references to Titles 29, 40 and 10 of the Code of Federal Regulations. Some of the HCC definitions were developed to identify items that are believed to present certain hazards (or lack thereof) but are not regulated by the CFRs. Such classifications (i.e. C3, C4, N1, T6) rely heavily on language contained in the MSDS, product literature, labels, and other technical literature and are subject to interpretation by qualified technical personnel. Questions regarding the assignment of these and the other more regulatory based HCCs should be addressed to the appropriate HMIS Focal Point personnel.

5. Two HCCs, H1 and X1, are defined in this appendix and are only visible in certain data systems but are not used for physical storage and are not assigned in the HMIS based on specific data from an MSDS.

6. There are three tables presented in this appendix. Table B-1 is a summarization of the HCCs with abbreviated definitions. Table B-2 contains the complete technical definitions. Table B-3 is a listing of the HCCs in order of preference of assignment. This table lends itself to development of hierarchical assignment programs and decision matrices for assignment of products at storage depots. The order of ranking was developed with consideration being given to the order of preference for hazard class assignment specified in 49 CFR 173.2a as a guide.

*Table B-1. Hazard Characteristic Codes*

| Code | Hazard Group | Abbreviated Definition |
|---|---|---|
| A1 | Radioactive, Licensed | RADIOACTIVE, LICENSED |
| A2 | Radioactive, License Exempt | RADIOACTIVE, EXEMPT |
| A3 | Radioactive, License Exempt, Authorized | RADIOACTIVE, EXEMPT AUTHORIZED |
| B1 | Alkali, Corrosive, Inorganic | ALKALI, CORR, INORGANIC |
| B2 | Alkali, Corrosive, Organic | ALKALI, CORR, ORGANIC |
| B3 | Alkali, Low Risk | ALKALI, LOW RISK |
| C1 | Acid, Corrosive, Inorganic | ACID, CORR, INORGANIC |
| C2 | Acid, Corrosive, Organic | ACID, CORR, ORGANIC |
| C3 | Acid, Low Risk | ACID, LOW RISK |
| C4 | Acid, Corrosive and Oxidizer, Inorganic | ACID, CORR/OXID, INORGANIC |
| C5 | Acid, Corrosive and Oxidizer, Organic | ACID, CORR/OXID, ORGANIC |
| D1 | Oxidizer | OXIDIZER |
| D2 | Oxidizer and Poison | OXIDIZER, POISON |
| D3 | Oxidizer and Corrosive, Acidic | OXIDIZER, CORR, ACIDIC |
| D4 | Oxidizer and Corrosive, Alkali | OXIDIZER, CORR, ALKALI |
| E1 | Explosive, Military | EXPLOSIVE, MILITARY |
| E2 | Explosive, Low Risk | EXPLOSIVE, LOW RISK |
| F1 | Flammable Liquid, DOT Packing Group I, OSHA IA | FLAM DOT PG I, OSHA IA |
| F2 | Flammable Liquid, DOT Packing Group II, OSHA IB | FLAM DOT PG II, OSHA IB |
| F3 | Flammable Liquid, DOT Packing Group III, OSHA IC | FLAM DOT PG III, OSHA IC |
| F4 | Flammable Liquid, DOT Packing Group III, OSHA II | FLAM DOT PG III, OSHA II |
| F5 | Flammable Liquid and Poison | FLAM, POISON |
| F6 | Flammable Liquid and Corrosive, Acidic | FLAMMABLE, CORR, ACIDIC |
| F7 | Flammable Liquid and Corrosive, Alkali | FLAMMABLE, CORR, ALKALI |
| F8 | Flammable Solid | FLAM SOLID |
| G1 | Gas, Poison (Nonflammable) | GAS, POISON |
| G2 | Gas, Flammable | GAS, FLAM |
| G3 | Gas, Nonflammable | GAS, NON FLAM |
| G4 | Gas, Nonflammable, Oxidizer | GAS, NON FLAM, OXIDIZER |
| G5 | Gas, Nonflammable, Corrosive | GAS, NON FLAM, CORROSIVE |
| G6 | Gas, Poison, Corrosive (Nonflammable) | GAS, POISON, CORROSIVE |
| G7 | Gas, Poison, Oxidizer (Nonflammable) | GAS, POISON, OXIDIZER |
| G8 | Gas, Poison, Flammable | GAS, POISON, FLAM |
| G9 | Gas, Poison, Corrosive, Oxidizer (Nonflammable) | GAS, POISON, CORR, OXIDIZER |
| H1 | Hazard Characteristics Not Yet Determined * | HAZ CHAR NOT DETERMINED |
| K1 | Infectious Substance | INFECTIOUS SUB |
| K2 | Cytotoxic Drugs | CYTOTOXIC DRUG |
| M1 | Magnetized Material | MAGNETIZED MATERIAL |
| N1 | Not Regulated as Hazardous | NON HAZARDOUS |
| P1 | Peroxide, Organic, DOT Regulated | PEROXIDE, ORGANIC, DOT |
| P2 | Peroxide, Organic, Low Risk | PEROXIDE, ORGAN, LOW RISK |
| R1 | Reactive Chemical, Flammable | REACTIVE CHEM, FLAMMABLE |
| R2 | Water Reactive Chemical | WATER REACTIVE CHEMICAL |
| T1 | DOT Poison - Inhalation Hazard | DOT POISON INHAL HAZARD |
| T2 | UN Poison, Packing Group I | UN POISON, PG I |
| T3 | UN Poison, Packing Group II | UN POISON, PG II |
| T4 | UN Poison, Packing Group III | POISON FOOD CONTAMINANT |
| T5 | Pesticide, Low Risk | PESTICIDE LOW RISK |
| T6 | Health Hazard | HEALTH HAZARD |
| T7 | Carcinogen (OSHA, NTP, IARC) | CARCINOGEN |
| V1 | Miscellaneous Hazardous Materials - Class 9 | MISC HAZ MATL CLASS 9 |
| V2 | Aerosol, Nonflammable | AEROSOL, NONFLAMMABLE |
| V3 | Aerosol, Flammable | AEROSOL, FLAMMABLE |
| V4 | DOT Combustible Liquid, OSHA IIIA | COMBUSTIBLE LIQUID |
| V5 | High Flash Point Materials, OSHA IIIB | HIGH FLASH LIQUID |
| V6 | Petroleum Products | PETROLEUM PRODUCTS |
| V7 | Environmental Hazard | ENVIRONMENTAL HAZARD |
| X1 | Multiple Hazards Under One NSN * | MULTIPLE HAZARDS |
| Z1 | Article Containing Asbestos | ARTICLE, ASBESTOS |
| Z2 | Article Containing Mercury | ARTICLE, MERCURY |
| Z3 | Article Containing Polychlorinated Biphenyl (PCB) | ARTICLE, PCB |
| Z4 | Article, Battery, Lead Acid, Nonspillable | BATT, LEAD ACID, NONSPIL |
| Z5 | Article, Battery, Nickel Cadmium, Nonspillable | BATT, NICAD, NONSPIL |
| Z6 | Article, Battery, Lithium | BATTERY, LITHIUM |
| Z7 | Article, Battery, Dry Cell | BATTERY, DRY CELL |

*** System derived HCC. Not assigned directly in HMIS.**

*Table B-2. Hazard Characteristic Code Definitions*

**A1 - Radioactive Material, Licensed.** Any radioactive material that requires the issuance of a specific or general license, according to Title 10, Code of Federal Regulations (CFR), to persons who manufacture, produce, transfer, receive, possess, acquire, own, or use by-product material. Each package of radioactive shall be labeled and marked for transportation purposes in accordance with US Department of Transportation (DOT), Title 49 CFR.

**A2 - Radioactive Material, License Exempt.** Any radioactive material that does not require the issuance of a specific or general license according to Title 10, CFR, Parts 30 and 40. The package shall be labeled and marked, if required, in accordance with Title 49 CFR, if any material has a specific activity greater than 0.002 microcuries per gram (μCi/g).

**A3 - Radioactive Material, License Exempt, Authorized.** Radioactive material, exempt from specific or general license requirements of Title 10, CFR, but for which the appropriate military services or agency representative has determined that an authorization or permit is required for the receipt, transfer, ownership, possession, or use. Included are electron tubes, smoke detectors, or other devices containing material not exceeding the Nuclear Regulatory Commission (NRC) license-exempt quantities listed in Title 10, CFR.

**B1 - Alkali, Corrosive, Inorganic.** An inorganic alkali (not hydrocarbon based), either liquid or solid, meeting the definition of a Corrosive Material (Class 8) under DOT Title 49, Section 173.136, or EPA 40 CFR 370.2, or OSHA 1910.1200, Appendix A that causes visible destruction or irreversible alterations in human skin tissue at the site of contact, or a liquid that has a severe corrosion rate on steel or aluminum, in accordance with any one of the following criteria:

(a) A material is considered to be destructive or to cause irreversible alteration in human skin tissue if, when tested on the intact skin of an albino rabbit, the structure of the tissue at the site of contact is destroyed or changed irreversibly after an exposure period of 4 hours or less; or

(b) A liquid is considered to have a severe corrosion rate if its corrosion rate exceeds 6.25 mm (0.246 inches) per year on steel (SAE 1020) or aluminum (nonclad 7075-T6) at a test temperature of 55$^{o}$C (131$^{o}$F). An acceptable test is described in NACE Standard TM-01-69; or

(c) It is aqueous and has a pH in aqueous solution greater than or equal to 12.5 as determined by the test method specified in Title 40 CFR, Section 261.22.

**B2 - Alkali, Corrosive, Organic.** An organic alkali (hydrocarbon based), either liquid or solid, meeting the definition of a Corrosive Material (Class 8) under DOT Title 49, Section 173.136, or EPA 40 CFR 370.2, or OSHA 1910.1200, Appendix A that causes visible destruction or irreversible alterations in human skin tissue at the site of contact, or a liquid that has a severe corrosion rate on steel or aluminum, in accordance with any one of the following criteria:

(a) A material is considered to be destructive or to cause irreversible alteration in human skin tissue if, when tested on the intact skin of an albino rabbit, the structure of the tissue at the site of contact is destroyed or changed irreversibly after an exposure period of 4 hours or less; or

(b) A liquid is considered to have a severe corrosion rate if its corrosion rate exceeds 6.25 mm (0.246 inches) per year on steel (SAE 1020) or aluminum (nonclad 7075-T6) at a test temperature of 55$^{o}$C (131$^{o}$F). An acceptable test is described in NACE Standard TM-01-69; or

(c) It is aqueous and has a pH in aqueous solution greater than or equal to 12.5 as determined by the test method specified in Title 40 CFR, Section 261.22.

**B3 - Alkali, Low Risk.** A liquid or solid product that exhibits alkali (caustic/basic) properties and does not meet the definition of HCCs B1 or B2 but which through experience or through documentation on the MSDS or product bulletin would cause severe skin or eye irritation, dermatitis, or allergic skin reaction. Any classification of a material into this category is a process which relies heavily on the professional judgment of the evaluator recognizing that individuals react differently to exposure to chemicals. Factors to consider are the pH, the intended use of the product, the type of package, and the concentration of the active ingredient(s).

**C1 - Acid, Corrosive, Inorganic.** An acid (not hydrocarbon based), either liquid or solid, meeting the definition of a Corrosive Material (UN Class 8) under DOT Title 49, Section 173.136, or EPA 40 CFR 370.2, or OSHA 29 CFR 1910.1200, Appendix A that causes visible destruction or irreversible alterations in human skin tissue at the site of contact, or a liquid that has a severe corrosion rate on steel or aluminum, in accordance with any one of the following criteria:

(a) A material is considered to be destructive or to cause irreversible alteration in human skin tissue if, when tested on the intact skin of an albino rabbit, the structure of the tissue at the site of contact is destroyed or changed irreversibly after an exposure period of 4 hours or less; or

(b) A liquid is considered to have a severe corrosion rate if its corrosion rate exceeds 6.25 mm (0.246 inches) per year on steel (SAE 1020) or aluminum (nonclad 7075-T6) at a test temperature of 55$^{o}$C (131$^{o}$F). An acceptable test is described in NACE standard TM-01-69; or

(c) It is aqueous and has a pH in aqueous solution less than or equal to 2 as determined by the test method specified in Title 40 CFR, Section 261.22.

**C2 - Acid, Corrosive, Organic.** An acid (hydrocarbon based), either liquid or solid, meeting the definition of a Corrosive Material (UN Class 8) under DOT Title 49, Section 173.136, or EPA 40 CFR 370.2, or OSHA 29 CFR 1910.1200, Appendix A that causes visible destruction or irreversible alterations in human skin tissue at the site of contact, or a liquid that has a severe corrosion rate on steel or aluminum, in accordance with any one of the following criteria:

(a) A material is considered to be destructive or to cause irreversible alteration in human skin tissue if, when tested on the intact skin of an albino rabbit, the structure of the tissue at the site of contact is destroyed or changed irreversibly after an exposure period of 4 hours or less; or

(b) A liquid is considered to have a severe corrosion rate if its corrosion rate exceeds 6.25 mm (0.246 inches) per year on steel (SAE 1020) or aluminum (nonclad 7075-T6) at a test temperature of 55$^{o}$C (131$^{o}$F). An acceptable test is described in NACE standard TM-01-69; or

(c) It is aqueous and has a pH in aqueous solution less than or equal to 2 as determined by the test method specified in Title 40 CFR, Section 261.22.

**C3 - Acid, Low Risk.** A liquid or solid product that exhibits acidic properties and does not meet the definition of HCCs C1 or C2 but which through experience or through documentation on the MSDS or product bulletin would cause severe skin or eye irritation, dermatitis, or allergic skin reaction. Any classification of a material into this category is a process which relies heavily on the professional judgment of the evaluator recognizing that individuals react differently to exposure to chemicals. Factors to consider are the pH, the intended use of the product, the type of package, and the concentration of the active ingredient(s).

**C4 - Acid, Corrosive and Oxidizer, Inorganic.** An inorganic acid (HCC C1) that also meets the definition of an Oxidizer (HCC D1).

**C5 - Acid, Corrosive and Oxidizer, Organic.** An organic acid (HCC C2) that also meets the definition of an Oxidizer (HCC D1).

**D1 - Oxidizer.** A material regulated as an Oxidizer, UN Class 5.1, by DOT under 49 CFR 173.127 or is listed in Section 43A of the National Fire Protection Association (NFPA) Fire Codes Subscription Service as a Class 1, 2, 3, or 4 oxidizer other than a compressed gas, that can undergo an explosive reaction when catalyzed or exposed to heat, shock, or friction; or will cause a severe increase in the burning rate of combustible material with which it comes in contact; or which will undergo vigorous self-sustained decomposition when catalyzed or exposed to heat; or will moderately increase the burning rate or which may cause spontaneous ignition of combustible or flammable material with which it comes in contact.

**D2 - Oxidizer and Poison.** An oxidizing material (HCC D1), other than a compressed gas (HCC G4), that also meets the definition of a poison (HCCs T1, T2, T3, or T4).

**D3 - Oxidizer and Corrosive - Acidic.** An oxidizing material (HCC D1), other than a compressed gas (HCC G4), that also meets the definition of a corrosive material, acidic (HCC C1 or C2).

**D4 - Oxidizer and Corrosive - Alkali.** An oxidizing material (HCC D1), other than a compressed gas (HCC G4), that also meets the definition of a corrosive material, alkali (HCC B1 or B2).

**E1 - Explosives, Military.** Items classed as explosives, UN Class 1, Division 1.1, 1.2, 1.3, 1.4 (except 1.4S), and 1.5 as defined in 49 CFR 173.50 and all Military Explosives identified by a Department of Defense Ammunition Code (DoDAC). (See DoD Standard DoD 6055.9, for hazard classification and compatibility groups).

**E2 - Explosives, Low Risk.** Items classed as explosives, UN Class 1, Division 1.4S and 1.6, as defined in 49 CFR 173.50. Division 1.4S consists of explosives that present a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package. The compatibility group "S" indicates that the item is so packed or designed that any hazardous effects arising from accidental functioning are confined within the package. If the package has been degraded by fire, all blast or projection effects are limited to the extent that they do not significantly hinder fire fighting or other emergency response efforts in the immediate vicinity of the package. Division 1.6 consists of extremely insensitive items which do not have a mass explosion hazard and which demonstrate a negligible probability of accidental initiation or propagation.

**F1 - Flammable Liquid, Packing Group I, OSHA IA.** A product meeting the definition of a flammable liquid (UN Class 3) under 49 CFR 173.120 and classed as a Packing Group I under 49 CFR 173.121 with an initial boiling point less than or equal to 95$^{o}$F (35$^{o}$C). Included in this definition are OSHA IA liquids except those that have a boiling point between 95$^{o}$F and 100$^{o}$F. The definitions for OSHA classes of flammable liquids are found in 29 CFR 1910.106.

**F2 - Flammable Liquid, Packing Group II, OSHA IB.** A product meeting the definition of a flammable liquid (UN Class 3) under 49 CFR 173.120 and classed as a Packing Group II under 49 CFR 173.121 with a flash point less than 73$^{o}$F (23$^{o}$C) and an initial boiling point of more than 95$^{o}$F (35$^{o}$C). Included in this definition are OSHA IB liquids and the balance of OSHA IA liquids with boiling points between 95$^{o}$F and 100$^{o}$F.

**F3 - Flammable Liquid, Packing Group III, OSHA IC.** A product meeting the definition of a flammable liquid (UN Class 3) under 49 CFR 173.120 and classed as a Packing Group III under 49 CFR 173.121 with a flash point greater than or equal to 73$^{o}$F (23$^{o}$C) but less than 100$^{o}$F (38$^{o}$C). Included in this definition are OSHA IC liquids.

**F4 - Flammable Liquid, Packing Group III, OSHA II.** A product meeting the definition of a flammable liquid (UN Class 3) under 49 CFR 173.120 and classed as a Packing Group III under 49 CFR 173.121 but with a flash point greater than or equal to 100$^{o}$F (38$^{o}$C) and less than or equal to 141$^{o}$F (60.5$^{o}$C). Included in this definition are OSHA II liquids.

**F5 - Flammable Liquid and Poison.** UN Class 3 Flammable Liquids (HCCs F1, F2, F3, or F4) that also have the hazards of UN division 6.1, Poisons (HCCs T1, T2, T3, T4, or T6)

**F6 - Flammable Liquid and Corrosive, Acidic.** UN Class 3 Flammable Liquids (HCCs F1, F2, F3, or F4) that also have the hazards of UN Class 8 Corrosive materials and are acidic in nature meeting the definition of HCC C1 or C2.

**F7 - Flammable Liquid and Corrosive, Alkali.** United Nations Class 3 Flammable Liquids (HCCs F1, F2, F3, or F4) that also have the hazards of United Nations Class 8 Corrosive materials and are alkali (caustic/basic) in nature meeting the definition of HCC B1 or B2.

**F8 - Flammable Solid.** Any product which is required to be shipped as UN Class 4.1 under 49 CFR 173.124 which under conditions normally incident to transportation or storage is likely to cause fires through friction, retained heat from manufacturing or processing, or which can be readily ignited and when ignited burns so vigorously and persistently as to create a serious transportation hazard.

**G1 - Gas, Poison (Nonflammable).** Any product which is required to be shipped as UN Class 2.3 under 49 CFR 173.115 (c) (Gas poisonous by inhalation) and is required to be marked "Inhalation Hazard" under 49 CFR 172.313. This means a material which is a gas at 20$^{o}$C (68$^{o}$F) or lower at one atmosphere of pressure (101.3 kPa, 14.7 psi)(a material which has a boiling point of 20$^{o}$C (68$^{o}$F) or lower at 1 atmosphere) and which:

(a) Is known to be so toxic to humans as to pose a hazard to health during transportation; or

(b) In the absence of adequate data on human toxicity, is presumed to be so toxic to humans, because when tested on young adult albino rats for 1 hour, it has an LC50 (inhalation rat) less than 5000 ml/m$^3$ (ppm); and

(c) Meets the definition of Nonflammable Gas (HCC G3).

Codes 1,2,3,4,5,6, or 13 are listed in the special provisions column of 49 CFR 172.101 for those shipping names that are poison-inhalation hazard and would require this HCC.

**G2 - Gas, Flammable.** Any product, other than a flammable aerosol, which is required to be shipped as a UN Class 2.1 (Flammable gas) under 49 CFR 173.115 (a). This means any material which is a gas at 20$^{o}$C (68$^{o}$F) or lower at 1 atmosphere of pressure (101.3 kPa, 14.7 psi) (a material which has a boiling point of 20$^{o}$C (68$^{o}$F) or lower at 1 atmosphere) and which:

(a) Is ignitable at 1 atmosphere when in a mixture of 13 percent or less by volume with air; or

(b) At 1 atmosphere with air has a flammable range of at least 12 percent regardless of the lower limit.

(c) The limits specified above shall be determined at 1 atmosphere of pressure and a temperature of 20$^{o}$C (68$^{o}$F) in accordance with ASTM E681-85 (or latest version), Standard Test Method for Limits of Flammability of Chemicals.

**G3 - Gas, Non-flammable.** Any product (includes compressed gas, liquefied gas, pressurized cryogenic gas and compressed gas in solution) which is required to be shipped as UN Class 2.2 under 49 CFR 173.115 (b). This means a "non-flammable, non-poisonous compressed gas" material (or mixture) which:

(a) Exerts in the packaging a pressure of 41 psia (280 kPa) or higher at 20$^{o}$C (68$^{o}$F), and

(b) Does not meet the definition of a Flammable Gas (HCC G2), a Poison Gas (HCC G1), a Corrosive Gas (HCC G5), or an Oxidizing Gas (HCC G4).

**G4 - Gas, Nonflammable, Oxidizer.** A Nonflammable Gas, Oxidizer is a material (or mixture) which:

(a) Meets the definition of a Nonflammable Gas (HCC G3), except is an oxidizer; and

(b) Does not meet the definition of Poison Gas (HCC G1) or Flammable Gas (HCC G2); and

(c) Requires an Oxidizer label and a Nonflammable Gas label for transportation under 49 CFR.

**G5 - Gas, Nonflammable, Corrosive.** A Nonflammable Gas, Corrosive is a material (or mixture) which:

(a) Meets the definition of a Nonflammable Gas (HCC G3), except it is corrosive; and

(b) Does not meet the definition of Poison Gas (HCC G1) or Flammable Gas (HCC G2); and

(c) Requires a Corrosive label and a Nonflammable Gas label for transportation under 49 CFR.

**G6 - Gas, Poison, Corrosive (Nonflammable).** A Gas, Poison, Corrosive, (Nonflammable) is a material (or mixture) which:

(a) Meets the definition of a Nonflammable Gas (HCC G3), except it is poisonous and corrosive; and

(b) Does not meet the definition of a Flammable Gas (HCC G2) or an Oxidizing Gas (HCC G4); and

(c) Meets the definition of a Poison Gas (HCC G1); and

(d) Requires a Corrosive label and a Poison Gas label for transportation under 49 CFR.

**G7 - Gas, Poison, Oxidizer (Nonflammable).** A Gas, Poison, Oxidizer (Nonflammable) is a material (or mixture) which:

(a) Meets the definition of a Nonflammable Gas (HCC G3), except it is oxidizing and poisonous; and

(b) Does not meet the definition of a Flammable Gas (HCC G2) or a Corrosive Gas (HCC G5); and

(c) Meets the definition of a Poison Gas (HCC G1); and

(d) Meets the definition of an Oxidizing Gas (HCC G4).

**G8 - Gas, Poison, Flammable.** Any product which is required to be shipped as a UN Class 2.3 under 49 CFR 173.115(c) (Gas, poisonous by inhalation), and is required to be marked "Inhalation Hazard" under 49 CFR 172.313. This means a material which is a gas at 20$^{o}$C (68$^{o}$F) or lower at one atmosphere of pressure (101.3kPa, 14.7 psi) (a material which has a boiling point of 20$^{o}$C (68$^{o}$F) or lower at one atmosphere) and which:

(a) Is known to be so toxic to humans as to pose a hazard to health during transportation; or

(b) In the absence of data on human toxicity, is presumed to be so toxic to humans, because when tested on young albino rats for 1 hour, it has a LC50 (inhalation rat) less than 5000 ml/m$^3$ (ppm); and

(c) Meets the definition of a Flammable Gas (HCC G2).

**G9 - Gas, Poison, Corrosive, Oxidizer (Nonflammable).** A Gas, Poison, Corrosive, Oxidizer (Nonflammable) is a material (or mixture) which:

(a) Meets the definition of a Nonflammable Gas (HCC G3), except it is poisonous, oxidizing, and corrosive; and

(b) Does not meet the definition of a Flammable Gas (HCC G2); and

(c) Meets the definition of a Poison Gas (HCC G1), and an Oxidizer Gas (HCC G4); and

(d) Requires a Corrosive label, an Oxidizer label, and a Poison Gas label for transportation under 49 CFR.

**H1 - Hazard Characteristics Not Yet Determined.** Definitive hazard characteristics are not yet determined. The source of this code is the Federal Logistics Information System (FLIS).

**K1 - Infectious Substance.** A viable micro-organism or its toxin, which causes or may cause animal or human disease as published in Title 42 CFR, Section 72.3. Includes Infectious Substances Affecting Animals only (UN 2900), Infectious Substances Affecting Humans (UN 2814), and Etiologic Agent, N.O.S. (NA 2814).

**K2 - Cytotoxic Drugs.** Antineoplastic (Chemotherapy) drugs used in the treatment of cancer and determined and listed by the Directorate of Medical Material, Defense Supply Center Philadelphia, Philadelphia, PA.

**M1 - Magnetized Material.** Any material meeting the definition of a magnetized material as defined in the International Air Transport Association (IATA) regulations 3.9.1.3. The best method for determining magnetic properties is specified in IATA Packing Instruction 902, Method 2. This method specifies using a magnetic compass, accurate to one degree increments, that is placed on one of two points positioned 4.6 m (15 ft) apart which are aligned in an East/West direction in an area that is free from any magnetic interference other than the earth's magnetic field. The packaged item to be tested is placed on the other point and rotated 360 degrees in its

horizontal plane for indication of compass deflection. When the maximum compass deflection observed is two degrees or less the material is not considered to be magnetic. When the deflection of an item exceeds 2 degrees, the item is magnetic and shielding must be applied until the maximum deflection is not more than 2 degrees.

**N1 - Not regulated as Hazardous.** Any material, which does not meet the definition of any other HCC, is not regulated as hazardous by any regulatory organization, and through technical evaluation is generally regarded as nonhazardous for storage. Supporting documentation regarding the lack of storage hazards must be available through documents such as the MSDS, product labels, manufacturer's literature, and the advisory sources listed in Appendix C of 29 CFR 1910.1200, OSHA Hazard Communication Standard. An absence of the product from known listings of hazardous materials, while not conclusive of the lack of storage hazards, may be considered in the decision process and relies heavily on the professional judgment and experience of the evaluator. Note: Hazards associated with the actual *use* of the item should be made by qualified Industrial Hygiene Personnel.

**P1 - Peroxide, Organic, DOT Regulated.** A product classed as a UN Class 5.2 (Organic Peroxide) by the US DOT as defined in 49 CFR 173.128 and listed in the Organic Peroxides Table in 49 CFR 173.225 and is defined in NFPA Code 43B as NFPA Classes I, II, or III organic peroxides based on information provided by the supplier or manufacturer.

NFPA Class I organic peroxides present a deflagration hazard through easily ignited, rapid explosive decomposition. NFPA Class I includes some formulations that are relatively safe only under closely controlled temperatures. Either excessively high or low temperatures may increase the potential for severe explosive decomposition.

NFPA Class II organic peroxides present a severe fire hazard similar to NFPA Class I flammable liquids. The decomposition is not as rapid, violent, or complete as that produced by Class I formulations. As with Class I formulations, this class includes some formulations that are relatively safe when under controlled temperatures or when diluted.

NFPA Class III organic peroxides present a fire hazard similar to NFPA Class II combustible liquids. They are characterized by rapid burning and high heat liberation, due to decomposition.

Typical Class I, II, and III organic peroxides are listed in Volume 2, Appendix 43B of the National Fire Protection Association (NFPA) National Fire Codes Subscription Service.

**P2 - Peroxide, Organic, Low Risk.** A product that is an Organic Peroxide that is not regulated by the US DOT and meets the definition of NFPA Code 43B, Class IV organic peroxides that burn as ordinary combustibles and present minimal reactivity hazard. Class IV formulations present fire hazards that are easily controlled. Reactivity has little effect on fire intensity. Also included are Organic Peroxides that are not regulated by the US DOT and meet the definition of NFPA Code 43B, Class V organic peroxides. Class V formulations do not themselves burn and do not present a decomposition hazard. This definition includes Organic Peroxides regulated by the FDA. Typical Class IV and V organic peroxides are listed in Volume 2, Appendix 43B of the NFPA National Fire Codes Subscription Service.

**R1 - Reactive Chemical, Flammable.** Any product meeting the definition of UN Class 4.2 (Spontaneously Combustible) as defined in 49 CFR 173.124(b), which is likely to heat spontaneously under conditions normal to transportation or storage, or is likely to heat up in contact with air and catch fire. Included in this group are pyrophoric liquids that ignite spontaneously in dry or moist air at or below 130$^{o}$F (54.4$^{o}$C) as defined in 29 CFR 1910.1200.

**R2 - Water Reactive Chemical.** Any product meeting the definition of UN Class 4.3 (Dangerous when Wet) as defined in 49 CFR 173.124(c), which on interaction with water, is liable to become spontaneously ignitable or to give off flammable gases in dangerous quantities.

**T1 - DOT Poison-Inhalation Hazard.** A material, other than a poisonous gas (HCC G1), meeting the definition of UN Class 6.1 (Poisonous Material) under 49 CFR 173.132(a)(1)(iii) and assigned to Hazard Zone A or B in accordance with 49 CFR 173.133(a) and required to be marked or labeled "Inhalation Hazard" under 49 CFR 172.313 or 49 CFR 172.416 or 49 CFR 172.429. Codes 1, 2, 5, 6, or 13 are listed in the special provisions column of 49 CFR 172.101 for those shipping names that are poison-inhalation hazards and would require this HCC.

**T2 - UN Poison, Packing Group I.** A material, other than a poisonous gas (HCC G1) or Poison-Inhalation Hazard (HCC T1), that is classed as a UN Class 6.1 (Poisonous Material), that for packing purposes has been assigned Packing Group I (Great Danger) as defined in 49 CFR 173.133 (a)(1). This means that the toxicity is as specified below:

**Toxicity Ranges for Packing Group I**

| Route of Entry | Range | Test Animal |
|---|---|---|
| Oral Toxicity | Less than or equal to 5 mg/kg | Albino Rat |
| Dermal Toxicity | Less than or equal to 40 mg/kg | Albino Rabbit |
| Inhalation Toxicity | Less than or equal to 0.5 mg/L | Albino Rat |

**T3 - UN Poison, Packing Group II**

A material, other than a poisonous gas (HCC G1) or Poison-Inhalation Hazard (HCC T1), that is classed as a UN Class 6.1 (Poisonous Material), that for packing purposes has been assigned Packing Group II (Medium Danger) as defined in 49 CFR 173.133 (a)(1). This means that the toxicity is as specified below:

**Toxicity Ranges for Packing Group II**

| Route of Entry | Range | Test Animal |
|---|---|---|
| Oral Toxicity | Greater than 5 mg/kg and less than or equal to 50 mg/kg | Albino Rat |
| Dermal Toxicity | Greater than 40 mg/kg and less than or equal to 200 mg/kg | Albino Rabbit |
| Inhalation Toxicity | Greater than 0.5 mg/L and less than or equal to 2 mg/L | Albino Rat |

**T4 - UN Poison, Packing Group III**

A material, other than a poisonous gas (HCC G1) or Poison-Inhalation Hazard (HCC T1), that is classed as a UN Class 6.1 (Poisonous Material), that for packing purposes has been assigned Packing Group III (Minor Danger) as defined in 49 CFR 173.133 (a)(1) and may be labeled "Keep Away From Food". This means that the toxicity is as specified below:

**Toxicity Ranges for Packing Group III**

| Route of Entry | Range | Test Animal |
|---|---|---|
| Oral Toxicity | Solids: Greater than 50 mg/kg and less than or equal to 200 mg/kg. Liquids: Greater than 50 mg/kg and less than or equal to 500 mg/kg | Albino Rat |
| Dermal Toxicity | Greater than 200 mg/kg and less than or equal to 1000 mg/kg | Albino Rabbit |
| Inhalation Toxicity | Greater than 2 mg/L and less than or equal to 10 mg/L | Albino Rat |

**T5 - Pesticide, Low Risk**

Any product meeting the definition of a pesticide or pesticide product as defined in 40 CFR 152.3 which is in Toxicity Categories II, III, or IV as specified for warning label purposes in 40 CFR 156.10(h) and is not otherwise classed as a hazardous material under 49 CFR, and does not meet the definition of any other HCC. The toxicity categories are provided below:

**Toxicity Ranges for Low Risk Pesticides**

| Hazard Indicator | I | II | III | IV |
|---|---|---|---|---|
| Oral LD 50 | Up to and including 50 mg/kg | From 50 through 500 mg/kg | From 500 through 5000 mg/kg | Greater than 5000 mg/kg |
| Inhalation LC 50 | Up to and including .2 mg/liter | From .2 through 2 mg/liter | From 2 through 20 mg/liter | Greater than 20 mg/liter |
| Dermal LD 50 | Up to and including 200 mg/kg | From 200 through 2000 mg/kg | From 2000 through 20,000 mg/kg | Greater than 20,000 mg/kg |
| Eye Effects | Corrosive, corneal opacity not reversible within 7 days | Corneal opacity reversible in 7 days; irritation persisting for 7 days | No corneal opacity; irritation reversible | No irritation |
| Skin Effects | Corrosive | Severe irritation at 72 hours | Moderate irritation at 72 hours | Mild or slight irritation at 72 hours |

**T6 - Health Hazard**

Any product defined as hazardous in 29 CFR 1910.1200, which cannot be assigned any other HCC and which is supported by documentation such as an MSDS or product bulletin, or through experience is a known health hazard. Any classification of a material into this category is a process which relies heavily on the professional judgment of the evaluator, particularly in the area of potential chronic hazards. Such classification should be considered in light of the fact that although the primary purpose of the HCCs is to assure safe storage of products, there may be some application of the HCCs in screening products from a pollution prevention as well as safety and health standpoint. However, hazards associated with the actual use of the item should be made by qualified Industrial Hygiene personnel.

**T7 - Carcinogen (OSHA, NTP, IARC)**

A material not meeting the definition of any other HCC and which meets the definition of a carcinogen under the OSHA Hazard Communication standard and is so specified on the MSDS. This means that:

(a) It is listed by the International Agency for Research on Cancer (IARC) as a carcinogen or potential carcinogen in IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man (latest edition); or

(b) It is listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or

(c). It is regulated and listed by the Occupational Safety and Health Administration (OSHA) as a carcinogen in 29 CFR 1910, subpart Z.

**V1 - UN Class 9 Miscellaneous Hazardous Materials.** Materials meeting the definition of a United Nations Class 9 material as defined in Title 49 CFR, Section 173.140, the UN IMDG Code, or the IATA Dangerous Goods Regulations. This category includes any material which has anesthetic, noxious, or other similar properties that could cause extreme annoyance or discomfort to a flight crew member so as to prevent the correct performance of assigned duties. It also includes any material designated as a hazardous substance with a reportable quantity (RQ) listed in Title 49 CFR, Section 172.101 Appendix A, an elevated temperature material, a hazardous waste, or a marine pollutant which does not meet the definition of any other transportation hazard class.

**V2 - Aerosol, Nonflammable.** An aerosol product not exceeding 1 liter capacity which can be shipped under the shipping name "Aerosols, Nonflammable" Hazard Class 2.2 UN1950 or the shipping name "Consumer Commodity" ORM-D as specified in 49 CFR 173.306 (h).

**V3 - Aerosol, Flammable.** An aerosol product, not exceeding 1 liter capacity, which can be shipped under the shipping name "Aerosols, Flammable", Hazard Class 2.1, UN1950 or the shipping name "Consumer Commodity", ORM-D, as specified in 49 CFR 173.306 (h). An aerosol is regarded as flammable if it produces positive results when tested as described in 49 CFR 306(i).

**Note**: Recognized standard test methods utilizing procedures similar to those specified above which produce similar results may also be used. Also includes any aerosol that is required to be labeled "Flammable" under the US Federal Hazardous Substance Act. Included are ICAO Flammable non-refillable receptacles made of metal, glass, or plastic and containing a gas compressed, liquefied or dissolved under pressure, with or without a liquid, paste, or powder, and fitted with a self-closing release device allowing the contents to be ejected as solid or liquefied particles in suspension in a gas, as a foam, paste or powder, or in a liquid or gaseous state. Excluded are refillable compressed gas cylinders or flasks which are assigned a "G" series code.

**V4 - DOT Combustible Liquid, OSHA IIIA.** Any product that does not meet the definition of any other hazard class or HCC and has a flash point (closed cup) above 141$^{o}$F (60.5$^{o}$C) and at or below 200$^{o}$F (93$^{o}$C). OSHA Class IIIA items are included in this definition.

**V5 - High Flash Point Materials, OSHA IIIB.** Materials, not meeting the definition of any other HCC, that have a flash point above 200$^{o}$F (93$^{o}$C). Excluded from this definition are Petroleum Oils and Lubricants (POLs) as they have a separate HCC (V6). OSHA Class IIIB liquids are included in this definition.

**V6 - Petroleum Products.** Materials, not meeting the definition of any other HCC, containing petroleum products which could cause an environmental hazard if spilled on water or land. This category includes oils, greases, and lubricants that could be categorized in Federal Supply Class 9150 or 9160 as defined in the Federal Supply Classification Cataloging Handbook H2-1.

**V7 - Environmental Hazard.** Materials, not meeting the definition of any other HCC, which contain an Extremely Hazardous Substance listed in 40 CFR, Part 355, Appendix A or B, or a CERCLA Hazardous Substance listed in 40 CFR, Part 302.4, or a Toxic Chemical listed in 40 CFR, Part 372.65. In deciding whether or not a product falls into this category, determine if the concentration of a chemical exceeds the established de minimis limits which compare to the requirement for reporting the existence of the chemical under 29 CFR 1910.1200 section (g)(2)(i)(C)(1).

**X1 - Multiple Hazards Under One National Stock Number (NSN).** System generated code to reflect the existence of more than one HCC for an NSN. It reflects the fact that different products under the NSN have different hazards and consequently different HCCs.

**Z1 - Article Containing Asbestos.** An article in accordance with 29 CFR 1910.1200 which contains asbestos, or an item containing asbestos which under conditions of storage would not be expected to release hazardous materials and would not pose a physical hazard or health risk to employees. This category includes, but is not limited to, asbestos gaskets, brake shoes, or other products in which the asbestos is bound or otherwise immobilized to the point that exposure to personnel in a storage environment is minimal.

**Z2 - Article Containing Mercury.** An article in accordance with 29 CFR 1910.1200 which contains mercury, or an item containing mercury which under conditions of storage would not be expected to release hazardous materials and would not pose a physical hazard or health risk to employees. This category includes, but is not limited to, electron tubes, mercury switches and relays, mercury vapor lamps and tubes, fluorescent lamps, manometers, pumps, thermometers, or other devices in which the mercury is contained in such a fashion that exposure to personnel in a storage environment is minimal. For batteries which contain mercury use HCC Z7.

**Z3 - Article Containing Polychlorinated Biphenyl (PCB).** An article in accordance with 29 CFR 1910.1200 which contains Polychlorinated Biphenyls (PCB), or an item containing PCB which under conditions of storage would not be expected to release hazardous materials and would not pose a physical hazard or health risk to employees. This category includes, but is not limited to transformers, capacitors, or other devices in which the PCBs are contained in such a fashion that exposure to personnel in a storage environment is minimal.

**Z4 - Article, Battery, Lead Acid, Nonspillable.** A nonspillable battery consisting of a lead anode, a lead dioxide cathode, and sulfuric acid electrolyte that is designed and constructed so as to positively prevent leakage of the electrolyte, irrespective of the position of the battery. It must meet the definition of a "Nonspillable Battery" as defined in 49 CFR, Section 173.159(d).

**Z5 - Article, Battery, Nickel Cadmium, Nonspillable.** A nonspillable battery consisting of a cadmium anode, a nickel oxyhydroxide cathode, and potassium hydroxide electrolyte that is designed and constructed so as to positively prevent leakage of the electrolyte, irrespective of the position of the battery. It must meet the definition of a "Nonspillable Battery" as defined in 49 CFR, Section 173.159(d).

**Z6 - Article, Battery, Lithium.** A battery consisting of a lithium anode, a solid or liquid cathode, and electrolyte. The battery must meet the conditions established by 49 CFR, 173.185. Examples of typical lithium batteries and their compositions are provided below.

**TYPICAL LITHIUM ANODE/SOLUBLE CATHODE CELLS**

| NAME | ELECTROLYTE MIXTURE | CATHODE |
|---|---|---|
| Lithium-Sulfur dioxide | Sulfur dioxide/Acetonitrile/ Lithium bromide | Sulfur dioxide on Carbon |
| Lithium-Thionyl chloride | Thionyl chloride/Lithium tetrachloroaluminate | Thionyl chloride on Carbon |
| Lithium-Sulfuryl chloride | Sulfuryl chloride/Aluminum tetrachloride | Sulfuryl chloride on Carbon |

**TYPICAL LITHIUM ANODE/SOLID CATHODE CELLS**

| NAME | ELECTROLYTE MIXTURE | CATHODE |
|---|---|---|
| Lithium-Manganese dioxide | Propylene carbonate/1,2 Dimethoxy-ethane/Lithium tetrachloroaluminate | Manganese dioxide |
| Lithium-Carbon monofluorite | Dimethyl sulfide/Lithium hexafluoro-arsenate or Butyrolactone/1,2 Dimeth oxyethane/Tetrahydrofuran/Lithium borofluoride | Carbon monofluorite and Carbon |
| Lithium-Copper(II) oxide | Propylene carbonate /Tetrahydrofuran /Lithium perchlorate | Copper(II) oxide and Carbon |
| Lithium-Iron disulfide | Propylene carbonate/1,2 Dimethoxyethane/Lithium perchlorate | Iron sulfide and Carbon or Iron disulfide and Carbon |
| Lithium-Vanadium pentoxide | Methylformate/Lithium hexafluoroarsenate or Methyl formate/Lithium tetrafluoroborate | Vanadium pentoxide and Carbon |
| Lithium-Iodine | Lithium iodide | Iodine and Poly (2 vinylpyridine) |

**Z7 – Article, Battery, Dry Cell.** A sealed, non-vented battery containing electrolyte immobilized in the form of a paste or gel and not regulated for transportation by 49 CFR. Examples of typical dry cell batteries and their compositions are provided below:

**TABLE 6 – TYPICAL DRY CELL BATTERIES**

| NAME | ANODE | CATHODE | ELECTROLYTE |
|---|---|---|---|
| Carbon-Zinc | Zinc | Manganese dioxide | Ammonium chloride or Zinc chloride |
| Alkaline-Manganese dioxide | Zinc | Manganese dioxide | Potassium hydroxide or sodium hydroxide |
| Mercury-Zinc | Zinc | Mercuric oxide | Potassium hydroxide or sodium hydroxide |
| Zinc-Air | Zinc | Oxygen/Catalyst | Potassium hydroxide or sodium hydroxide |
| Silver-Zinc | Zinc | Silver oxide | Potassium hydroxide |
| Mercury-Cadmium | Cadmium | Mercuric oxide | Potassium hydroxide |
| Magnesium-Manganese dioxide | Magnesium | Manganese dioxide | Magnesium perchlorate, lithium chlorate, and Barium chromate |

*Table B-3. Relationship between HCCs and Various Regulatory Categories Shown in Order of Assignment Preference Using 49CFR as a Basis*

| HCC | EPA 40CFR370.2 | OSHA 29CFR1910.1200 | DOT 49CFR |
|---|---|---|---|
| A1 | NOT REGULATED | LONG TERM HEALTH HAZARD | CLASS 7 |
| A2 | NOT REGULATED | LONG TERM HEALTH HAZARD | CLASS 7 |
| A3 | NOT REGULATED | LONG TERM HEALTH HAZARD | CLASS 7 |
| E1 | SUDDEN RELEASE OF PRESSURE | EXPLOSIVE | CLASS 1.1-1.3 |
| E2 | SUDDEN RELEASE OF PRESSURE | EXPLOSIVE | CLASS 1.4-1.6 |
| G1 | PRESSURE+ACUTE/CHRONIC HEALTH | COMPRESS GAS + HI TOXIC/TOXIC | CLASS 2.3 |
| G9 | PRESSURE+ACUTE/CHRONIC HEALTH+ FIRE HAZARD | COMP GAS+HI TOXIC/TOXIC+CORROSIVE +OXIDIZER | CLASS 2.2+POISON+CORROSIVE + OXIDIZER |
| G8 | PRESSURE+ACUTE/CHRONIC HEALTH + FIRE HAZARD | COMPRESS GAS+HI TOXIC/TOXIC + FLAMMABLE | CLASS 2.3 + FLAMMABLE |
| G7 | PRESSURE+ACUTE/CHRONIC HEALTH + FIRE HAZARD | COMP GAS+HI TOXIC/TOXIC + OXIDIZER | CLASS 2.2+POISON+OXIDIZER |
| G6 | PRESSURE + ACUTE HAZARD | COMP GAS+HI TOXIC/TOXIC + CORROSIVE | CLASS 2.2+POISON+CORROSIVE |
| G2 | PRESSURE + FIRE HAZARD | COMP GAS + FLAMMABLE | CLASS 2.1 |
| G4 | PRESSURE + OXIDIZER | COMPRESS GAS + OXIDIZER | CLASS 2.2 + OXIDIZER |
| G5 | PRESSURE + ACUTE HEALTH | COMPRESSED GAS + CORROSIVE | CLASS 2.2 + CORROSIVE |
| G3 | SUDDEN RELEASE OF PRESSURE | COMPRESSED GAS | CLASS 2.2 |
| T1 | ACUTE HEALTH HAZARD | HIGHLY TOXIC | CLASS 6.1 INHALATION HAZARD |
| F5 | FIRE HAZ+ACUTE/CHRON HEALTH | FLAM/COMB + HI TOXIC/TOXIC | CLASS 3+6.1, PG I-III |
| F6 | FIRE HAZ+ACUTE HEALTH HAZARD | FLAM LIQ/COMB + CORROSIVE | CLASS 3 + CLASS 8 |
| F7 | FIRE HAZ+ACUTE HEALTH HAZARD | FLAM LIQ/COMB + CORROSIVE | CLASS 3 + CLASS 8 |
| F1 | FIRE HAZARD | FLAMMABLE LIQUID, CLASS IA | CLASS 3 (PG I) |
| F2 | FIRE HAZARD | FLAMMABLE LIQUID, CLASS IB | CLASS 3 (PG II) |
| F3 | FIRE HAZARD | FLAMMABLE LIQUID, CLASS IC | CLASS 3 (PG III) |
| F4 | FIRE HAZARD | COMBUSTIBLE LIQUID, CLASS II | CLASS 3 (PG III) |
| D2 | FIRE HAZ+ACUTE/CHRONIC HEALTH | OXIDIZER + HI TOXIC/TOXIC | CL 5.1 + 6.1, PG I-III |
| D3 | FIRE HAZ+ACUTE HEALTH HAZARD | OXIDIZER + CORROSIVE | CLASS 5.1 + CLASS 8 |
| D4 | FIRE HAZ+ACUTE HEALTH HAZARD | OXIDIZER + CORROSIVE | CLASS 5.1 + CLASS 8 |
| D1 | FIRE HAZARD | OXIDIZER | CLASS 5.1 |
| R2 | REACTIVE | WATER REACTIVE | CLASS 4.3 |
| F8 | FIRE HAZARD | PYROPHORIC | CLASS 4.1 |
| R1 | REACTIVE + FIRE HAZARD | PYROPHORIC | CLASS 4.2 |
| P1 | REACTIVE + FIRE HAZARD | ORGANIC PEROXIDE | CLASS 5.2 |
| V3 | SUDDEN RELEASE OF PRESSURE | COMPRESSED GAS | CLASS 2.1 |
| V2 | SUDDEN RELEASE OF PRESSURE | COMPRESSED GAS | CLASS 2.2 |
| C4 | ACUTE HEALTH HAZARD | CORROSIVE + OXIDIZER | CLASS 8 + CLASS 5.1 |
| C5 | ACUTE HEALTH HAZARD | CORROSIVE + OXIDIZER | CLASS 8 + CLASS 5.1 |
| C1 | ACUTE HEALTH HAZARD | CORROSIVE | CLASS 8 |
| C2 | ACUTE HEALTH HAZARD | CORROSIVE | CLASS 8 |
| B1 | ACUTE HEALTH HAZARD | CORROSIVE | CLASS 8 |
| B2 | ACUTE HEALTH HAZARD | CORROSIVE | CLASS 8 |
| K1 | ACUTE + CHRONIC HEALTH HAZARD | SHORT TERM HEALTH HAZARD | CLASS 6.2 |
| T2 | ACUTE HEALTH HAZARD | HIGHLY TOXIC | CLASS 6.1, PG I |
| T3 | ACUTE HEALTH HAZARD | HIGHLY TOXIC | CLASS 6.1, PG II |
| T4 | ACUTE HEALTH HAZARD | TOXIC | CLASS 6.1, PG III |
| V4 | FIRE HAZARD | COMBUSTIBLE LIQUID | COMBUSTIBLE LIQUID |
| V5 | NOT REGULATED | CLASS IIIB | NOT REGULATED |
| Z2 | NOT REGULATED - ARTICLE | NOT REGULATED - ARTICLE | CLASS 8 |
| V1 | ACUTE HEALTH HAZARD | SHORT TERM HEALTH HAZARD | CLASS 9 |
| Z1 | NOT REGULATED - ARTICLE | NOT REGULATED - ARTICLE | CLASS 9 |
| Z3 | NOT REGULATED - ARTICLE | NOT REGULATED - ARTICLE | CLASS 9 |
| Z6 | NOT REGULATED - ARTICLE | NOT REGULATED - ARTICLE | CLASS 9 |
| T7 | CHRONIC HEALTH HAZARD | CARCINOGEN | NOT REGULATED |
| T6 | ACUTE/CHRONIC HEALTH HAZARD | IRRIT/SENSITIVE/LONG TERM HLTH HAZ | NOT REGULATED |
| T5 | ACUTE/CHRONIC HEALTH HAZARD | TOXIC | NOT REGULATED |
| K2 | ACUTE + CHRONIC HEALTH HAZARD | SHORT TERM HEALTH HAZARD | NOT REGULATED |
| P2 | REACTIVE | ORGANIC PEROXIDE | NOT REGULATED |
| V7 | ACUTE/CHRONIC HEALTH HAZARD | NOT REGULATED | NOT REGULATED |
| C3 | NOT REGULATED | NOT REGULATED | NOT REGULATED |
| B3 | NOT REGULATED | NOT REGULATED | NOT REGULATED |
| V6 | NOT REGULATED | NOT REGULATED | NOT REGULATED |
| M1 | NOT REGULATED | NOT REGULATED | MAGNETIC |
| Z4 | NOT REGULATED - ARTICLE | NOT REGULATED - ARTICLE | NOT REGULATED |
| Z5 | NOT REGULATED - ARTICLE | NOT REGULATED - ARTICLE | NOT REGULATED |
| Z7 | NOT REGULATED - ARTICLE | NOT REGULATED - ARTICLE | NOT REGULATED |
| N1 | NOT REGULATED | NOT REGULATED | NOT REGULATED |

# Department of Defense Green Procurement Program Strategy

## Promoting Environmental Stewardship Throughout the Department of Defense

**Updated November 2008**

**This document is the Department of Defense (DoD) Strategy for Green Procurement. The strategy is a "living" document that will be maintained and routinely updated on the Defense Procurement and Acquisition Policy (DPAP) and DENIX web sites. This method of managing the Strategy will enable the Department to be more flexible and responsive to feedback from the field and to emerging requirements and information on the Federal Green Purchasing Programs. It also supports our intent to lead continual improvement in DoD green procurement performance.**

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# INTRODUCTION

This document formally established the Department of Defense's (DoD) Green Procurement Program (GPP) in Fiscal Year (FY) 2004 and provides an agency-wide strategy for implementing an effective program. The purpose of the DoD GPP is to enhance and sustain mission readiness through cost effective acquisition that achieves compliance and reduces resource consumption and solid and hazardous waste generation. Green procurement includes the acquisition of:

- recycled content products,
- environmentally preferable products and services,
- biobased products, energy- and water-efficient products,
- alternate fuel vehicles and alternative fuels,
- products using renewable energy, and
- alternatives to hazardous or toxic chemicals.

Green procurement practices also play a key role in enhancing transportation efficiency and sustainable buildings. The GPP applies to all acquisitions from major systems programs to individual unit supply and service requisitions.

This strategy does not directly address the compliance requirements of any specific component of the Federal Green Purchasing Program; rather it defines the management framework all DoD organizations will use to ensure compliance with procurement preference requirements as a routine part of day-to-day purchasing activities. DoD's procurement of green products and services contributes to sound management of the Department's financial resources, natural resources, and energy. In its day-to-day operations, DoD has the opportunity and obligation to be environmentally and energy conscious in its selection and use of products and services. Proper attention to green procurement will enhance the Department's credibility and demonstrate DoD's commitment to environmental stewardship by becoming a model consumer of green products and services. Across the government, sound environmental management and procurement are known under a variety of other names such as Affirmative Procurement (AP) and Environmentally Preferable Purchasing (EPP), to name a few. As the titles suggest, the focus of these programs has been towards procurement organizations. DoD's GPP is focused not only on the procurement function but also on the roles and responsibilities of each member of the Department and recognizes that every person has a role to play.

Green Procurement Program Objectives:

- Educate appropriate DoD employees on the requirements of Federal "green" procurement preference programs, their roles and responsibilities relevant to the DoD GPP, and the opportunities to purchase green products and services.
- Increase purchases of green products and services consistent with the demands of mission, efficiency, and cost-effectiveness, with continual improvement toward Federally established procurement goals.
- Reduce the amount of solid waste generated.

- Reduce consumption of petroleum and increase the use of alternative and renewable fuel sources.
- Increase in the use of renewable energy.
- Reduce the use of ozone depleting substances and hazardous and toxic chemicals.
- Improve the procurement of green electronic equipment through smarter acquisition.
- Increase the use of biobased products and reduce dependence on fossil energy-based products derived from imported oil and gas.
- Reduce consumption of energy and natural resources.
- Expand markets for green products and services.

The DoD is a leader in green procurement. As the single largest buyer of supplies and services throughout the government, DoD strives to ensure that every procurement meets the requirements of applicable Federal green procurement preference programs.

This strategy defines DoD's minimum requirements for green procurement management. They shall be implemented in DoD and Component organizations as the management framework for the Federal Green Purchasing Programs, including those listed herein and new programs as they are established in law, regulation, or Executive Order (E.O.).

The DoD GPP requires green products and services to be purchased to the maximum extent practicable, consistent with the requirements of relevant Federal Green Purchasing Programs. No part of the DoD GPP Strategy or DoD Component Green Procurement Programs shall be interpreted to supersede any Federal green procurement requirements.

The responsibility for implementing DoD's GPP lies not within any single organization, but with every person involved in the procurement process. This includes, but is not limited to, the technical/requirements planner, contracting specialist, contracting officer, persons requisitioning products or services through any source of supply, and governmentwide commercial purchase card (GCPC) holders. Each person has a role to play in ensuring that DoD complies fully with all Federal procurement preference requirements.

# WHEN DO I NEED TO CONSIDER GREEN PROCUREMENT AND WHERE CAN I FIND GREEN PRODUCTS AND SERVICES?

Under E.O. 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," federal agencies are required to use sustainable environmental practices in the acquisition of goods and services.

> *E.O. 13423, sec. 2(d) and (h), excerpted: In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
>
> *(d) require in agency acquisitions of goods and services (i) use of sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy-efficient, water-efficient, and recycled-content products, and(ii) use of paper of at least 30 percent postconsumer fiber content;*
>
> *(h) ensure that the agency (i) when acquiring an electronic product to meet its requirements, meets at least 95 percent of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product….*
>
> *Sec. 3(a), excerpted, (e), and (f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
>
> *(a) implement within the agency sustainable practices for (i) energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction, (ii) renewable energy, including bioenergy, (iii) water conservation, (iv) acquisition, (v) pollution and waste prevention and recycling, (vi) reduction or elimination of acquisition and use of toxic or hazardous chemicals, (vii) high performance construction, lease, operation, and maintenance of buildings, (viii) vehicle fleet management, and (ix) electronic equipment management;*
>
> *(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;*
>
> *(f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order.*

In addition to E.O. 13423, certain laws concern green procurement and mandate the specific procurement of supplies/services. For example:

- Section 6002 of the Resources Conservation and Recovery Act (RCRA) requires federal agencies to comply with the Environmental Protection Agency's (EPA's) regulations concerning procurement of items composed of recovered materials. EPA's "Buy Recycled" program requires the purchase of recycled content products for specific designated products.
- The U.S. Department of Agriculture (USDA)'s "BioPreferred" program, under Section 9002 of the Farm Security and Rural Investment Act, requires the purchase of biobased products for specific designated products.
- The Energy Policy Act of 2005 (EPAct 2005) requires Federal agencies to purchase ENERGY STAR® and Federal Energy Management Program (FEMP)-designated products.

Information about the many components of the GPP can be found on the internet at the web sites provided in the "Additional Regulatory Guidance" section of this document.

The Federal green procurement program components were created as individual programs authorized by various statutes and E.O.s and administered by three agencies: EPA, the DOE, and the USDA. E.O. 13423 and the Instructions for Implementing E.O. 13423 require agencies to implement these individual programs as a holistic green procurement program. Under the Instructions for Implementing Executive Order 13423 issued by the Council on Environmental Quality, each federal agency shall give preference in their procurement and acquisition programs to the purchase of:

- Recycled content products designated in EPA's Comprehensive Procurement Guidelines.
- ENERGY STAR® products identified by DOE and EPA, as well as FEMP-designated energy-efficient products.
- Water-efficient products, including those meeting EPA's WaterSense standards.
- Energy from renewable sources.
- Biobased products designated by the U.S. Department of Agriculture in the BioPreferred program.
- Environmentally preferable products and services, including EPEAT-registered electronic products.
- Alternative fuel vehicles and alternative fuels required by EPAct.
- Products with low or no toxic or hazardous constituents, consistent with section VIII.A of these instructions.
- Non-ozone depleting substances, as identified in EPA's Significant New Alternatives Program.

The Green Purchasing section of the Office of the Federal Environmental Executive's (OFEE) web site, www.ofee.gov/gp/gp.asp, is the portal to the Federal Green Procurement

Programs and links to each of the program components. The EPA Database of Environmental Information for Products and Services at http://yosemite1.epa.gov/oppt/eppstand2.nsf provides a quick reference guide to the various programs and products involved in DoD's GPP. The EPA database provides links to contract language, specifications, and policies; environmental standards and guidelines; vendor lists of product brands; and other useful sources of information (e.g., fact sheets, guidance, case studies). Similar component-specific information is found in the other program component-specific web sites managed by EPA, DOE, and USDA.

There are many ways to find green products. Routinely used government supply sources have green products but these products must be sought and specifically requested. Products are available through supply catalogs published by the General Services Administration (GSA), the Defense Logistics Agency (DLA), and local contractors serving as AbilityOne Program distributors. Green products also are readily available through government supply sources on the internet. Sample green contract language also can be found on the web or through networking on electronic mail list servers. A list of useful resources and web sites is provided in the "Additional Regulatory Guidance" section.

In every procurement action involving EPA- or USDA-designated items, the procurement request originator must justify a decision not to procure products containing recovered material or biobased content. Valid justifications must be based upon the inability to acquire the product in a timely manner or at a sufficient level of competition, at a reasonable price, or to satisfy the technical/performance requirements. In addition, agencies must also justify a decision not to procure ENERGY STAR® and FEMP-designated products when procuring energy consuming products, as applicable, unless the Head of Agency makes a written finding of an exception as defined in the EPAct 2005. Such justifications must be based on the inability to acquire the product that meets the functional requirements of the agency or is cost-effective over the life of the product, taking energy cost savings into account.

# DOD's GREEN PROCUREMENT PROGRAM

The overall framework selected for the DoD GPP is the basic framework of an environmental management system (EMS). The basic EMS framework consists of: Policy, Planning, Implementation and Operation, Checking and Corrective Action, and Management Review. The required elements of E.O. 13423, RCRA of 1976 Section 6002, Section 9002 of the Farm Security and Rural Investment Act of 2002 (The Farm Bill), and EPAct 2005 correlate well with the EMS framework, and all other components of Federal green procurement may be readily integrated into the EMS framework.

The Department's GPP is jointly managed by the Deputy Under Secretary of Defense for Installations and Environment (DUSD(I&E)) and the Director, Defense Procurement, Acquisition Policy, and Strategic Sourcing (USD(AT&L)/DPAPSS). Information regarding the DoD GPP is available on DUSD(I&E), Defense Environmental Network Information and Exchange (DENIX) and DPAP websites.

Every organization in DoD that defines requirements, places orders, makes purchases, or contracts for products and services shall implement the following management elements in its GPP. To the extent that any of the elements listed below are in-place and documented as integral elements of the organization's EMS, they need not be duplicated for the purposes of GPP implementation.

## *DoD Requirements for Green Procurement Management:*

The following sections describe the process that installations/organizations should use to develop an effective GPP.

### a. Policy

- Establish policy for a GPP that meets the requirements of this guidance document and is appropriate for the nature of the organization's purchasing activities.

### b. Planning – Preference Program and Procedures

- Establish and document a process to identify opportunities to procure green products and services in the normal course of business, maintain a list of such opportunities, and update the list regularly to reflect changes in the mission and availability of green products and services relevant to the mission. The list of green procurement opportunities should be developed and maintained at a level within the organization where initial purchasing requirements are defined.

- Establish and document a process for setting, maintaining, and annually reviewing and updating objectives and targets for GPP performance that are appropriate for the nature and quantity of purchases made by the organization. Objectives and targets must be established

for significant opportunities to purchase green products and services. Objectives and targets should be based on the organization's purchasing activities and applied at a level of the organization where initial purchasing requirements are defined.

- Implement and operate the GPP in a manner that meets or exceeds the requirements of all relevant laws, regulations, and E.O.s.

- Document the objectives, targets, and actions necessary to achieve them in an installation-level plan for improving green procurement performance. Existing AP or GPP Plans may meet many of the basic requirements; however, they should be expanded during future reviews to include the DoD GPP management system structure and to address changes in requirements, goals, and policies relative to all applicable Federal green purchasing programs.

## c. Implementation and Operation

- Define and document roles and responsibilities and establish accountability for GPP implementation and operation.
  - Ensure each individual is aware of his/her responsibilities under the GPP.
  - Ensure each individual has received training to fulfill such responsibilities competently.
  - Ensure accountability for implementation by including green procurement responsibilities in job descriptions and performance standards of key personnel (e.g., facility managers, information technology (IT) managers, environmental and energy program managers, vehicle fleet managers, contracting officials, GCPC program managers, and others as appropriate).
  - If appropriate, create a green procurement team or assign a manager(s) to review proposed procurements and acquisitions for inclusion of green procurement requirements.

- Implement training.
  - Tailor the GPP awareness training program to the nature and quantity of purchases made by the organization.
  - Include initial and refresher training for all personnel involved in the procurement process from requirements generation to contracting, credit card, or other purchase actions. Green training was added to the mandatory course material for purchase cards. Card holders must take the initial purchase card training (available online at Defense Acquisition University (DAU)) prior to a card being issued. It is DoD policy that all cardholders, approving officials, certifying officials and Agency/Organization Program Coordinator must take refresher purchase card training every two years after completing basic card training.
  - Incorporate the GPP awareness training program into established training programs for installation management and staff, such as: new employee orientation; environmental awareness training; Contracting Officer's Representative, governmentwide commercial purchase card, and other procurement training; and office administrative staff training.
  - Establish a process to identify training requirements for each position, and document initial and follow-up training for each individual with responsibilities under the GPP.

- Implement internal and external communication programs.
  - Educate government personnel and contractors about complying with the requirements of Federal green purchasing programs.
  - Use the following tools, and others, as appropriate:
    - Electronic broadcast messages
    - Articles in agency/site newsletters and newspapers
    - Web sites to provide information and notices on green procurement of products and services, waste prevention, and recycling
    - Publications, speeches, commitments, and presentations in association with DoD-sponsored and national events such as Earth Day, America Recycles Day, DoD Procurement Conference, and Environment, Energy, & Sustainability Symposium & Exposition ($E^2S^2$)
    - Bulletin boards, marquee, or other means of posting information
    - Acquisition forecasts

- Define GPP documentation requirements. For example, document the following:
  - Consideration of environmental and energy aspects of a planned acquisition or procurement (e.g., products that will be supplied or used in the performance of the work, such as janitorial products and restroom paper products)
  - Initial and follow-up training for each individual with responsibilities under the GPP
  - Justification for not purchasing green products and services (e.g., price, performance, or availability)
  - Certifications, estimations, and verifications
  - Performance data and metrics
  - Required reports and records
  - Other records needed for a successful program

- Implement operational controls.
  - Establish procedures to ensure GPP requirements are addressed in all procurement actions and at each appropriate stage of the procurement process.
  - Establish procedures and approval authorities for justifications not to purchase green products.
  - Establish automatic substitution procedures where appropriate and feasible.

## d. Checking and Corrective Action

- Establish a process for evaluation and reporting of GPP performance, if a corrective action program does not already exist through the installation EMS, or other management system.

- Measure performance based on:
  - Installation-level objectives and targets established at the organization level where initial purchasing requirements are defined
  - DoD Component-level objectives and targets

- Use established DoD data tracking and audit systems to measure performance consistent with DoD and Federal metrics and reporting requirements.
  - Federal Procurement Data System-Next Generation (FPDS-NG) data at https://www.fpds.gov/
  - Defense Logistics Agency's web-based Green Procurement Reporting (GPR) at www.dlis.dla.mil/erlsgpr
  - GPP training data from DAU (click on CLC tab then CLC046): DAU Continuous Learning Module CLC046 - Green Purchasing
  - List of partners in the Federal Electronics Challenge (FEC) found at https://db2.erg.com/fec/curpart.asp
  - Contract management reviews, environmental compliance audits, GCPC audits

- Develop other measurement tools as necessary to meet local mission and management goals.

- Annually report up the chain of command as necessary to meet the Federal, DoD, and Component reporting requirements.
  - DoD will collect data annually to comply with the statutory and E.O. reporting requirements. Reporting guidance will be issued annually by Office Under the Secretary of Defense, OUSD (AT&L)/I&E and DPAP.
  - All DoD organizations' respective evaluation and reporting processes shall be conducted in a manner that supports the content and timing of DoD's reporting requirements.
  - Currently, DoD's Federal agency-level reporting requirements are limited to the E.O. 13423 Sustainable Practices, Farm Security and Rural Investment Act of 2002 (FSRIA) 9002 Annual Report, and the Annual Report to Congress for the GPP.

- Incorporate GPP requirements into self assessments, compliance inspection protocols, management system audit protocols, contract audit protocols, and GCPC audit protocols. Note: See DoD GPP Management Assessment.

- Develop corrective action procedures to address deficiencies identified in assessments, inspections, and audits.

- Conduct routine self assessments of the effectiveness of GPP awareness training, the completeness and integrity of GPP performance data, and the overall GPP.

- Evaluate the effectiveness of audit procedures, including implementation of corrective actions.

## e. Management Review

- Establish procedures for routine (at least annual) senior management review of the effectiveness of the GPP in each relevant organization and at each level of the Department. The organization's management should review the GPP comprehensively to ensure its continued suitability and effectiveness in meeting green procurement requirements, and to ensure continual improvement in green procurement performance.

- Include, at a minimum, results from audits; progress on objectives and targets; FPDS-NG data; DLA-provided green procurement data; training data; and the effectiveness of the GPP in meeting local, Component, and DoD GPP requirements. The management review process should result in documented conclusions and recommendations for which follow-on actions are required and tracked through the appropriate installation corrective action program.

# ROLES AND RESPONSIBILITIES

## *I. Procurement Request Originator and Acquisition Program Managers*

Procurement request originators may include GCPC holders, technical requirements generators/specification writers, facilities managers, construction managers, fleet managers, and IT managers. Procurement request originators and acquisition program managers are responsible for:

- Identifying and documenting whether recycled content, biobased content, and energy- and water-efficient products, alternative fuel vehicles, and products containing non-ozone depleting substances are required.
- Determining if recycled content and biobased products satisfy local requirements for price, availability, and performance and if FEMP-designated or ENERGY STAR® products are life-cycle cost effective and reasonably available.
- Identifying opportunities for specifying environmentally preferable products and services, including:
  - Cleaning products and services
  - Materials used in construction, renovation, and landscaping
  - EPEAT-registered products
  - Low or non-toxic and hazardous chemicals or products with low or non-toxic constituents
  - Conference and meeting services
  - Renewable energy sources
- Identifying and developing specifications that are based on consideration of all of the green attributes identified in the section of this document titled "When Do I Need to Consider Green Procurement…"
- Ensuring that relevant green procurement requirements are identified prior to submission to the contracting office, the approving official or source of supply, so that final/approved purchase requests properly address all relevant green procurement requirements.
- Consulting with contract and environmental specialists to improve procurement plans and prepare purchase requests, statements of work or specifications that incorporate relevant green procurement concepts and requirements of Federal laws, regulations and E.O.s.
- Following DoD Component or locally established procedures for documenting exceptions to green procurement requirements.
- Applying life-cycle cost concepts to determine cost effectiveness of green alternatives for use in acquisition and procurement decisions.
- Providing oversight of contract execution to ensure green procurement requirements are addressed in accordance with the terms of the contract.
- Attend GPP training, as required.

## II. Governmentwide Commercial Purchase Card Approving Officials

Governmentwide Commercial Purchase Card (GCPC) Approving officials are responsible for:

- Reviewing purchase requests to determine whether green products have been considered or requested.
- Ensuring that mandatory GPP requirements are being met.
- Determining if there is appropriate justification based on price, performance, or availability for not meeting the purchasing requirements of the "Buy Recycled" or "BioPreferred" program.
- Attend GPP training, as required.

## III. Installation Procurement Offices

Contracting officials are responsible for:

- Reviewing all procurement requests to ascertain and validate whether green products or services are involved in the procurement action.
- Providing guidance to procurement request originators and facilitating acquisition planning with respect to green products and services.
- Providing and documenting green procurement training for procurement personnel in consultation with appropriate DoD and Component acquisition/procurement training sources and environmental management organizations.
- Incorporating appropriate green procurement language and Federal Acquisition Regulation (FAR) provisions and clauses in solicitations and contracts, respectively, consistent with specifications provided by the customer.
- Ensuring all contract actions from development through award, execution, and close-out meet relevant FAR requirements for green procurement. Specifically, as required by FAR 23.405, these requirements include placing a written justification in the contract file for acquisitions above the micro-purchase threshold that describes why an EPA-designated product *containing recovered materials* or USDA-designated item containing biobased content was not acquired.
- Maintaining required documents in the contract file to include estimates, certifications, and written justifications for exceptions when required.
- Accurately completing the Contract Action Report (CAR) for data input to FPDS-NG.
- Including environmental considerations (reuse, recycling, waste reduction, and green procurement) as a selection criterion.
- Assisting organizations and personnel involved in the procurement process in utilizing the FPDS-NG and the DLA GPR tool at www.dlis.dla.mil/erlsgpr to track performance.
- Complying with procedures for monitoring and annually reviewing the effectiveness of the GPP.

## IV. Installation Environmental Managers

Installation environmental managers are responsible for:

- Implementing an awareness program to promote green procurement that covers the program components appropriate for products and services purchased at the installation along with implementation of Federal Acquisition Regulation requirements at the installation.
- Advising the procurement request originators and contracting officers on best practices for acquisition strategies with green products and services.
- Providing procurement request originators and contracting officers with current Federal requirements and listings of green products and services.
- Providing procurement request originators with information and tools supporting non-mandatory GPP initiatives, such as the web links for EPA Green Cleaning Product recommendations, the EPA EPP database, and green product catalogs or listings from the GSA and DLA.
- Providing green procurement consultation support to all personnel and organizations involved in the purchasing process, including personnel and organizations that define requirements, write specifications, order, purchase, or contract for products or services.
- Providing recommendations to management personnel across all organizations involved in the purchasing process on the preparation, implementation, and monitoring of the GPP.
- Supporting and monitoring the organization's or installation's achievement of green procurement objectives and targets within the EMS.
- Attend GPP training, as required.

## V. Installation and Operational Commanders

Installation and operational commanders are responsible for:

- Designating the installation GPP manager(s).
- Signing and supporting the organization or installation GPP policy and plan.
- Ensuring that all organizational personnel are trained in green procurement and such training is tracked, managed, and reported as necessary to ensure all personnel involved in the procurement process are knowledgable and competent to comply with green procurement requirements relevant to their procurement/purchasing action(s).
- Ensuring appropriate personnel are accountable for the GPP through inclusion of green procurement responsibilities in job descriptions and performance standards.
- Establishing and updating installation-level objectives and targets for green procurement.
- Routinely evaluating the performance of subordinate units relative to their green procurement objectives and targets.
- Recommending personnel and projects for nomination for White House Closing the Circle Awards.
- Attend GPP training, as required.

## VI. Installation or Organization GPP Manager(s)

Installation or organization GPP Managers are responsible for:

- Serve as technical point of contact for installation/organization personnel regarding green procurement requirements and implementation.
- Organize and participate in installation or organizational meetings/forums addressing green procurement and its implementation.
- Initiate and develop the installation GPP by identifying opportunities for the procurement of green products and services, providing information on green products to installation purchasing activities, and publishing a green procurement policy and plan.
- Document and promote the initiatives and accomplishments of the GPP and disseminate lessons learned.
- Monitor the progress of the GPP objectives and targets within the EMS.
- Investigate and recommend training sources and maintain records of green procurement training of requirements generators, procurement personnel, and GCPC holders.
- Recommend changes in policies or procedures to improve the GPP when necessary.
- Periodically review written justifications for the purchase of noncompliant products to determine their installation-wide consistency and validity.
- Establish procedures to collect GPP data to support reporting requirements.
- Review and update the installation GPP every three years or sooner if regulations or requirements change, new products are designated, or operational changes affect procurement.
- Attend GPP training, as required.

## VII. Military Department and Agency Heads

Military departments and the directors of defense agencies are responsible for:

- Promoting DoD's GPP.
- Providing policy and guidance to component/agency personnel on implementing the GPP.
- Ensuring that each installation has an effective GPP that is appropriate for the nature of its purchasing and contracting activities.
- Establishing procedures to collect data that meets reporting requirements.
- Utilize and analyze procurement data for the purpose of management evaluation of green procurement performance, when such data is maintained in the FPDS-NG, DLA GPR tool at Defense Logistics Information Service (DLIS), or other databases operated by procurement organizations.
- Implement and operate the GPP in a manner that meets or exceeds the requirements of all relevant laws, regulations, and E.O.s.
- Define Senior Management at Agency-level to facilitate senior management reviews.

## *VIII. Agency Procurement Executive - Director, Defense Procurement Acquisition Policy, and Strategic Sourcing*

The Director, DPAPSS and associated staff are responsible for:

- Ensuring that all appropriate acquisition courses offered through the Defense Acquisition University incorporate green procurement training to ensure a sufficient level of proficiency.
- Issuing procurement policies and regulations in consonance with green procurement requirements.
- Issuing contract language supporting sustainable/green procurement or operations.
- Sharing best practices in DENIX; Green Procurement/Biobased Best Practices.
- Promoting the Department's GPP.
- Working in consonance with the Agency E.O. 13423 Senior Officials to review and analyze green procurement indicators, including the preparation of the annual report to the Office of the Federal Procurement Policy (OFPP) and the OFEE.
- Utilizing FPDS-NG data, DLA Environmental Reporting Logistics System (ERLS) GPR tool at www.dlis.dla.mil/erlsgpr, and contract management review data to track performance.
- Serves on Defense Acquisition Regulation System Environmental Committee.

## *IX. Agency E.O. 13423 Senior Official - Deputy Under Secretary of Defense (Installations and Environment)*

The DUSD(I&E) and associated staff are responsible for:

- Promulgating the Department's policies and regulations in conjunction with the Director of Defense Procurement and Acquisition Policy.
- Sharing best practices.
- Coordinating education and promotional activities.
- Working in consonance with the Senior Acquisition Executive to review and analyze green procurement indicators, including the preparation of the annual report to the OFPP and OFEE.
- Utilizing FPDS-NG data, the DLA GPR tool at www.dlis.dla.mil/erlsgpr, and environmental audit data to track performance.

# WHERE CAN I GET TRAINING ON GREEN PROCUREMENT?

## *Green Procurement:*

- **Buying Green: A Multi-Functional Approach to Pollution Prevention.** To order the manual or obtain more information on training offered by the DLA Training Center call (614) 692-5969, 1-800-458-7903, (269) 961-7046, or fax (269) 961-7055.
- **Green Procurement Training.** The U.S. Army Center for Health Promotion and Preventive Medicine offers onsite Green Procurement training at DoD facilities to credit card buyers, procurement request originators, and contracting personnel. Call (410) 436-5202 or visit http://chppm-www.apgea.army.mil/gwswp/greenpro.aspx.
- **DAU Contracting Courses**: http://www.dau.mil. **Online course available from DAU:** DAU Purchase Card Continuous Learning Module (click on CLG tab then CLG001): DAU Continuous Learning Module CLG001-DoD Government Purchase Card
- **DAU Green Purchasing Continuous Learning Module:** (click on CLC tab then CLC046) DAU Continuous Learning Module CLC046-Green Procurement
- **Air Force Environmental Safety and Occupational Health (ESOH) Training Network Computer-based Training Course:** http://esohtn.com/
- **OFEE GPP Training:** http://ofee.gov/gp/training.asp

## *Federal Energy Management Program (FEMP):*

- **FEMP Lights On-Line Training Course:** http://www.femplights.com/

## *Related Training:*

- **Buy Recycled Training Manual 5th Edition:** Contact Maryland Environmental Services, 2011 Commerce Park Drive, Annapolis, MD 21401 (410-974-7252)
- **Department of Energy Environmental Pollution Prevention Information Clearinghouse:** http://www.hss.energy.gov/pp/archives/otherinfo.htm

# ADDITIONAL REGULATORY AND PROGRAM GUIDANCE

Below is a list of additional regulatory and program guidance related to GPP. This list is not all inclusive.

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| **Public Law 107-171** | **Known as the "Farm Bill," this law establishes the USDA biobased product program. USDA designates biobased items for Federal agencies to purchase and provides recommendations for agencies purchasing these items with biobased content.** |
| **Section 6002 of the RCRA** | **RCRA Section 6002 requires the EPA to issue Comprehensive Procurement Guidelines (CPGs) that list designated items that are or can be made with recovered materials. It also established some of the fundamental requirements for recovered material procurement including applicability, acceptable exceptions, certifications and estimations, and exclusion of specifications for virgin materials.** |
| **Energy Policy Act (EPAct) of 2005** | **The EPAct is a comprehensive piece of legislation that covers numerous topics in the areas of energy and water conservation, alternative energy sources, reduction in fossil fuel use, and sustainable building design. It includes specific procurement requirements for energy efficient products and the increased use of cement/concrete with recovered mineral content.** |
| **Federal Acquisition Regulation (FAR) Subpart FAR 23.2** | **This subpart prescribes policies and procedures for acquiring energy- and water-efficient products and services, and products that use renewable energy technology.** |
| **FAR Subpart 23.4** | **This subpart prescribes policies and procedures for acquiring Environmental Protection Agency (EPA)-designated products or U.S. Department of Agriculture (USDA)-designated items through AP programs required by the RCRA of 1976 and E.O. 13423.** |
| **FAR Subpart 23.7** | **This subpart prescribes policies and procedures for acquiring energy-efficient, water conserving, and environmentally preferable products and services.** |
| **40 CFR Part 247** | **The CPGs are published in 40 CFR Part 247 of the Federal Register. This part contains some general affirmative procurement requirements and the specific recycled content item designations.** |
| **Executive Order 13423** | **Consolidated and strengthened several "Greening the Government" E.O.s. This E.O. addresses vehicles, petroleum conservation, alternative fuels, energy efficiency, renewable power, sustainable building, water conservation, procurement, toxic chemicals, and electronics management. Procurement practices have a role in each of these areas. The implementing instructions also require increased solid waste diversion and maintenance of cost-effective waste prevention and recycling programs in all facilities.** |
| **Executive Order 13221** | **"Energy Efficient Standby Power Devices" – Requires Federal agencies to purchase products that use no more than one watt in their standby power consuming mode. DOE's FEMP program develops lists of recommended products that meet this requirement.** |
| **Executive Order 13150** | **"Federal Workforce Transportation" – Establishes programs providing incentives for Federal employees to use mass transportation and vanpools.** |
| **Section 314, 2003 National Defense Authorization Act** | **Tracking systems and training related to the procurement of environmentally preferable procurement items.** |

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| **CPG Items** | **The EPA CPGs list 61 items which can be purchased with recycled content, such as paper and paper products, construction products, rerefined oil, etc. The Agency must require that 100 percent of purchases meet or exceed EPA's recycled content recommendations. A written justification/waiver is required for non-compliance.** |
| **Recovered Materials Advisory Notices (RMAN)** | **EPA issued RMANs provide purchasing guidance and recommend recovered and postconsumer material content levels for designated items. RMAN recommendations are guidance and therefore are not codified in the CFR. The RMANs recommend recycled-content ranges for CPG products based on current information on commercially available recycled-content products. RMAN levels are updated as marketplace conditions change.** |
| **Federal Green Construction Guide for Specifiers** | **The Federal Green Construction Guide for Specifiers was developed by EPA, the Federal Environmental Executive, and the Whole Building Design Guide, to help Federal building project managers meet mandates established by statute and E.O.s, as well as EPA and DOE program recommendations. The specifications reference several North American forest certification standards and other information pertinent to green construction.** |
| **GSA Products** | **GSA is one of the three central management agencies in the Federal Government. The goals are to avoid "senseless duplication, excess cost, and confusion in handling supplies," as well as to provide space for the Government to do its work. GSA provides a wealth of green supplies and services. Details may be found at GSA's environmental website.** |
| **Defense Logistics Agency** | **The DLA procures common usage items for all military departments and DoD agencies. Their automated procurement system DoD Electronic MALL (DoD EMALL, https://www.emaill.dla.mil) provides for a simple method by which green products may be acquired. DLA also operates a web based GPR tool (http://www.dlis.dla.mil/erlsgpr/).** |
| **USDA BioPreferred Program** | **The USDA BioPreferred program is a resource for producers of biobased products, military departments and DoD agencies required to purchase them, and others interested in renewable products. The program includes information on submitting products for designation, instructions on meeting requirements to purchase biobased materials, and many other useful topics.** |
| **ENERGY STAR®** | **ENERGY STAR® is a joint program of the EPA and the DOE helping to save money and protect the environment through energy efficient products and practices.** |
| **Federal Energy Management Program (FEMP)** | **The DOE's FEMP works to reduce the cost and environment impact of the Federal government by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at Federal sites. Additionally, the FEMP provides information on how to buy products with low standby power.** |
| **Electronic Product Environmental Assessment Tool (EPEAT)** | **EPEAT is a system to help purchasers evaluate, compare and select desktop computers, notebooks, and monitors based on their environmental attributes. EPEAT also provides a clear and consistent set of performance criteria for the design of products, and provides an opportunity for manufacturers to secure market recognition for efforts to reduce the environmental impact of its products.** |

# ANNUAL E.O. 13423 SUSTAINABLE PRACTICES/FSRIA REPORTING REQUIREMENTS FOR SERVICES/AGENCIES

The annual reporting requirements can be obtained by clicking on the following hyperlink and opening the appropriate file.
E.O. 13423 Sustainable Practices Annual Data Call Format and Requirements

# DoD GPP MANAGEMENT ASSESSMENT

## *Assessing your GPP*

Organizational managers may wish to utilize the questionnaire below to assess their GPP.

**Policy:**

- Does the organization have policy specifically requiring a Green Procurement Program (GPP), and compliance with all the requirements of all components of the Federal green procurement preference program?

**Planning:**

- Has the organization established objectives/targets for GPP performance (purchases of green products and services) that are consistent with the nature and quantity of purchasing activities?
- Does the organization have written procedures for setting, tracking, and updating objectives and targets?
- Are documented procedures in-place to achieve these objectives and targets?
- Have responsibilities been determined and documented?
- Has accountability been established through inclusion of GPP responsibilities in job descriptions and performance standards of key players?

**Implementation and Operation:**

- Is the organization's GPP awareness training program tailored specifically to the nature and quantity of purchases typically made by the organization?
- Does the organizations's GPP assign responsibility for implementation of the GPP awareness training program to a specific person/office?
- Does the GPP awareness training program provide initial and refresher training to all personnel involved with preparation of specifications/statements of work, purchases with government credit cards, contracting/ procurement?
- Does the organization have a documented process for tracking initial and refresher training for all personnel involved in the procurement process?
- Does the organization have documented procedures to ensure green procurement opportunities are identified for each purchasing action?
- Does the organization have documented procedures to ensure green products or services are purchased preferentially in each purchasing action?
- Does the organization have documented procedures to ensure that the relevant green procurement contract language and FAR clauses are incorporated in all contracts?
- Does the organization have documented procedures to ensure that the green procurement requirements are executed in accordance with contract requirements and that such execution is verified?

- Does the organization have documented procedures for justifying and granting approval for decisions not to purchase EPA- and USDA-designated items with recovered material or biobased content and energy efficient products designated by ENERGY STAR®/DOE?

## Checking and Corrective Action:

- Does the organization's GPP have procedures and assign responsibility for routine measurement, evaluation, and reporting of GPP performance data?
- Does the organization's GPP require routine self-assessments of the effectiveness of awareness training and the completeness and integrity of GPP performance data?
- Has the organization incorporated GPP requirements into self-assessments, compliance inspection protocols, and management system audit protocols?
- Do the organization's inspection protocols include evaluations of GPP awareness training, performance measurement, and responsibility/accountability?
- Do the organization's self-assessment, compliance inspections, and management system audit procedures include requirements for follow-up action and documented closure of deficiencies in GPP?

## Management Review:

- Does the organization's GPP include a management review process?
- Does the management review process provide facility senior leadership with accurate and timely data regarding the organization's GPP performance?
- Does the management review process include provisions for feedback and policy changes to ensure continuous improvement in GPP performance?
- Does the management review process require documentation, tracking, and closure of actions resulting from the review process?

# DoD GREEN PROCUREMENT METRICS

The OSD, DoD Components, and individual procuring organizations will guide and measure progress toward the DoD goal of 100 percent Compliance with Federal green procurement mandates with the following tools and criteria:

1. The Codes in the CAR (or successor data capture report), using data from the Federal Procurement Data System-Next Generation (or successor system).

2. Purchases of Federally-defined indicator items as determined using data from Defense Logistics Agency's GPR/ERLS at Defense Logistics Information Service (DLIS).

3. Personnel trained in green procurement using data from the Defense Acquisition University's training information database.

4. Organizations participating in the FEC.

5. Number of negative contract audit findings that indicate lack of compliance with GPP requirements.

OSD and the DoD Components will review and monitor green procurement performance trends using the following metrics:

1. Percent reduction in the number of "Not Required" codes in Use of EPA-Designated Products field in CAR (or corresponding fields in successor data capture system), and percent increase in the number of "Meets Requirements" codes in Use of EPA-Designated Products field in CAR (or corresponding fields in successor data capture system).

2. Increase in the purchases of Federally-defined indicator items.

3. Increase in the percentage of personnel trained in green procurement.

4. Increase in organizations or installations participating in the FEC.

5. Decrease in contract audit findings indicating lack of compliance with GPP requirements.

# ACRONYMS

| | |
|---|---|
| AP | Affirmative Procurement |
| CAR | Contract Action Report |
| CPG | Comprehensive Procurement Guidelines |
| DAU | Defense Acquisition University |
| DLA | Defense Logistics Agency |
| DoD | Department of Defense |
| DOE | Department of Energy |
| DPAP | Defense Procurement and Acquisition Policy |
| DUSD(I&E) | Deputy Under Secretary of Defense for Installations and Environment |
| $E^2S^2$ | Environment, Energy, & Sustainability Symposium & Exposition |
| EMALL | DoD Electronic MALL |
| EMS | Environmental Management System |
| E.O. | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| EPAct | Energy Policy Act of 2005 |
| EPEAT | Electronic Product Environmental Assessment Tool |
| EPP | Environmentally Preferable Purchasing |
| ERLS | Environmental Reporting Logistics System |
| ESOH | Environmental Safety and Occupational Health |
| FAR | Federal Acquisition Regulation |
| FEC | Federal Electronics Challenge |
| FEMP | Federal Energy Management Program |
| FPDS-NG | Federal Procurement Data System-Next Generation |
| FSRIA | Farm Security and Rural Investment Act of 2002 |
| FY | Fiscal Year |
| GCPC | Governmentwide Commercial Purchase Card |
| GPP | Green Procurement Program |
| GPR | Green Procurement Reporting |
| GSA | General Services Administration |
| IT | Information Technology |
| OFEE | Office of the Federal Environmental Executive |
| OFPP | Office of Federal Procurement Policy |
| OSD | Office of the Secretary of Defense |
| OUSD | Office Under the Secretary of Defense |
| RCRA | Resource Conservation and Recovery Act of 1976 |
| RMAN | Recovered Materials Advisory Notice |
| USDA | U.S. Department of Agriculture |
| USD(AT&L) | Under Secretary of Defense for Acquisition, Technology, and Logistics |

# TERMINOLOGY

**Acquisition –** acquiring by contract using appropriated funds for supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, or demonstrated and evaluated. Acquisition begins when agency needs are established and includes the description of requirements to satisfy agency needs, solicitation, selection of sources, contract award and financing details, contract performance and administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract.

**Affirmative Procurement Program (APP) –** a program assuring CPG items composed of recovered materials and USDA-designated biobased items will be purchased to the maximum extent practicable, consistent with Federal law and procurement regulations.

**Agency –** means an executive agency as defined in section 105 of title 5, United States Code, excluding the Government Accountability Office. For the purpose of the E.O., military departments, as defined in 5 U.S.C. 102, are covered under the auspices of DoD.

**Biobased Product –** a commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.

**Certification –** provided by offerors/bidders/vendors, it is written documentation certifying the percentage of recovered materials contained in products or to be used in the performance of the contract is at least the amount required by applicable specifications or other contractual requirements. Certification on multi-component or multi-material products should verify the percentage of postconsumer waste and recycled material contained in the major constituents of the product.

**Component –** one of the subordinate organizations that constitute a joint force. Normally a joint force is organized with a combination of Service and functional components.

**Components of the Federal Green Procurement Preference Program**:

- EPA-designated recycled content products
- EPEAT-registered electronic equipment
- Environmentally preferable products and services
- ENERGY STAR® and FEMP-designated energy-efficient products
- Water-efficient products
- USDA-designated biobased products
- Alternative fuel vehicles and alternative fuels
- Non-ozone depleting substances
- Low or non-toxic and hazardous substances or products containing low or non-toxic constituents
- Renewable energy sources and sustainable building materials

**Comprehensive Procurement Guideline (CPG) Program –** a procurement program through EPA, authorized by Congress under Section 6002 of the RCRA and EO 13101, which requires EPA to designate products that are or can be made with recovered materials, and to recommend practices for buying these products. Once a product is designated, procuring agencies are required to purchase it with the highest recovered material content level practicable.

**Cost-Effective Procurement Preference Program –** a procurement program favoring more environmentally-sound or energy-efficient products and services than other competing products and services, where price and other factors are equal.

**Designated Item –** an available EPA CPG item or category of items, made with recovered material, advancing the purpose of RCRA when purchased; or a USDA-designated biobased item made with biobased content, advancing the purpose of the FSRIA ("Farm Bill") when purchased.

**Energy-efficient Product –** a product in the upper 25 percent of efficiency for all similar products or, if there are applicable Federal appliance or equipment efficiency standards, a product that is at least 10 percent more efficient than the minimum Federal standard.

**Environmentally Preferable –** products or services having a lesser or reduced effect on human health and the environment when compared with competing products or services serving the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or product or service disposal.

**Estimation –** quantitative determination made by vendors of the total percentage of recovered material contained in offered products. Estimations should be based on historical or actual percentages of recovered materials in products sold in substantial quantities to the general public or on other factual basis. EPA recommends procuring agencies maintain records of these documents for three years by product type, quantity purchased, and price paid.

**Green Products/Services –** for the purposes of this document, Green Products and Services are defined as products and services meeting the requirements of one or more of the components of Federal green procurement preference programs as defined in RCRA Section 6002; FSRIA ("Farm Bill") section 9002; the Energy Policy Act of 2005 (EPAct 2005); E.O.s 13423, 13221, and 13150; Electronic Stewardship requirements; and any Federal Green procurement Program implemented after the date of this document.

**Installation –** a grouping of facilities, located in the same vicinity, which support particular functions. Installations may be elements of a base.

**Life Cycle Cost –** the sum of the present value of capital costs, installation costs, operating costs, maintenance costs, and disposal costs over the lifetime of the project, product, or measure.

**Life Cycle Assessment –** the comprehensive examination of a product's environmental and economic aspects and potential impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use, and disposal.

**Micro-purchase** – an acquisition of supplies or services using simplified acquisition procedures, the aggregate amount of which does not exceed the micro-purchase threshold.

**Micro-purchase Threshold** – $3,000; (1) for acquisitions of construction subject to the Davis-Bacon Act, $2,000; (2) For acquisitions of services subject to the Service Contract Act, $2,500; and (3) For acquisitions of supplies or services that, as determined by the head of the agency, are to be used to support a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack, as described in 13.201(g)(1), except for construction subject to the Davis-Bacon Act (41 U.S.C. 428a) – (i) $15,000 in the case of any contract to be awarded and performed, or purchase to be made, inside the United States; and (ii) $25,000 in the case of any contract to be awarded and performed, or purchase to be made, outside the United States.

**Minimum Content Standard –** the minimum recycled content or biobased content set in specifications, standards, contract scopes of work or other documents specifying the government's minimum needs. They are based on the recycled content levels recommended by EPA or the minimum biobased content levels recommended by USDA and are set to assure the recycled content or biobased content required is the maximum available without jeopardizing the intended item use or violating the limitations of the minimum content standards set forth by EPA's and USDA's guidelines.

**Objective –** an overall environmental goal arising from the environmental policy that an organization sets to achieve and which is quantified where practicable.

**Pollution Prevention –** "source reduction" as defined in the Pollution Prevention Act of 1990, 42 U.S.C. 13102, and other practices that reduce or eliminate the creation of pollutants through: (a) increased efficiency in the use of raw materials, energy, water, or other resources; or (b) protection of natural resources by conservation.

**Postconsumer Material –** a material or finished product whose life as a consumer item has concluded, after having served its intended use and being discarded for disposal or recovery. "Postconsumer material" is a part of the broader category of "recovered materials." It is also referred to as "postconsumer waste."

**Practicable –** capable of performing in accordance with applicable specifications, available at a reasonable price and within a reasonable period of time, while maintaining a satisfactory level of competition with other products is being maintained.

**Preference –** when two products or services are equal in performance characteristics and price, the Government, in making purchasing decisions, will favor the more environmentally-sound or energy-efficient product.

**Preference Standard –** the highest practicable minimum content standard for products. When minimum content is impractical to calculate, preference is for the presence of a recovered material or an environmentally-preferable trait (i.e., retread tires).

**Procurement Guidelines –** regulations issued by EPA pursuant to Section 6002 of RCRA and by USDA pursuant to Section 9002 of FSRIA: (1) identifying items produced (or can be produced) with recovered materials or biobased materials, respectively, and where procurement of such items will advance the objectives of RCRA or FSRIA; and (2) providing recommended practices for the procurement of such items.

**Procurement Request Originators –** the individual or organization responsible for defining the requirements for a purchase or acquisition program. This term includes, but is not limited to, engineers, acquisition program managers, and all contract specification writers/reviewers.

**Recovered Material –** waste materials and by-products recovered or diverted from solid waste, excluding those materials and by-products generated from, and commonly reused within an original manufacturing process.

**Recycled Material –** a material utilized in place of raw or virgin material in product manufacturing consisting of materials derived from postconsumer waste, industrial scrap, material derived from agricultural wastes, and other items, all of which can be used in new product manufacture.

**Recycling –** the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion.

**Solid Waste –** garbage, refuse, sludge, and other discarded solid materials, including those from industrial, commercial, and agricultural operations, and from community activities. This *excludes* solids or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial waste water effluents, dissolved materials in irrigation return flow, etc.

**Specification –** a clear and accurate description of the technical requirements for materials, products, or services including the minimum requirement for materials' quality and construction and any equipment necessary for an acceptable product. In general, specifications are in the form of written descriptions, drawings, prints, commercial designations, industry standards, and other descriptive references.

**Target –** detailed performance requirement, quantified where practicable, applicable to the organization or parts thereof, that arises from the environmental objectives that needs to be set and met in order to achieve those objectives.

**Unreasonable Price –** when recycled product cost is greater compared to virgin material cost. (Unreasonable price is not a factor when minimum content standards are specified in the

statement of work/procurement request, because price estimates will only be obtained from vendors who can supply products meeting recovered material content requirements.)

**Verification –** procedures used by procuring agencies to confirm both vendor estimates and certifications of the percentages of recovered material contained in the products supplied to them or to be used in the performance of a contract.

**Virgin Material –** previously unused raw material, including previously unused copper, aluminum, lead, zinc, iron, other metal or metal ore; or any undeveloped resource that is, or with new technology will become, a source of raw materials.

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| **REGULATORY REQUIREMENTS:** | **REVIEWER CHECKS:**<br>**December 2010** |
| **POLLUTION PREVENTION**<br><br>**O4.1**<br>**All Federal Facilities** | |
| **O4.1.1.US.** The current status of any ongoing or unresolved consent Orders, Compliance agreements, notice of violations (NOVs), inter agency agreements, or equivalent state enforcement actions is required to be examined (a finding under this checklist item will have the enforcement action/identifying information as the citation). | Determine if noncompliance issues have been resolved by reviewing a copy of the previous report, consent orders, compliance agreements, NOVs, interagency agreements, or equivalent state enforcement actions. |
| **O4.1.2.US.** No later than 1 January 2010, at least 1 renewable fuel pump will be installed at each Federal fleet fueling center in the United States (*Energy Security and Independence Act (ESIA)*, Section 246) **[Added January 2008]**. | Verify that, no later than 1 January 2010, at least 1 renewable fuel pump is installed at each Federal fleet fueling center in the United States.<br><br>(NOTE: This does not apply to a DoD fueling center with a fuel turnover rate of less than 100,000 gal/yr of fuel.)<br><br>(NOTE: The ESIA does not include a definition of the term "Federal fleet fueling center.") |

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| **POLLUTION PREVENTION**<br><br>**O4.2**<br>**Missing, Risk Management, and Positive Checklist Items** | |
| **O4.2.1.US.** Facilities are required to comply with all applicable Federal regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine if any new regulations have been issued since the finalization of TEAM.<br><br>Determine if the facility has activities or facilities that are Federally regulated, but not addressed in this checklist.<br><br>Verify that the facility is in compliance with all applicable and newly issued regulations. |
| **O4.2.2.US.** Risk management techniques should be promoted in environmental efforts (MP) **[Added April 2002].** | Determine if risk management techniques are promoted in environmental efforts. |
| **O4.2.3.US.** Facilities should go above and beyond statutory and regulatory compliance (MP) **[Added April 2002].** | Determine if the facility has gone above and beyond simply complying with environmental requirements. |

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| **POLLUTION PREVENTION**<br><br>**O4.5**<br>**Plans and Programs** | |
| **O4.5.1.US.** Checklist item deleted **[Deleted July 2000]**. | Checklist item deleted due to the revocation of EO 12856 by EO 13148, 21 April 2000. The requirement for a P2 plan has been encompassed in the scope of a broader plan required under EO 13148. See checklist item O5.1.2.US. |
| **O4.5.2.US.** Checklist item deleted **[Revised July 1999; Deleted January 2007]**. | Checklist item deleted due to the revocation of EO 13101 by EO 13423, 24 January 2007. |
| **O4.5.3.US.** Checklist item deleted **[Added October 2006; Deleted January 2007]**. | Checklist item deleted due to the revocation of EO 13123 by EO 13423, 24 January 2007. |
| **O4.5.4.US.** Checklist item deleted **[Added October 2006; Deleted January 2007]**. | Checklist item deleted due to the revocation of EO 13123 by EO 13423, 24 January 2007. |

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| **POLLUTION PREVENTION**<br><br>**O4.6**<br>**Procurement**<br><br>**O4.6.1.US.** Government agencies are required to increase their purchases of products containing recovered materials (RCRA, Section 6002(c)(1); 40 CFR 247.2 through 247.17) **[Added July 1999; Revised April 2000; Revised July 2000; Revised July 2004; Revised October 2007]**. | (NOTE: This applies to all procuring agencies and to all procurement actions involving items designated by USEPA, where the procuring agency purchases $10,000 or more worth of one of these items during the course of a fiscal year, or where the cost of such items or of functionally equivalent items purchased during the preceding fiscal year was $10,000 or more. This guideline applies to Federal agencies, to state and local agencies using appropriated Federal funds to procure designated items, and to persons contracting with any such agencies with respect to work performed under such contracts. Federal procuring agencies should note that the requirements of RCRA section 6002 apply to them whether or not appropriated Federal funds are used for procurement of designated items. The $10,000 threshold applies to procuring agencies as a whole rather than to agency subgroups such as regional offices or subagencies of a larger department or agency.)<br><br>Verify that procured Comprehensive Procurement Guideline (CPG) designated items are composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, considering such guidelines.<br><br>Verify that, if the purchase of products containing recovered materials does not meet USEPA Guidelines, the facility has written justification that products are not available competitively within a reasonable timeframe, do not meet appropriate performance standards, or are only available at unreasonable prices.<br><br>(NOTE: Written justification is not required for purchases below the micropurchase threshold.)<br><br>(NOTE: For each designated CPG, USEPA has issued a Recovered Materials Advisory Notice (RMAN), which establishes the recommended recycle content level for a given product. See Appendix 6-1 for examples of the RMANs for designated CPGs. The following is the current list of CPG categories and products:<br>– paper and paper products, excluding building and construction paper grades<br>– vehicular products:<br>  – lubricating oils containing re-refined oil, including engine lubricating oils, hydraulic fluids, and gear oils, excluding marine and aviation oils<br>  – tires, excluding airplane tires<br>  – reclaimed engine coolants, excluding coolants used in non-vehicular applications<br>  – rebuilt vehicular parts<br>– construction products: |

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| | – building insulation products, including the following items:<br>  – loose-fill insulation, including but not limited to cellulose fiber, mineral fibers (fiberglass and rock wool), vermiculite, and perlite<br>  – blanket and batt insulation, including but not limited to mineral fibers (fiberglass and rock wool)<br>  – board (sheathing, roof decking, wall panel) insulation, including but not limited to structural fiberboard and laminated paperboard products, perlite composite board, polyurethane, polyisocyanurate, polystyrene, phenolics, and composites<br>  – spray-in-place insulation, including but not limited to foam-in-place polyurethane and polyisocyanurate, and spray-on cellulose<br>– structural fiberboard and laminated paperboard products for applications other than building insulation, including building board, sheathing, shingle backer, sound deadening board, roof insulating board, insulating wallboard, acoustical and non-acoustical ceiling tile, acoustical and non-acoustical lay-in panels, floor underlayments, and roof overlay (coverboard)<br>– cement and concrete, including concrete products such as pipe and block, containing coal fly ash or ground granulated blast furnace (GGBF) slag<br>– carpet made of polyester fiber for moderate end uses<br>– floor tiles and patio blocks containing recovered rubber or plastic<br>– shower and restroom dividers/partitions containing recovered plastic or steel<br>– consolidated latex paint used for covering graffiti<br>– reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutter boards; and concrete, stucco, masonry, wood, and metal surfaces<br>– modular threshold ramps<br>– nonpressure pipe<br>– roofing materials<br>– transportation products:<br>  – traffic barricades and traffic cones used in controlling or restricting vehicular traffic<br>  – parking stops made from concrete or containing recovered plastic or rubber<br>  – channelizers containing recovered plastic or rubber<br>  – delineators containing recovered plastic, rubber, or steel<br>  – flexible delineators containing recovered plastic<br>– park and recreation products:<br>  – playground surfaces and running tracks containing recovered rubber or plastic<br>  – plastic fencing containing recovered plastic for use in controlling snow or sand drifting and as a warning/safety barrier in construction or other applications |

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| | – park benches and picnic tables containing recovered steel, aluminum, plastic, or concrete<br>– playground equipment containing recovered plastic, steel, or aluminum<br>– bike racks<br>– landscaping products:<br>– hydraulic mulch products containing recovered paper or recovered wood used for hydroseeding and as an over-spray for straw mulch in landscaping, erosion control, and soil reclamation<br>– compost made from recovered organic materials<br>– shrubs, and in erosion control and soil reclamation, garden and soaker hoses containing recovered plastic or rubber<br>– lawn and garden edging containing recovered plastic or rubber<br>– plastic lumber landscaping timbers and posts containing recovered materials<br>– fertilizer made from recovered organic materials<br>– non-paper office products:<br>– office recycling containers and office waste receptacles<br>– plastic desktop accessories<br>– toner cartridges<br>– plastic-covered binders containing recovered plastic; chipboard and pressboard binders containing recovered paper; and solid plastic binders containing recovered plastic<br>– plastic trash bags<br>– printer ribbons<br>– plastic envelopes<br>– plastic clipboards containing recovered plastic<br>– plastic file folders containing recovered plastic<br>– plastic clip portfolios containing recovered plastic<br>– plastic presentation folders containing recovered plastic<br>– office furniture<br>– miscellaneous products:<br>– pallets containing recovered wood, plastic, or paperboard<br>– sorbents containing recovered materials for use in oil and solvent clean-ups and as animal bedding<br>– industrial drums containing recovered steel, plastic, or paper<br>– awards and plaques containing recovered glass, wood, paper, or plastic<br>– mats containing recovered rubber and/or plastic<br>– non-road signs containing recovered plastic or aluminum and road signs containing recovered aluminum<br>– sign supports and posts containing recovered plastic or steel<br>– manual-grade strapping containing recovered steel or plastic<br>– blasting grit.<br><br>(NOTE: The CPG guidelines do not apply to purchases of designated items that |

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| | are unrelated to or incidental to Federal funding, i.e., not the direct result of a contract or agreement with, or a grant, loan, or funds disbursement to, a procuring agency. The guidelines also do not apply to purchases made by private party recipients (e.g., individuals, non-profit organizations) of Federal funds pursuant to grants, loans, cooperative agreements, and other funds disbursements.) |
| **O4.6.2.US.** Contracts for procurement by federal facilities are required to contain specific clauses relating to hazardous materials identification, recovered materials certification, pollution prevention, biobased product content, and Right-to-Know information (48 CFR 52.223-1 through 52.223-5) **[Added July 2001; Revised January 2009]**. | (NOTE: Title 48 of the Code of Federal Regulations is titled the "Federal Acquisition Regulations System.")<br><br>Verify that the clauses concerning hazardous material identification, recovered materials certification, biobased product content, and pollution prevention and right-to-know information are included in appropriate contracts.<br><br>(NOTE: See Appendix 6-2 for the actual text of the clauses<br><br>Verify that the clauses are enforced. |
| **O4.6.3.US.** Federal facilities should develop a procurement program for biobased products (7 CFR 2902.3, 2902.4(a), 2902.4(b), and 2902.5(c)) **[Added April 2005; Revised April 2006; Revised October 2006; Revised July 2008; Revised January 2010]**. | (NOTE: Consult http://www.biobased.oce.usda.gov for details on the status of the Biobased Products Preferred Procurement Program.)<br><br>(NOTE: The guidelines in this checklist item apply to all procurement actions by procuring agencies involving items designated by USDA in this part, where the procuring agency purchases $10,000 or more worth of one of these items during the course of a fiscal year, or where the quantity of such items or of functionally equivalent items purchased during the preceding fiscal year was $10,000 or more. The $10,000 threshold applies to Federal agencies as a whole rather than to agency subgroups such as regional offices or subagencies of a larger Federal department or agency.)<br><br>(NOTE: This checklist item does not apply to purchases of designated items that are unrelated to or incidental to Federal funding; i.e., not the direct result of a contract or agreement with persons supplying items to a procuring agency or providing support services that include the supply or use of items.)<br><br>(NOTE: The following applications are exempt from the preferred procurement requirements:<br>– military equipment which is defined as products or systems designed or procured for combat or combat-related missions<br>– spacecraft systems and launch support equipment.)<br><br>(NOTE: On or before 11 January 2006, each Federal agency shall develop a |

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| | procurement program which will assure that items composed of biobased products will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement laws. Each procurement program shall contain:<br>– a preference program for purchasing designated items<br>– a promotion program to promote the preference program<br>– provisions for the annual review and monitoring of the effectiveness of the procurement program.)<br><br>(NOTE: Motor vehicle fuels and electricity are excluded by statute from this program. USDA additionally will not designate items for preferred procurement that are determined to have mature markets. USDA will determine mature market status by whether the item had significant national market penetration in 1972.)<br><br>Verify that, in developing the preference program, one of the following options is adopted, or a substantially equivalent alternative, as part of the procurement program:<br><br>– a policy of awarding contracts to the vendor offering a designated item composed of the highest percentage of biobased product practicable except when such items meet one of the following:<br>  – are not available within a reasonable time<br>  – fail to meet performance standards set forth in the applicable specifications, or the reasonable performance standards of the Federal agency<br>  – are available only at an unreasonable price<br>– a policy of setting minimum biobased products content specifications in such a way as to assure that the biobased products content required is consistent with section 9002 of FSRIA and the requirements of the guidelines in this part except when such items:<br>  – are not available within a reasonable time<br>  – fail to meet performance standards for the use to which they will be put, or the reasonable performance standards of the Federal agency<br>  – are available only at an unreasonable price.<br><br>(NOTE: In implementing the preference program, Federal agencies shall treat as eligible for the preference biobased products from "designated countries," as that term is defined in section 25.003 of the Federal Acquisition Regulation (FAR), provided that those products otherwise meet all requirements for participation in the preference program.)<br><br>(NOTE: For any procurement by any procuring agency that is subject to regulations of the EPA under section 6002 of the *Solid Waste Disposal Act* as amended by the *Resource Conservation Act* of 1976 (40 CFR 247), these guidelines do not apply to the extent that the requirements of this part are |

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| | inconsistent with such regulations [See checklist item O4.6.1.US].)<br><br>(NOTE: The Farm Security and Rural Investment Act of 2002 (FSRIA) section 9002(c)(1) requires Federal agencies to procure designated items composed of the highest percentage of biobased products practicable or such items that comply with the regulations issued under section 103 of Public Law 100-556 (42 U.S.C. 6914b-1), consistent with maintaining a satisfactory level of competition, considering these guidelines. Federal agencies may decide not to procure such items if they are not reasonably priced or readily available or do not meet specified or reasonable performance standards.)<br><br>(NOTE: See Appendix 6-2c for information on specific products.) |
| **O4.6.4.US.** Checklist item deleted **[Added April 2006; Revised July 2008; Deleted January 2010].** | (NOTE: This checklist item concerning the procurement of bio-based mobile equipment hydraulic fluid, diesel fuel additives, penetrating lubricants, 2-cycle engine oil, greases, and stationary equipment hydraulic fluids has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |
| **O4.6.5.US.** In the case of electric motors of 1 to 500 horsepower, only premium efficient motors that meet a specification designated by the Secretary of Energy will be selected and purchased as of 18 August 2006 (*Energy Policy Act* (EPACT) of 2005, Section 104(a)) **[Added October 2006]**. | Verify that, in the case of electric motors of 1 to 500 horsepower, only premium efficient motors that meet the specification designated by the Secretary of Energy are selected and purchased.<br><br>(NOTE: See Appendix 6-2a for DOE specifications.) |
| **O4.6.6.US.** Only external standby powers devices using no more than one watt in their standby power consuming mode will be purchased (E.O. 13221, Section 1) **[Added October 2006]**. | Verify that, when purchasing commercially available, off-the-shelf products that use external standby power devices, or that contain an internal standby power function, the products purchased will use no more than one watt in their standby power consuming mode.<br><br>(NOTE: If such products are not available, purchase products with the lowest standby power wattage while in their standby power consuming mode.)<br><br>(NOTE: Agencies shall adhere to these requirements, when life-cycle cost-effective and practicable and where the relevant product's utility and performance are not compromised as a result. Annually the DoE, in consultation with the Department of Defense and the General Services Administration, compiles a preliminary list of products to be subject to these requirements.) |
| **O4.6.7.US.** ENERGY STAR®-qualified or FEMP- | (NOTE: Title 48 of the Code of Federal Regulations is titled the "Federal Acquisition Regulations System.") |

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| designated products will be chosen when acquiring energy-using products (10 CFR 436.40, 436.42, 436.43 and 48 CFR 23.203(a)(1)(i), 23.203(a)(2), 23.203(b), 23.204, and 23.206) **[Added October 2006; Citation Revised January 2007; Revised January 2008, Revised April 2009].** | Verify that the procurement of ENERGY STAR and FEMP designated products is required in new service contracts and other existing service contracts as they are recompeted.<br><br>Verify that, to the extent possible, ENERGY STAR and FEMP designated product requirements and preferences into existing contracts as they are modified or extended through options.<br><br>Verify that, when acquiring energy using products listed in ENERGY STAR® Program or the Federal Energy Management Program (FEMP), ENERGY STAR® or FEMP products are purchased.<br><br>Verify that the use of ENERGY STAR® or other energy-efficient items listed on the FEMP Product Energy Efficiency Recommendations product list is included when contracting for services or construction.<br><br>Verify that criteria for energy efficiency that are consistent with the criteria used for rating qualified products are included in the factors for the evaluation of:<br><br>– offers received for procurements involving covered products<br>– offers received for construction, renovation, and services contracts that include provisions for covered products.<br><br>Verify that the use of ENERGY STAR and FEMP products are considered in the following circumstances:<br><br>– design, design/build, renovation, retrofit and services contracts; facility maintenance and operations contracts<br>– energy savings performance contracts and utility energy service contracts<br>– if applicable, lease agreements for buildings or equipment, including build-to-lease contracts.<br><br>(NOTE: ENERGY STAR qualified and FEMP designated products may be assumed to be life-cycle cost-effective. In making a determination that a covered product is not life-cycle cost-effective, rely on the life-cycle cost analysis method in 10 CFR 436, Subpart A.)<br><br>(NOTE: For product groups where ENERGY STAR®labels are not yet available, select products that are in the upper 25 percent of energy efficiency as designated by FEMP.)<br><br>(NOTE: Procurement of an Energy Star® product or FEMP-designated product is not required if one of the following is true and is documented in writing:<br>– no Energy Star® or FEMP-designated product is cost-effective over the life of |

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| **REGULATORY REQUIREMENTS:** | **REVIEWER CHECKS:**<br>**December 2010** |
| | the product taking energy cost savings into account<br>– no Energy Star® or FEMP-designated product is reasonably available that meets the functional requirements of the agency. )<br><br>(NOTE: See the following website for information about FEMP products http://www1.eere.energy.gov/femp/procurement/eep_requirements.html.)<br><br>(NOTE: See http://www.energystar.gov/products for information specific to ENERGY STAR.)<br><br>Verify that the clause at 52.223-15 Energy Efficiency in Energy-Consuming Products is inserted in solicitations and contracts when energy-consuming products listed in the Energy Star® Program or FEMP will be:<br><br>– delivered<br>– acquired by the contractor for use in performing services at a Federally-controlled facility<br>– furnished by the contractor for use by the Government<br>– specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance. |
| **O4.6.8.US.** Procurement of products that consume power in a standby mode and are listed on FEMP's Standby Power Devices product listing must be done according to specific parameters (48 CFR 23.203(a)(1)(ii), 23.203(b), and 23.204) **[Added October 2006; Revised January 2008].** | (NOTE: Title 48 of the Code of Federal Regulations is titled the "Federal Acquisition Regulations System.")<br><br>Verify that, for products that consume power in a standby mode and are listed on FEMP's Standby Power Devices product listing, agencies do one of the following:<br><br>– purchase items which meet FEMP's standby power wattage recommendation or document the reason for not purchasing such items<br>– if FEMP has listed a product without a corresponding wattage recommendation, purchase items which use no more than one watt in their standby power consuming mode.<br><br>(NOTE: When it is impracticable to meet the one watt requirement, agencies shall purchase items with the lowest standby wattage practicable.)<br><br>(NOTE: The FEMP Standby Power Devices product listing is available at http://www.eere.energy.gov/femp/procurement/eep_standby_power.cfm.)<br><br>(NOTE: Procurement of an Energy Star® product or FEMP-designated product is not required if one of the following is true and is documented in writing:<br>– no Energy Star® or FEMP-designated product is cost-effective over the life of the product taking energy cost savings into account<br>– no Energy Star® or FEMP-designated product is reasonably available that meets the functional requirements of the agency. ) |

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| **REGULATORY REQUIREMENTS:** | **REVIEWER CHECKS:**<br>**December 2010** |
| | (NOTE: See http://www.eere.energy.gov/femp/procurement/eep_modellang.cfm for model language that can be inserted (customizing as necessary) into contracts which involve energy consuming products and systems.) |
| **O4.6.9.US.** Checklist item deleted **[Added October 2006; Revised January 2008, Deleted April 2009]**. | Checklist item rolled into O4.6.7.US. |
| **O4.6.10.US.** Clauses related to EPEAT are required to be included solicitations and contracts (48 CFR 23.705(c) and 23.706) **[Added January 2008].** | Verify that the clauses in Appendix 6-2b (FAR 52.223-10, Waste Reduction Program) are included in all solicitations and contracts for contractor operation of Government-owned or -leased facilities and all solicitations and contracts for support services at Government-owned or -operated facilities.<br><br>Verify that, unless there is an approved exemption from the agency, the clause at 52.223-16, IEEE 1680 *Standard for the Environmental Assessment of Personal Computer Products* (see Appendix 6-2b), is inserted in all solicitations and contracts for:<br><br>– personal computer products<br>– services that require furnishing of personal computer products for use by the Government<br>– contractor operation of Government-owned facilities.<br><br>(NOTE: Agencies may use the clause with its Alternate I when there are sufficient EPEAT Silver registered products available to meet agency needs.)<br><br>(NOTE: Agencies will establish procedures for granting exceptions to the use of EPEAT.)<br><br>(NOTE: This is effective as of December 26, 2007.) |
| **O4.6.11.US.** When life-cycle cost effective, an energy-savings performance contract (ESPC) must be used to reduce energy use and cost at facilities and operations (48 CFR 23.204(a)) **[Added January 2008]**. | Verify that, when life-cycle cost effective, an energy-savings performance contract (ESPC) is used to reduce energy use and cost at facilities and operations. |
| **O4.6.12.US.** When acquiring light duty motor vehicles or medium duty passenger vehicles, a low greenhouse | (NOTE: For this checklist item, the term "Federal agency" does not include any office of the legislative branch, except in certain instances members of the House of Representatives.) |

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|---|---|
| gas emitting vehicle must be procured (*Energy Policy Act of 1992* as amended by the *Energy Security and Independence Act (ESIA*), Section 141) **[Added January 2008, Revised April 2009]**. | (NOTE: See 41 CFR 102-34 for GSA acquisition and operation requirements. The updated version of these regulations is available at http://edocket.access.gpo.gov/2009/E9-6152.htm. )<br><br>(NOTE: A Medium duty Passenger Vehicle means a vehicle which would satisfy the criteria in 49 CFR 523.5 (relating to light trucks) but for its gross vehicle weight rating or its curb weight, which is rated at more than 8,500 lbs GVWR or has a vehicle curb weight of more than 6,000 lbs or has a basic vehicle frontal area in excess of 45 $ft^2$, and which is designed primarily to transport passengers, but does not include a vehicle that meets one of the following:<br>– is an "incomplete truck" as defined in 49 CFR<br>– has a seating capacity of more than 12 persons<br>– is designed for more than 9 persons in seating rearward of the driver's seat<br>– is equipped with an open cargo area (for example, a pick-up truck box or bed) of 72.0 inches in interior length or more.<br>A covered box not readily accessible from the passenger compartment will be considered an open cargo area for purposes of this definition.)<br><br>Verify that no Federal agency acquires a light duty motor vehicle or medium duty passenger vehicle that is not a low greenhouse gas emitting vehicle.<br><br>(NOTE: This prohibition does not apply to acquisition of a vehicle if the head of the agency certifies in writing, in a separate certification for each individual vehicle purchased, either:<br>– that no low greenhouse gas emitting vehicle is available to meet the functional needs of the agency and details in writing the functional needs that could not be met with a low greenhouse gas emitting vehicle<br>– that the agency has taken specific alternative more cost-effective measures to reduce petroleum consumption that meets one of the following:<br>  – have reduced a measured and verified quantity of greenhouse gas emissions equal to or greater than the quantity of greenhouse gas reductions that would have been achieved through acquisition of a low greenhouse gas emitting vehicle over the lifetime of the vehicle<br>  – will reduce each year a measured and verified quantity of greenhouse gas emissions equal to or greater than the quantity of greenhouse gas reductions that would have been achieved each year through acquisition of a low greenhouse gas emitting vehicle.<br><br>(NOTE: There is a special rule for vehicles provided by funds contained in members' representational allowance, including an acquisition under a long-term lease.) |
| **O4.6.13.US.** Checklist item deleted **[Added July 2008; Deleted January 2010.** | (NOTE: This checklist item concerning the procurement of roofing coating, biobased water tank coatings, and biobased concrete and asphalt release fluids has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |

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| **REGULATORY REQUIREMENTS:** | **REVIEWER CHECKS:**<br>**December 2010** |
| **O4.6.14.US.** Checklist item deleted **[Added July 2008; Deleted January 2010.** | (NOTE: This checklist item concerning the procurement of adhesive and mastic remover, plastic insulating foam for residential and commercial construction, composite panels, metalworking fluids, and wood and concrete sealers has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |
| **O4.6.15.US.** Checklist item deleted **[Added July 2008; Deleted January 2010.** | (NOTE: This checklist item concerning the procurement of hand cleaners and sanitizers, lip care products, graffiti and grease removers, laundry products, and bathroom/spa cleaners has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |
| **O4.6.16.US.** Checklist item deleted **[Added July 2008; Deleted January 2010.** | (NOTE: This checklist item concerning the procurement of bio-based fluid-filled transformers and bio-based films has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |
| **O4.6.17.US.** Checklist item deleted **[Added July 2008; Deleted January 2010].** | (NOTE: This checklist item concerning the procurement of bedding, bed linen, and towels; disposal cutlery, disposable containers, and glass cleaners has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |
| **O4.6.18.US.** Checklist item deleted **[Added July 2008; Deleted January 2010].** | (NOTE: This checklist item concerning the procurement of fertilizers, sorbents, and dust suppressants has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |
| **O4.6.19.US.** Checklist item deleted **[Added July 2008; Deleted January 2010].** | (NOTE: This checklist item concerning the procurement of carpets, floor strippers, and carpet and upholstery cleaners has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |
| **O4.6.20.US.** Checklist item deleted **[Added July 2008; Deleted January 2010].** | (NOTE: This checklist item concerning the procurement of deicers and firearm lubricants has been incorporated into checklist item O4.6.3.US and Appendix 6-2c.) |

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| **REGULATORY REQUIREMENTS:** | **REVIEWER CHECKS:**<br>**December 2010** |
| **POLLUTION PREVENTION**<br><br>**O4.9**<br>**ODCs**<br><br>**O4.9.1.US.** Actions will be taken to maximize the efficiency of air conditioning and refrigeration equipment (EPACT 2005 Section 104(a)) **[Added October 2006]**. | Verify that facilities take actions to maximize the efficiency of air conditioning and refrigeration equipment, including appropriate cleaning and maintenance.<br><br>Verify that facilities use any system treatment or additive that will reduce the electricity consumed by air conditioning and refrigeration equipment.<br><br>Verify that any such treatment or additive is:<br><br>– determined by the Secretary to be effective in increasing the efficiency of air conditioning and refrigeration equipment without having an adverse impact on air conditioning performance (including cooling capacity) or equipment useful life<br>– determined by the Administrator of the EPA to be environmentally safe<br>– shown to increase seasonal energy efficiency ratio (SEER) or energy efficiency ratio (EER) when tested by the National Institute of Standards and Technology according to Department of Energy test procedures without causing any adverse impact on the system, system components, the refrigerant or lubricant, or other materials in the system.<br><br>(NOTE: For purposes of this checklist item, a hardware device or primary refrigerant shall not be considered an additive.) |

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

DEC - 3 2008

MEMORANDUM FOR SECRETARY OF THE ARMY
SECRETARY OF THE NAVY
SECRETARY OF THE AIR FORCE
UNDER SECRETARY OF DEFENSE (COMPTROLLER)
DEPUTY UNDER SECRETARY OF DEFENSE
FOR ACQUISITION AND TECHNOLOGY
DEPUTY UNDER SECRETARY OF DEFENSE
FOR LOGISTICS AND MATERIAL READINESS
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARY OF DEFENSE (NETWORKS
AND INFORMATION INTEGRATION)
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Reducing Toxic and Hazardous Chemicals under Executive Order (EO) 13423, *Strengthening Federal Environmental, Energy and Transportation Management*

The Department of Defense (DoD) has implemented policies and programs to manage and reduce its toxic and hazardous chemicals use over the last decade. In accordance with the *DoD Agency-Level Toxic and Hazardous Chemicals Reduction Plan* (the Plan) submitted to the Office of the Federal Environmental Executive (OFEE), DoD conducted an analysis that revealed further opportunities for improving DoD chemical management and lifecycle costs. The plan must be implemented by January 9, 2009. To comply, each Service will:

- Identify a minimum of three toxic/hazardous chemicals for reduction, potential elimination, or replacement by less toxic/hazardous chemicals, using the EO 13423 Implementing Instructions' criteria of March 29, 2007, in Attachment A.

- Establish current-usage "baselines" for the identified chemicals from best-available information sources, in order to develop future-usage benchmarks, in keeping with the intent of the Plan.

- Report to the DoD Environmental, Energy and Transportation Executive Committee the planned reductions of current usages and estimated required resources. Additional guidance is provided in Attachment B.

As DoD's supply chain integrator and manager of many of the Services' hazardous materials, the Defense Logistics Agency will assist the Services in their efforts to comply with the Plan. Areas of opportunities exist in product specification review/revision, product substitution possibilities, and introduction of green products.

The purchase of Electronic Product Environmental Assessment Tool registered products is required by EO 13423 and the DoD Electronic Stewardship Plan. Draft OFEE guidance of July 1, 2008, is included as a reduction strategy in Attachment C.

The above measures will be adopted in appropriate DoD policy. My point of contact is Dr. Carole LeBlanc at 703-604-1934.

John J. Young, Jr.

Attachments:
As stated

**Attachment A.**

## EO 13423 Implementing Instructions Criteria for the Selection of Toxic and Hazardous Chemicals to Reduce or Eliminate

1. Quantity of the chemical or material in use by the agency
2. Human and/or environmental toxicity of the chemical
3. Potential for human and/or environmental exposure to the chemical or material
4. Potential harm to the environment associated with the use or release of the chemical or material, including impacts to air quality, surface water, groundwater, soils/land, and climate systems
5. Persistence of the chemical in the environment
6. Availability of controls to manage identifiable risks
7. Impacts on mission capability and business costs
8. Existing environmental hazard lists such as priority chemicals identified by EPA's Resource Conservation Challenge, and any agency-specific toxic or hazardous chemicals lists, www.epa.gov/epaoswer/osw/conserve/priorities/chemical.htm
9. The available substitutes for ODSs identified by EPA's Significant New Alternatives Policy Program, www.epa.gov/ozone/snap/index.html
10. Contaminants identified by the U.S. Geological Survey as part of its National Reconnaissance of Emerging Contaminants, http://toxics.usgs.gov/regional/contaminants.html
11. Where appropriate, regional- and watershed-based environmental improvement efforts such as the Chesapeake Bay Prioritized Chemicals of Concern Program, the Great Lakes Bi-national Strategy or local watershed efforts.

**Attachment B.**

## Green Procurement Programs (GPPs) and Alternative Chemicals

| | |
|---|---|
| Joint Strike Fighter (JSF) Hazardous Material Screening Tool: | Contact David.Asiello@osd.mil or ( 703) 571-9068 |
| OSD Comparative Report on Services' Chemical Ranking Systems: | Contact Carole.LeBlanc@osd.mil or (703) 604-1934 |
| DoD GPP<br>www.acq.osd.mil/dpap/Docs/policy/greenprocurement/GPP Strategy 09082004.doc<br>Defense Technical Information Center (DTIC), Service GPPs searchable<br>www.dtic.mil<br>Defense Logistics Agency (DLA) Green Procurement Report (GPR)<br>www.dlis.dla.mil/erlsgpr<br>Federal Acquisition Regulation (FAR) – Affirmative Procurement Programs: Contracting for Environmentally Preferable Products and Processes<br>http://acquisition.gov/far/current/html/Subpart%2023_7.html<br>Office of the Federal Environmental Executive (OFEE) Green Purchasing<br>www.ofee.gov/gp/gp.asp<br>General Services Administration (GSA) Environmental Initiatives<br>www.gsa.gov/Portal/gsa/ep/home.do?tabId=10<br>Joint Service Solvent Substitution (JS3) Database<br>https://js3.ctc.com<br>Joint Group on Pollution Prevention (JG-PP) Projects<br>www.jgpp.com/projects/projects_index.html | Strategic Environmental Research & Development Program<br>www.serdp.org<br>Environmental Security Technology Certification Program<br>www.estcp.org<br>Advanced Surface Engineering Technologies for a Sustainable Defense, ASETSDefense formerly the Hard Chrome Alternatives Team (HCAT) runs a public website at www.hazmat-alternatives.com and a pass-worded site at www.materialoptions.com<br>EPA Environmentally Preferable Purchasing (EPP)<br>www.epa.gov/epp/pubs/products/index.htm<br>EPA Design for the Environment (DfE)<br>www.epa.gov/dfe<br>USDA Biobased Products<br>www.biobased.oce.usda.gov<br>Green Seal (U.S. non-profit organization)<br>www.greenseal.org |

### Worksheet for Implementing EO 13423 Chemical Reductions*

The Services are to inform the DoD Environmental, Energy and Transportation Executive Committee whether a planned reduction is expected to be within budgeted resources, or requires reprogramming.

| **SERVICE:** | | | | | | |
|---|---|---|---|---|---|---|
| **Identification of Chemicals Due to OSD by January 9, 2009 (minimum of three)** | **Chemical Name and CAS Number, if applicable** | **Family (F) or Type (T) or Not applicable (N/A)** | **Baseline/year (approx. pounds, gallons, etc. used)[1]** | **As of (approx. dates)** | **Based on Est. Total Usage OR Est. [2]Intensity-specific Usage (please describe)** | **[3]Reduction Goals** |
| **Toxic/Hazardous Chemical 1** | | | | | | |
| **Reasons for Selection:** | | | | | | |
| **Toxic/Hazardous Chemical 2** | | | | | | |
| **Reasons for Selection:** | | | | | | |
| **Toxic/Hazardous Chemical 3** | | | | | | |
| **Reasons for Selection:** | | | | | | |

[1]May require the monitoring of credit card/local purchases for accurate record keeping.
[2]Could reflect the substantial use of a chemical in a particular application, for which better data are available.
**[3]Realistic But Meaningful Reduction Goals Due to OSD by January 9, 2009 (may be reported as percentages).**

*Toxic/hazardous chemicals can be identified for reduction by, for example,
(1) Specific chemical name and CAS (Chemical Abstract Service) Number
(2) Chemical family (for instance, those products containing hexavalent chromium) or
(3) Chemical type (i.e., those products with significant global warming potentials, but may not otherwise be related).

### IMPORTANT

**Hazardous Materials (HAZMAT) Pharmacies and improved ERP (Enterprise Resource Planning) systems may be critical in establishing current baselines and future benchmarks affordably and accurately. In particular, standardized Product Hazard Data (PHD) and Hazardous Process Authorizations (HPA) are key enablers of hazardous materials tracking and control. Otherwise, it may be too resource-intensive to maintain 24/7 awareness of HAZMAT usage.**

**Attachment C.**

# Guidance For Federal Agencies: How to Use EPEAT to Meet Your E.O. 13423 Toxic and Hazardous Chemicals and Materials Reduction Goals

## Purpose

This document provides guidance for federal agencies that choose to include the purchase of Electronic Product Environmental Assessment Tool (EPEAT) registered products as a strategy for achieving the toxic and hazardous chemicals and materials reduction goals of Executive Order (E.O.) 13423, "Strengthening Federal Environmental, Energy, and Transportation Management." Use of this guidance is **not required** for any federal agency or facility.

## Background Information

E.O. 13423 and the March 2007 E.O. Implementing Instructions established the following goals and requirements for electronic stewardship and toxic and hazardous chemicals and materials reduction:

- Section 2(e) of E.O. 13423 requires Federal agencies to "ensure that the agency (i) reduces the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency..." Section 3(a) of the E.O. requires Federal agencies to "implement within the agency sustainable practices for... (vi) reduction or elimination of acquisition and use of toxic or hazardous chemicals...."

- Section 2(h) of E.O. 13423 requires that "In implementing the policy set forth in section 1 of this order, the head of each agency shall:(h) ensure that the agency (i) when acquiring an electronic product to meet its requirements, meets at least 95 percent of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product."

- Section VIII.A of the E.O. Implementing Instructions specify that "No later than January 24, 2008, each agency, at all appropriate organizational levels including appropriate facilities, organizations, and acquisition activities, shall develop *written goals* and *support actions* to identify and reduce the release and use of toxic and hazardous chemicals and materials, including toxic chemicals, hazardous substances, ozone-depleting substances (ODSs), and other pollutants that may result in significant harm to human health or the environment."

- Section XII of the E.O. Implementing Instructions specify that "by May 1, 2007, each agency shall develop and submit to OFEE a plan to implement electronics stewardship practices for all eligible owned or leased electronic equipment in support of the goals in section 2(h) of the E.O. The plan shall: (1) Address the three life-cycle phases for electronics assets: acquisition, operations and maintenance, and end-of life. (2) Be developed and implemented in coordination with the energy, environmental, information technology, acquisition, financial and property officers, and facility managers and maintenance personnel, within each agency. (3) Address how the agency will: (i) Acquire 95 percent of its electronic products as Electronic Product Environmental Assessment

Tool (EPEAT)-registered (for products for which there are EPEAT standards). a. Agencies will ensure applicable IT contracts incorporate appropriate language for the procurement of EPEAT-registered equipment, and address any future FAR clauses related to EPEAT. b. Agencies will strive to purchase to EPEAT Silver rated electronic products or higher if available."

Federal agencies may address these sections of the E.O. and Implementing Instructions by 1) purchasing EPEAT-registered electronic equipment; and 2) including the purchase of EPEAT-registered equipment as a strategy for reducing their acquisition, use, and disposal of toxic and hazardous chemicals and materials, in their chemical management plan.

**How to Calculate Amount of Reduced Toxic and Hazardous Chemicals and Materials in EPEAT-Registered Products**

All EPEAT-registered products must meet the European Restrictions on Hazardous Substances (RoHS) Directive, which provides specific threshold amounts of certain hazardous substances in electronic products. The Directive addresses cadmium, mercury, lead, hexavalent chromium, and certain brominated flame retardants.

EPEAT also has other required and optional criteria related to environmentally sensitive materials (see table below). "R" indicates which criteria are required, and "O" is next to optional criteria which an EPEAT Silver or Gold registered product may meet:

**EPEAT – IEEE 1680 Standard – Section related to Hazardous or Toxic Substances**

**4.1 Reduction/elimination of environmentally sensitive materials**

**R** 4.1.1.1 Compliance with provisions of European RoHS Directive upon its effective date

**O** 4.1.2.1 Elimination of intentionally added cadmium

**R** 4.1.3.1 Reporting on amount of mercury used in light sources (mg)

**O** 4.1.3.2 Low threshold for amount of mercury used in light sources

**O** 4.1.3.3 Elimination of intentionally added mercury used in light sources

**O** 4.1.4.1 Elimination of intentionally added lead in certain applications

**O** 4.1.5.1 Elimination of intentionally added hexavalent chromium

**R** 4.1.6.1 Elimination of intentionally added SCCP flame retardants and plasticizers in certain applications

**O** 4.1.6.2 Large plastic parts free of certain flame retardants classified under European Council Directive 67/548/EEC

**O** 4.1.7.1 Batteries free of lead, cadmium and mercury

**O** 4.1.8.1 Large plastic parts free of PVC

To determine whether or not products you purchase meet each of the optional criteria listed above, search the EPEAT Registry at http://www.epeat.net/Search.aspx. Enter the product information (Type, Manufacturer, Rating) and click the "Search" button. Select the correct product from the Search results, and view the Optional criteria on the Product Detail page:

**Product Detail**

Printer-friendly  Export to CSV  Export to EXCEL

**Product Information**

**Product Type:** Desktops
**Product:** OptiPlex 745 Energy Smart MT
**Manufacturer:** Dell, Inc.
**URL:** http://www.dell.com/content/products/category.aspx/optix_energy?c=us&l=en&s=biz
**Rating:** EPEAT GOLD
**Listing Date:** 5/1/2007
**Monitor Type:**
**Monitor Size:**
**Product Status:** Active
**Exceptions:** 1. Certain exceptional configurations may fall outside E-star 4.0 requirements. Please specify E-star 4.0 compliance when ordering.

| IEEE 1680-2006 Criteria Category Summary | Optional Points |
|---|---|
| 4.1 Reduction/elimination of environmentally sensitive materials | 5/5 |
| 4.2 Materials selection | 0/3 |
| 4.3 Design for end of life | 5/5 |
| 4.4 Product longevity/life cycle extension | 2/2 |
| 4.5 Energy conservation | 1/2 |

EPEAT-registered products have less toxic and hazardous chemicals and materials, when compared to conventional electronic products that do not meet the RoHS directive. These reductions can be easily measured and reported.

**Calculating Reductions in Toxic and Hazardous Chemical and Materials**

The Electronics Environmental Benefits Calculator (EEBC) can be used to calculate the specific toxic and hazardous chemicals and materials reductions that are the result of the acquisition of EPEAT-registered products meeting the following criteria:

- 4.1.1.1 (Required of all products)
- 4.1.3.1 (Required of all flat panel video display devices)
- 4.1.3.2 (Optional for flat panel video display devices)
- 4.1.3.3 (Optional for flat panel video display devices)

Acquisition information for three different EPEAT-registered products can be entered into the EEBC on Tab 3a "User input_Purchasing." The following data may be entered on Tab 3a:

- Product ID (optional): Enter an identifier that will be used for this product in the EEBC. If no ID is entered, the EEBC will list the product as "no user ID given."
- Product type (required): Select one product type - Computer Processing unit; Cathode ray tube monitor; Liquid crystal display; or Notebook computer.
- Number of products (optional): Enter the number of products purchased, leased or acquired under seat management. If no number is entered, a default of one is used.
- EPEAT Registered (required): Select Yes/No, whether the product is EPEAT-registered.
- EPEAT Registration tier (required): Select the EPEAT registration tier of the product (Bronze, Silver, or Gold). This entry is only available if EPEAT Registered is selected as "Yes." If "Do not know" is selected, a default of Bronze is used.

No further information is required to calculate the benefits of the purchase of EPEAT-registered products, however, more specific information about the optional criteria that each entered product meets *may* be entered into the EEBC on Tab 3c "Alt user input-Purchasing." Data entry in this Tab is not required, and if no data is entered in Tab 3c, the EEBC will use default assumptions for which optional criteria the entered product meets, based on the entered EPEAT registration tier in Tab 3a. The following data, related to hazardous substances, may be entered on Tab 3c, under "Reduced Toxicity" for each entered product (1 through 3):

- RoHS compliance: *Do NOT check Yes/No here*, the EEBC will use the data entered in Tab 3a.
- Hg declaration, enter # of lamps with Hg: Enter number of lamps, declared by the manufacturer for required criteria 4.1.3.1.
- Maximum average Hg content per lamp, in milligrams: Enter the average mercury content per lamp, declared by the manufacturer for required criteria 4.1.3.1.
- Max average of 3 mg Hg/lamp: Check the box if the manufacturer declared the product as meeting optional criteria 4.1.3.2.
- Hg-free lamps: Check the box if the manufacturer declared the product as meeting optional criteria 4.1.3.3.

After data entry is completed, the environmental benefits that are the result of the acquisition of the entered EPEAT-registered products are displayed in the EEBC on Tab 5a "RESULTS-savings." The savings specific to reduced toxic substances are listed by criteria, under "PURCHASING, Reduced Toxicity," for the total of all of the entered products, and for the breakdown for each of the entered products.

As an example, assume that a federal agency purchased the following EPEAT-registered equipment:

- 10,000 Gold-registered computer desktops
- 10,000 Gold-registered liquid crystal display (LCD) monitors

This data may be entered in Tab 3a in the EEBC:

| | | |
|---|---|---|
| 6 | **PURCHASING INFORMATION:** | |
| 7 | **USER INPUT** | **Input data or click answer** |
| 8 | **Product 1** Enter a product ID, if desired | **Computers** |
| 9 | Choose one | (•) Computer Processing unit (CPU)<br>( ) Cathode ray tube monitor (CRT)<br>( ) Liquid crystal display (LCD)<br>( ) Notebook computer |
| 12 | Number of products purchased | 10000 |
| 14 | Is the product EPEAT registered? | (•) Yes ( ) No ( ) Not applicable |
| 15 | If yes, which EPEAT registration tier? | ( ) Bronze ( ) Silver (•) Gold ( ) Do not know |
| 17 | Initial cost per unit (US$) (*Optional*) | |
| 18 | | |
| 19 | **Product 2** Enter a product ID, if desired | **Monitors** |
| 20 | Choose one | ( ) Computer processing unit (CPU)<br>( ) Cathode ray tube monitor (CRT)<br>(•) Liquid crystal display (LCD)<br>( ) Notebook computer |
| 23 | Number of products purchased | 10000 |
| 25 | Is the product EPEAT registered? | (•) Yes ( ) No ( ) *Not applicable* |
| 26 | If yes, which EPEAT registration tier? | ( ) Bronze ( ) Silver (•) Gold ( ) Do not know |
| 28 | Initial cost per unit (US$) (*Optional*) | |
| 29 | | |
| 30 | **Product 3** Enter a product ID, if desired | |
| | | ( ) Computer processing unit (CPU) |

The results provided in Tab 5a of the EEBC indicate that, in total, these EPEAT-registered products have 744 kg (~1,636 lbs) less toxic materials than conventional computer desktops and monitors:

**Results represent the following user selections:**

| Purchasing: | | ID: |
|---|---|---|
| 10000 | CPU | Computers |
| 10000 | LCD | Monitors |
| | no input | no user ID given |

**Use:**

0 computer products in use

**End-of-life:**

| | |
|---|---|
| 0 reused CPUs | 0 recycled CPUs |
| 0 reused CRTs | 0 recycled CRTs |
| 0 reused LCDs | 0 recycled LCDs |
| 0 reused notebooks | 0 recycled notebooks |
| 0 reused mobile phones | 0 recycled mobile phones |

| Criteria reference E=EPEAT | CRITERIA/ATTRIBUTES | SAVINGS (difference from baseline) (kWh, kg, or $) (savings are presented in scientific notation, e.g., 1.23E+06 = 1,230,000; and 1.23 | | | | | |
|---|---|---|---|---|---|---|---|
| | *For explanations of calculations see Sheet 5b.* | Energy savings (kWh) | Primary material savings (kg) | GHG emission savings (kg of CE) | Air emission savings (kg) | Water emission savings (kg) | Toxic material savings (kg) |
| | GRAND TOTAL (for all life-cycle phases) | 9.99E+06 | 1.50E+07 | 7.29E+05 | 3.40E+07 | 7.34E+04 | 7.44E+02 |
| | TOTAL All product purchases | 9.99E+06 | 1.50E+07 | 7.29E+05 | 3.40E+07 | 7.34E+04 | 7.44E+02 |
| | Subtotal: computer product 1 purchase | 1.90E+06 | 1.66E+06 | 1.06E+05 | 3.44E+06 | 8.40E+03 | 4.86E+02 |
| | Subtotal: computer product 2 purchase | 8.09E+06 | 1.33E+07 | 6.22E+05 | 3.06E+07 | 6.50E+04 | 2.58E+02 |
| | Subtotal: computer product 3 purchase | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| | TOTAL: Equipment use | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

By purchasing EPEAT-registered equipment, the federal agency has reduced the quantity of toxic materials that it acquires, uses and will eventually have to dispose of.

## Conclusion

The purchase of EPEAT-registered electronic equipment reduces the amount of toxic and hazardous chemicals and materials acquired by a federal agency. Federal agencies may choose to use these purchases as a strategy to reduce their overall acquisition of hazardous chemicals and materials, and may track and report these reductions under their chemical management plan.

§ 2901.6, may request a review of the denial by the Secretary within 30 days from the date of the denial.

(b) *Procedures.* Any request for review under § 2901.7(a) shall be in writing and shall set forth the specific ground upon which the request is based. There is no final agency action for purposes of judicial review under § 2901.8 until that request has been acted upon. If the request for review has not been acted upon within 30 days after it is received, the request shall be deemed to have been denied. That denial shall then constitute final agency action for the purpose of judicial review under § 2901.8.

### § 2901.8 Judicial review.

Any person aggrieved or adversely affected by a final agency action taken on a request for an adjustment under this section may obtain judicial review in accordance with section 506 of the Natural Gas Policy Act of 1978.

### § 2901.9 Effective date.

This rule shall become effective on October 29, 1979.

# PART 2902—GUIDELINES FOR DESIGNATING BIOBASED PRODUCTS FOR FEDERAL PROCUREMENT

## Subpart A—General

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SOURCE: 70 FR 1809, Jan. 11, 2005, unless otherwise noted.

AUTHORITY: 7 U.S.C. 8102.

## Subpart A—General

### § 2902.1 Purpose and scope.

(a) *Purpose.* The purpose of the guidelines in this part is to assist procuring agencies in complying with the requirements of section 9002 of the Farm Security and Rural Investment Act of 2002 (FSRIA), Public Law 107–171, 116 Stat. 476 (7 U.S.C. 8102), as they apply to the procurement of the items designated in subpart B of this part.

(b) *Scope.* The guidelines in this part designate items that are or can be produced with biobased products and whose procurement by procuring agencies will carry out the objectives of section 9002 of FSRIA.

[71 FR 42575, July 27, 2006]

### § 2902.2 Definitions.

These definitions apply to this part:

*Agricultural materials*. Agricultural-based, including plant, animal, and marine materials, raw materials or residues used in the manufacture of commercial or industrial, nonfood/nonfeed products.

*ASTM International*. ASTM International, a nonprofit organization organized in 1898, is one of the largest voluntary standards development organizations in the world with about 30,000 members in over 100 different countries. ASTM provides a forum for the development and publication of voluntary consensus standards for materials, products, systems, and services.

*BEES*. An acronym for ''Building for Environmental and Economic Sustainability,'' an analytic tool used to determine the environmental and health benefits and life cycle costs of items, developed by the U.S. Department of Commerce National Institute of Standards and Technology, with support from the U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics (BEES 3.0, Building for Environmental and Economic Sustainability Technical Manual and User Guide, NISTIR 6916, National Institute of Standards and Technology, U.S. Department of Commerce, October 2002). Also, see *http://www.bfrl.nist.gov/oae/software/bees_USDA.html* for a discussion of how biobased feedstocks are addressed in the BEES Analysis.

*Biobased components*. Any intermediary biobased materials or parts that, in combination with other components, are functional parts of the biobased product.

*Biobased content*. Biobased content shall be determined based on the amount of biobased carbon in the material or product as a percent of weight (mass) of the total organic carbon in the material or product.

*Biobased product*. A product determined by USDA to be a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials.

*Biodegradability*. A quantitative measure of the extent to which a material is capable of being decomposed by biological agents, especially bacteria.

*Biological products*. Products derived from living materials other than agricultural or forestry materials.

*Designated item*. A generic grouping of biobased products identified in subpart B that is eligible for the procurement preference established under section 9002 of FSRIA.

*Diluent*. A substance used to diminish the strength, scent, or other basic property of a substance.

*Engineered wood products*. Products produced with a combination of wood, food fibers and adhesives.

*EPA-designated recovered content product*. A product, designated under the Resource Conservation and Recovery Act, that is subject to Federal procurement as specified in section 6002 of the Solid Waste Disposal Act (42 U.S.C. 6962), whereby Federal agencies must give preferred procurement to those products composed of the highest percentage of recovered materials practicable, subject to availability, cost, and performance.

*Federal agency*. Any executive agency or independent establishment in the legislative or judicial branch of the Government (except the Senate, the House of Representatives, the Architect of the Capitol, and any activities under the Architect's direction).

*Filler*. A substance added to a product to increase the bulk, weight, viscosity, strength, or other property.

*Forest thinnings*. Refers to woody materials removed from a dense forest, primarily to improve growth, enhance forest health, or recover potential mortality. (To recover potential mortality means to remove trees that are going to die in the near future.)

*Forestry materials*. Materials derived from the practice of planting and caring for forests and the management of growing timber. Such materials must come from short rotation woody crops (less than 10 years old), sustainably managed forests, wood residues, or forest thinnings.

*Formulated product*. A product that is prepared or mixed with other ingredients, according to a specified formula and includes more than one ingredient.

*FSRIA*. The Farm Security and Rural Investment Act of 2002, Public Law 107–171, 116 Stat. 134 (7 U.S.C. 8102).

*Functional unit*. A measure of product technical performance that provides a common reference to which all environmental and economic impacts of the product are scaled. This reference is necessary to ensure comparability of performance results across competing products. Comparability of results is critical when competing product alternatives are being assessed to ensure that such comparisons are made on a common basis. For example, the functional unit for competing interior paint products may be defined as ''protecting one square foot of interior wall surface for 50 years.''

*Ingredient*. A component; part of a compound or mixture; may be active or inactive.

*ISO*. The International Organization for Standardization, a network of national standards institutes from 145 countries working in partnership with international organizations, governments, industries, business, and consumer representatives.

*Neat product*. A product that is made of only one ingredient and is not diluted or mixed with other substances.

*Procuring agency* means any Federal agency that is using Federal funds for procurement or any person contracting with any Federal agency with respect to work performed under the contract.

*Relative price*. The price of a product as compared to the price of other products on the market that have similar performance characteristics.

*Residues*. That which remains after a part is taken, separated, removed, or designated; a remnant; a remainder; and, for this purpose, is from agricultural materials, biological products, or forestry materials.

*Secretary*. The Secretary of the United States Department of Agriculture.

*Small and emerging private business enterprise*. Any private business which will employ 50 or fewer new employees and has less than $1 million in projected annual gross revenues.

*Sustainably managed forests*. Refers to the practice of a land stewardship ethic that integrates the reforestation, management, growing, nurturing, and harvesting of trees for useful products while conserving soil and improving air and water quality, wildlife, fish habitat, and aesthetics.

[70 FR 1809, Jan. 11, 2005, as amended at 71 FR 13704, Mar. 16, 2006; 71 FR 42575, July 27, 2006]

### § 2902.3 Applicability to Federal procurements.

(a) *Applicability to procurement actions*. The guidelines in this part apply to all procurement actions by procuring agencies involving items designated by USDA in this part, where the procuring agency purchases $10,000 or more worth of one of these items during the course of a fiscal year, or where the quantity of such items or of functionally equivalent items purchased during the preceding fiscal year was $10,000 or more. The $10,000 threshold applies to Federal agencies as a whole rather than to agency subgroups such as regional offices or subagencies of a larger Federal department or agency.

(b) *Exception for procurements subject to EPA regulations under the Solid Waste Disposal Act*. For any procurement by any procuring agency that is subject to regulations of the Administrator of the Environmental Protection Agency under section 6002 of the Solid Waste Disposal Act as amended by the Resource Conservation Act of 1976 (40 CFR part 247), these guidelines do not apply to the extent that the requirements of this part are inconsistent with such regulations.

(c) *Procuring items composed of highest percentage of biobased products*. FSRIA section 9002(c)(1) requires procuring agencies to procure designated items composed of the highest percentage of biobased products practicable or such items that comply with the regulations issued under section 103 of Public Law 100–556 (42 U.S.C. 6914b–1), consistent with maintaining a satisfactory level of competition, considering these guidelines. Procuring agencies may decide not to procure such items if they are not reasonably priced or readily available or do not meet specified or reasonable performance standards.

(d) This guideline does not apply to purchases of designated items that are unrelated to or incidental to Federal

funding; *i.e.*, not the direct result of a contract or agreement with persons supplying items to a procuring agency or providing support services that include the supply or use of items.

(e) *Exemptions*. The following applications are exempt from the preferred procurement requirements of this part:

(1) Military equipment: Products or systems designed or procured for combat or combat-related missions.

(2) Spacecraft systems and launch support equipment.

[71 FR 42575, July 27, 2006, as amended at 73 FR 27953, May 14, 2008]

### § 2902.4 Procurement programs.

(a) *Integration into the Federal procurement framework*. The Office of Federal Procurement Policy, in cooperation with USDA, has the responsibility to coordinate this policy's implementation in the Federal procurement regulations. These guidelines are not intended to address full implementation of these requirements into the Federal procurement framework. This will be accomplished through revisions to the Federal Acquisition Regulation.

(b) *Federal agency preferred procurement programs*. (1) On or before January 11, 2006, each Federal agency shall develop a procurement program which will assure that items composed of biobased products will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement laws. Each procurement program shall contain:

(i) A preference program for purchasing designated items,

(ii) A promotion program to promote the preference program; and

(iii) Provisions for the annual review and monitoring of the effectiveness of the procurement program.

(2) In developing the preference program, Federal agencies shall adopt one of the following options, or a substantially equivalent alternative, as part of the procurement program:

(i) A policy of awarding contracts to the vendor offering a designated item composed of the highest percentage of biobased product practicable except when such items:

(A) Are not available within a reasonable time;

(B) Fail to meet performance standards set forth in the applicable specifications, or the reasonable performance standards of the Federal agency; or

(C) Are available only at an unreasonable price.

(ii) A policy of setting minimum biobased products content specifications in such a way as to assure that the biobased products content required is consistent with section 9002 of FSRIA and the requirements of the guidelines in this part except when such items:

(A) Are not available within a reasonable time;

(B) Fail to meet performance standards for the use to which they will be put, or the reasonable performance standards of the Federal agency; or

(C) Are available only at an unreasonable price.

(3) In implementing the preference program, Federal agencies shall treat as eligible for the preference biobased products from ''designated countries,'' as that term is defined in section 25.003 of the Federal Acquisition Regulation, provided that those products otherwise meet all requirements for participation in the preference program.

(c) *Procurement specifications*. After the publication date of each designated item, Federal agencies that have the responsibility for drafting or reviewing specifications for items procured by Federal agencies shall ensure within a specified time frame that their specifications require the use of designated items composed of biobased products, consistent with the guidelines in this part. USDA will specify the allowable time frame in each designation rule. The biobased content of a designated item may vary considerably from product to product based on the mix of ingredients used in its manufacture. In procuring designated items, the percentage of biobased product content should be maximized, consistent with achieving the desired performance for the product.

[70 FR 1809, Jan. 11, 2005, as amended at 71 FR 42575, July 27, 2006]

### § 2902.5 Item designation.

(a) *Procedure*. Designated items are listed in subpart B. In designating

items, USDA will designate items composed of generic groupings of specific products and will identify the minimum biobased content for each listed item. As items are designated for procurement preference, they will be added to subpart B. Items are generic groupings of specific products. Products are specific products offered for sale by a manufacturer or vendor. Although manufacturers and vendors may submit recommendations to USDA for future item designations at any time, USDA does not have a formal process for such submissions or for responding to such submissions.

(b) *Considerations.* In designating items, USDA will consider the availability of such items and the economic and technological feasibility of using such items, including life cycle costs. USDA will gather information on individual products within an item and extrapolate that product information to the item level for consideration in designating items. In considering these factors, USDA will use life cycle cost information only from tests using the BEES analytical method.

(c) *Exclusions.* (1) Motor vehicle fuels and electricity are excluded by statute from this program.

(2) USDA additionally will not designate items for preferred procurement that are determined to have mature markets. USDA will determine mature market status by whether the item had significant national market penetration in 1972.

### § 2902.6 Providing product information to Federal agencies.

(a) *Informational Web site.* An informational USDA Web site implementing section 9002 can be found at: *http://www.biobased.oce.usda.gov.* USDA will maintain a voluntary Web-based information site for manufacturers and vendors of designated items produced with biobased products and Federal agencies to exchange product information. This Web site will provide information as to the availability, relative price, biobased content, performance and environmental and public health benefits of the designated items. USDA encourages manufacturers and vendors to provide product, business contacts, and product information for designated items. Instructions for posting information are found on the Web site itself. USDA also encourages Federal agencies to utilize this Web site to obtain current information on designated items, contact information on manufacturers and vendors, and access to information on product characteristics relevant to procurement decisions. In addition to any information provided on the Web site, manufacturers and vendors are expected to provide relevant information to Federal agencies, upon request, with respect to product characteristics, including verification of such characteristics if requested.

(b) *Advertising, labeling and marketing claims.* Manufacturers and vendors are reminded that their advertising, labeling, and other marketing claims, including claims regarding health and environmental benefits of the product, must conform to the Federal Trade Commission Guides for the Use of Environmental Marketing Claims, 16 CFR part 260.

### § 2902.7 Determining biobased content.

(a) *Certification requirements.* For any product offered for preferred procurement, manufacturers and vendors must certify that the product meets the biobased content requirements for the designated item within which the product falls. Paragraph (c) of this section addresses how to determine biobased content. Upon request, manufacturers and vendors must provide USDA and Federal agencies information to verify biobased content for products certified to qualify for preferred procurement.

(b) *Minimum biobased content.* Unless specified otherwise in the designation of a particular item, the minimum biobased content requirements in a specific item designation refer to the biobased portion of the product, and not the entire product.

(c) *Determining biobased content.* Verification of biobased content must be based on third party ASTM/ISO compliant test facility testing using the ASTM International Radioisotope Standard Method D 6866. ASTM International Radioisotope Standard Method D 6866 determines biobased content based on the amount of biobased carbon in the material or product as percent of the weight (mass) of the total

organic carbon in the material or product.

(d) *Products with the same formulation.* In the case of products that are essentially the same formulation, but marketed under a variety of brand names, biobased content test data need not be brand-name specific.

### § 2902.8 Determining life cycle costs, environmental and health benefits, and performance.

(a) *Providing information on life cycle costs and environmental and health benefits.* When requested by Federal agencies, manufacturers and vendors must provide information on life cycle costs and environmental and health benefits based on tests using either of two analytical approaches: The BEES analytical tool along with the qualifications of the independent testing entity that performed the tests; or either a third-party or an in-house conducted analysis using the ASTM standard for evaluating and reporting on environmental performance of biobased products D7075. Both BEES and the ASTM standard are in accordance with ISO standards, are focused on testing of biobased products, and will provide the life cycle assessment and life cycle cost information Federal agencies might require. As with biobased content, test data using the above analytical methods need not be brand-name specific.

(b) *Performance test information.* In assessing performance of qualifying biobased products, USDA requires that procuring agencies rely on results of performance tests using applicable ASTM, ISO, Federal or military specifications, or other similarly authoritative industry test standards. Such testing must be conducted by an ASTM/ISO compliant laboratory. The procuring official will decide whether performance data must be brand-name specific in the case of products that are essentially of the same formulation.

(c) *Biodegradability information.* If biodegradability is claimed by the manufacturer of a qualifying biobased product as a characteristic of that product, USDA requires that, if requested by procuring agencies, these claims be verified using the appropriate, product-specific ASTM biodegradability standard(s). Such testing must be conducted by an ASTM/ISO-compliant laboratory. The procuring official will decide whether biodegradability data must be brand-name specific in the case of products that are essentially of the same formulation. ASTM biodegradability standards include:

(1) D5338 ''Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials Under Controlled Composting Conditions'';

(2) D5864 ''Standard Test Method for Determining the Aerobic Aquatic Biodegradation of Lubricants or Their Components'';

(3) D6006 ''Standard Guide for Assessing Biodegradability of Hydraulic Fluids'';

(4) D6400 ''Standard Specification for Compostable Plastics'' and the standards cited therein;

(5) D6139 ''Standard Test Method for Determining the Aerobic Aquatic Biodegradation of Lubricants or Their Components Using the Gledhill Shake Flask'';

(6) D6868 ''Standard Specification for Biodegradable Plastics Used as Coatings on Paper and Other Compostable Substrates''; and

(7) D7081 ''Standard Specification for Non-Floating Biodegradable Plastics in the Marine Environment.''

[70 FR 1809, Jan. 11, 2005, as amended at 71 FR 13704, Mar. 16, 2006; 71 FR 42575, July 27, 2006]

### § 2902.9 Funding for testing.

(a) *USDA use of funds for biobased content and BEES testing.* USDA will use funds to support testing for biobased content and conduct of BEES testing for products within items USDA has selected to designate for preferred procurement through early regulatory action. USDA initially will focus on gathering the necessary test information on a sufficient number of products within an item (generic grouping of products) to support regulations to be promulgated to designate an item or items for preferred procurement under this program. USDA may accept cost sharing for such testing to the extent consistent with USDA product testing decisions. During this period USDA will not consider cost sharing in deciding what products to test. When USDA has

concluded that a critical mass of items have been designated, USDA will exercise its discretion, in accordance with the competitive procedures outlined in paragraph (b) of this section, to allocate a portion of the available USDA testing funds to give priority to testing of products for which private sector firms provide cost sharing for the testing.

(b) *Competitive program for cost sharing for determining life cycle costs, environmental and health benefits, and performance.* (1) Subject to the availability of funds and paragraph (a) of this section, USDA will announce annually the solicitation of proposals for cost sharing for life cycle costs, environmental and health benefits, and performance testing of biobased products in accordance with the standards set forth in § 2902.8 to carry out this program. Information regarding the submission of proposals for cost sharing also will be posted on the USDA informational Web site, *http://www.biobased.oce.usda.gov*.

(2) Proposals will be evaluated and assigned a priority rating. Priority ratings will be based on the following criteria:

(i) A maximum of 25 points will be awarded a proposal based on the market readiness;

(ii) A maximum of 20 points will be awarded a proposal based on the potential size of the market for that product in Federal agencies;

(iii) A maximum of 25 points will be awarded based on the financial need for assistance of the manufacturer or vendor;

(iv) A maximum of 20 points will be awarded a proposal based on the product's prospective competitiveness in the market place;

(v) A maximum of 10 points will be awarded a proposal based on its likely benefit to the environment.

(3) Cost-sharing proposals will be considered first for high priority products of small and emerging private business enterprises. If funds remain to support further testing, USDA will consider cost sharing proposals for products of all other producers of biobased items as well as the remaining proposals for products of small and emerging private business enterprises. Proposals will be selected based on priority rating until available funds for the fiscal year are committed.

(4)(i) For products selected for life cycle costs and environmental and health benefits testing under this paragraph, USDA could provide up to 50 percent of the cost of determining the life cycle costs and environmental and health effects, up to a maximum of $5,000 of assistance per product.

(ii) For products selected for performance testing under this paragraph, USDA could provide up to 50 percent of the cost for performance testing, up to $100,000 of assistance per product for up to two performance tests (measures of performance) per product.

(5) For selected proposals, USDA will enter into agreements with and provide the funds directly to the testing entities.

(6) Proposals submitted in one fiscal year, but not selected for cost sharing of testing in that year, may be resubmitted to be considered for cost sharing in the following year.

## Subpart B—Designated Items

SOURCE: 71 FR 13705, Mar. 16, 2006, unless otherwise noted.

### § 2902.10 Mobile equipment hydraulic fluids.

(a) *Definition.* Hydraulic fluids formulated for general use in non-stationary equipment, such as tractors, end loaders, or backhoes.

(b) *Minimum biobased content.* The minimum biobased content is 44 percent and shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference effective date.* No later than March 16, 2007, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased mobile equipment hydraulic fluids. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased mobile equipment hydraulic fluids.

(d) *Determining overlap with an EPA-designated recovered content product.*

Qualifying biobased products that fall under this item may, in some cases, overlap with the following EPA-designated recovered content product: Re-refined Lubricating Oils. USDA is requesting that manufacturers of these qualifying biobased products provide information for the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains petroleum-based ingredients, re-refined oil, and/or any other recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated lubricating oils containing re-refined oil and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Mobile equipment hydraulic fluid products within this designated item can compete with similar lubricating oils containing re-refined oil. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated lubricating oils containing re-refined oil as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.11.

[71 FR 13705, Mar. 16, 2006, as amended at 73 FR 27953, May 14, 2008]

### § 2902.11 Roof coatings.

(a) *Definition.* Coatings formulated for use in commercial roof deck systems to provide a single-coat monolith coating system.

(b) *Minimum biobased content.* The minimum biobased content is 20 percent and shall be based on the entire product.

(c) *Preference effective date.* No later than March 16, 2007, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased roof coatings. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased roof coatings.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the following EPA-designated recovered content product: Roofing Materials. USDA is requesting that manufacturers of these qualifying biobased products provide information for the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any type of recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with recovered content roofing materials and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Roof coating products within this designated item can compete with similar roofing material products. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated roofing material containing recycled material as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.12.

[71 FR 13705, Mar. 16, 2006, as amended at 73 FR 27953, May 14, 2008]

### § 2902.12 Water tank coatings.

(a) *Definition.* Coatings formulated for use in potable water storage systems.

(b) *Minimum biobased content.* The minimum biobased content is 59 percent and shall be based on the entire product.

(c) *Preference effective date.* No later than November 20, 2007, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased water tank coatings. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased water tank coatings.

[71 FR 13705, Mar. 16, 2006, as amended at 71 FR 67032, Nov. 20, 2006]

### § 2902.13 Diesel fuel additives.

(a) *Definition.* (1) Any substance, other than one composed solely of carbon and/or hydrogen, that is intentionally added to diesel fuel (including any added to a motor vehicle's fuel system) and that is not intentionally removed prior to sale or use.

(2) Neat biodiesel, also referred to as B100, when used as an additive. Diesel fuel additive does not mean neat biodiesel when used as a fuel or blended biodiesel fuel (e.g., B20).

(b) *Minimum biobased content.* The minimum biobased content is 90 percent and shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference effective date.* No later than March 16, 2007, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased diesel fuel additives. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased diesel fuel additives.

[71 FR 13705, Mar. 16, 2006, as amended at 73 FR 27953, May 14, 2008]

### § 2902.14 Penetrating lubricants.

(a) *Definition.* Products formulated to provide light lubrication and corrosion resistance in close tolerant internal and external applications including frozen nuts and bolts, power tools, gears, valves, chains, and cables.

(b) *Minimum biobased content.* The minimum biobased content is 68 percent and shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference effective date.* No later than March 16, 2007, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased penetrating lubricants. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased penetrating lubricants.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the following EPA-designated recovered content product: Re-refined Lubricating Oils. USDA is requesting that manufacturers of these qualifying biobased products provide information for the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains petroleum-based ingredients, re-refined oil, and/or any other recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated lubricating oils containing re-refined oil and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Penetrating lubricant products within this designated item can compete with similar re-refined lubricating oil products. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated re-refined lubricating oils containing recycled material as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.11.

[71 FR 13705, Mar. 16, 2006, as amended at 73 FR 27953, May 14, 2008]

### § 2902.15 Bedding, bed linens, and towels.

(a) *Definition.* (1) Bedding is that group of woven cloth products used as coverings on a bed. Bedding includes products such as blankets, bedspreads, comforters, and quilts.

(2) Bed linens are woven cloth sheets and pillowcases used in bedding.

(3) Towels are woven cloth products used primarily for drying and wiping.

(b) *Minimum biobased content.* The minimum biobased content is 12 percent and shall be based on the amount of qualifying biobased carbon in the finished product as a percent of the

weight (mass) of the total organic carbon in the finished product. The 12 percent biobased content must be of a qualifying biobased feedstock. Cotton, wool, linen, and silk are not qualifying biobased feedstocks for the purpose of determining the biobased content of bedding, bed linens, and towels.

(c) *Preference effective date.* No later than November 20, 2007, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased bedding, bed linens, and towels. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased bedding, bed linens, and towels.

[71 FR 13705, Mar. 16, 2006, as amended at 71 FR 67032, Nov. 20, 2006]

### § 2902.16 Adhesive and mastic removers.

(a) *Definition.* Solvent products formulated for use in removing asbestos, carpet, and tile mastics as well as adhesive materials, including glue, tape, and gum, from various surface types.

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 58 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased adhesive and mastic removers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased adhesive and mastic removers.

[73 FR 27953, May 14, 2008]

### § 2902.17 Plastic insulating foam for residential and commercial construction.

(a) *Definition.* Spray-in-place plastic foam products designed to provide a sealed thermal barrier for residential or commercial construction applications.

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 7 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased plastic insulating foam for residential and commercial construction. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased plastic insulating foam for residential and commercial construction.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the EPA-designated recovered content product: Building Insulation. USDA is requesting that manufacturers of these qualifying biobased products provide information on the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated building insulation and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Biobased insulating products within this designated item can compete with similar insulating products with recycled content. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated building insulation containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.12. EPA provides recovered materials content

recommendations for building insulation products in the Recovered Materials Advisory Notice (RMAN) published for these products. The RMAN recommendations can be found by accessing EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

[73 FR 27953, May 14, 2008]

### § 2902.18 Hand cleaners and sanitizers.

(a) *Definitions.* (1) *Hand cleaners.* Products formulated for personal care use in removing a variety of different soils, greases, and similar substances from human hands with or without the use of water.

(2) *Hand sanitizers.* Products formulated for personal care use in removing bacteria from human hands with or without the use of water. Personal care products that are formulated for use in removing a variety of different soils, greases and similar substances and bacteria from human hands with or without the use of water are classified as hand sanitizers for the purposes of this rule.

(b) *Minimum biobased content.* The minimum biobased content requirement for all hand cleaners and/or sanitizers shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents are:

(1) Hand cleaners—64 percent.

(2) Hand sanitizers (including hand cleaners and sanitizers)—73 percent.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased hand cleaners and sanitizers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased hand cleaners and sanitizers.

[73 FR 27953, May 14, 2008]

### § 2902.19 Composite panels.

(a) *Definitions.* (1) *Plastic lumber composite panels.* Engineered products suitable for non-structural outdoor needs such as exterior signs, trash can holders, and dimensional letters.

(2) *Acoustical composite panels.* Engineered products designed for use as structural and sound deadening material suitable for office partitions and doors.

(3) *Interior panels.* Engineered products designed specifically for interior applications and providing a surface that is impact-, scratch-, and wear-resistant and that does not absorb or retain moisture.

(4) *Structural interior panels.* Engineered products designed for use in structural construction applications, including cabinetry, casework, paneling, and decorative panels.

(5) *Structural wall panels.* Engineered products designed for use in structural walls, curtain walls, floors and flat roofs in commercial buildings.

(b) *Minimum biobased content.* The minimum biobased content requirement for all composite panels shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents are:

(1) Plastic lumber composite panels—23 percent.

(2) Acoustical composite panels—37 percent.

(3) Interior panels—55 percent.

(4) Structural interior panels—89 percent.

(5) Structural wall panels—94 percent.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased composite panels. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased composite panels.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the following EPA-designated recovered content products: Laminated Paperboard and Structural

Fiberboard; Shower and Restroom Dividers; and Signage. USDA is requesting that manufacturers of these qualifying biobased products provide information on the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated laminated paperboard, structural fiberboard, shower and restroom dividers, and signage, and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Composite panel products within this designated item can be made with recycled material. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated laminated paperboard and structural fiberboard, shower and restroom dividers, and signage containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.12. EPA provides recovered materials content recommendations for laminated paperboard and structural fiberboard, shower and restroom dividers, and signage in the Recovered Materials Advisory Notice (RMAN) published for these products. The RMAN recommendations can be found by accessing EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

[73 FR 27953, May 14, 2008]

### § 2902.20 Fluid-filled transformers.

(a) *Definition.* (1) *Synthetic ester-based fluid-filled transformers.* Electric power transformers that are designed to utilize a synthetic ester-based dielectric (non-conducting) fluid to provide insulating and cooling properties.

(2) *Vegetable oil-based fluid-filled transformers.* Electric power transformers that are designed to utilize a vegetable oil-based dielectric (non-conducting) fluid to provide insulating and cooling properties.

(b) *Minimum biobased content.* The minimum biobased content requirement for all fluid-filled transformers shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents are:

(1) Synthetic ester-based fluid-filled transformers—66 percent.

(2) Vegetable oil-based fluid-filled transformers—95 percent.

(c) *Preference compliance date.* (1) *Synthetic ester-based fluid-filled transformers.* Determination of the compliance date for synthetic ester-based fluid-filled transformers is deferred until USDA identifies two or more manufacturers of synthetic ester-based fluid-filled transformers. At that time, USDA will publish a document in the FEDERAL REGISTER announcing that Federal agencies have one year from the date of publication to give procurement preference to biobased synthetic ester-based fluid-filled transformers.

(2) *Vegetable oil-based fluid-filled transformers.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased vegetable oil-based fluid-filled transformers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased vegetable oil-based fluid-filled transformers.

[73 FR 27953, May 14, 2008]

### § 2902.21 Disposable containers.

(a) *Definition.* Products designed to be used for temporary storage or transportation of materials including, but not limited to, food items.

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 72 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Biodegradability.* At the time a manufacturer offers a product under this item for Federal purchase under the BioPreferred Program, the preferred procurement product must be capable of meeting the current version of ASTM D6400 if disposed of in a non-

marine environment, the current version of ASTM D7081 if disposed of in a marine environment, or other appropriate and applicable standard for biodegradability.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the EPA-designated recovered content product: Paper and Paper Products. USDA is requesting that manufacturers of these qualifying biobased products provide information on the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated paper and paper products and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Disposable containers can include boxes and packaging made from paper. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated paper and paper products containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.10. EPA provides recovered materials content recommendations for paper and paper products in the Recovered Materials Advisory Notice (RMAN) published for these products. The RMAN recommendations can be found on EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

(e) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased disposable containers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased disposable containers.

[73 FR 27953, May 14, 2008]

## § 2902.22 Fertilizers.

(a) *Definition.* Products formulated or processed to provide nutrients for plant growth and/or beneficial bacteria to convert nutrients into plant usable forms. Biobased fertilizers, which are likely to consist mostly of biobased components, may include both biobased and chemical components.

NOTE TO PARAGRAPH (a): Biobased fertilizers, as well as other fertilizers, may be made with recycled hazardous waste. Such fertilizers need to meet applicable land disposal restriction standards for any hazardous constituents they contain, as required under 40 CFR 266.20(d).

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 71 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased fertilizers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased fertilizers.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the EPA-designated recovered content product: Fertilizer. USDA is requesting that manufacturers of these qualifying biobased products provide information on the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated fertilizer product and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Fertilizers within this designated item can be made with recycled materials. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated fertilizers containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.15. EPA provides recovered materials content recommendations for fertilizers in the Recovered Materials Advisory Notice (RMAN) published for these products. The RMAN recommendations can be found by accessing EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

[73 FR 27953, May 14, 2008]

### § 2902.23 Sorbents.

(a) *Definition.* Materials formulated for use in the cleanup and bioremediation of oil and chemical spills, the disposal of liquid materials, or the prevention of leakage or leaching in maintenance applications, shop floors, and fuel storage areas.

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 89 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased sorbents. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased sorbents.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the EPA-designated recovered content product: Sorbents. USDA is requesting that manufacturers of these qualifying biobased products provide information on the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated sorbents and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Sorbents within this designated item can be made with recycled materials. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated sorbents containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.17. EPA provides recovered materials content recommendations for sorbents in the Recovered Materials Advisory Notice (RMAN) published for these products. The RMAN recommendations can be found by accessing EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

[73 FR 27953, May 14, 2008]

### § 2902.24 Graffiti and grease removers.

(a) *Definition.* Industrial solvent products formulated to remove automotive, industrial, or kitchen soils and oils, including grease, paint, and other coatings, from hard surfaces.

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 34 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. If the finished product is to be diluted before use, the biobased content of the remover must be determined before dilution.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying graffiti and grease removers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the

use of biobased graffiti and grease removers.

[73 FR 27953, May 14, 2008]

### § 2902.25 2-Cycle engine oils.

(a) *Definition*. Lubricants designed for use in 2-cycle engines to provide lubrication, decreased spark plug fouling, reduced deposit formation, and/or reduced engine wear.

(b) *Minimum biobased content*. The preferred procurement product must have a biobased content of at least 34 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date*. No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased 2-cycle engine oils. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased 2-cycle engine oils.

[73 FR 27973, May 14, 2008]

### § 2902.26 Lip care products.

(a) *Definition*. Personal care products formulated to replenish the moisture and/or prevent drying of the lips.

(b) *Minimum biobased content*. The preferred procurement product must have a biobased content of at least 82 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date*. No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased lip care products. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased lip care products.

[73 FR 27973, May 14, 2008]

### § 2902.27 Films.

(a) *Definition*. (1) Products that are used in packaging, wrappings, linings, and other similar applications.

(2) Films for which preferred procurement applies are:

(i) *Semi-durable films*. Films that are designed to resist water, ammonia, and other compounds, to be re-used, and to not readily biodegrade. Products in this item are typically used in the production of bags and packaging materials.

(ii) *Non-durable films*. Films that are intended for single use for short-term storage or protection before being discarded. Non-durable films that are designed to have longer lives when used are included in this item.

(b) *Minimum biobased content*. The minimum biobased content for all films shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents are:

(1) Semi-durable films—45 percent.

(2) Non-durable films—85 percent.

(c) *Preference compliance date*. No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased semi-durable and non-durable films. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased semi-durable and non-durable films.

(d) *Determining overlap with an EPA-designated recovered content product*. Qualifying products within the semi-durable films subcategory may overlap with the EPA-designated recovered content product: Plastic trash bags. USDA is requesting that manufacturers of these qualifying biobased products provide information for the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining

whether or not a qualifying biobased product overlaps with EPA-designated plastic trash bags and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Biobased semi-durable film products within this designated item can compete with plastic trash bag products with recycled content. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated plastic trash bags containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.16. EPA provides recovered materials content recommendations for plastic trash bags in the May 1, 1995, Recovered Materials Advisory Notice (RMAN I). The RMAN recommendations can be found on EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

[73 FR 27973, May 14, 2008]

### § 2902.28 Stationary equipment hydraulic fluids.

(a) *Definition*. Fluids formulated for use in stationary hydraulic equipment systems that have various mechanical parts, such as cylinders, pumps, valves, pistons, and gears, that are used for the transmission of power (and also for lubrication and/or wear, rust, and oxidation protection).

(b) *Minimum biobased content*. The preferred procurement product must have a biobased content of at least 44 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date*. No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased stationary equipment hydraulic fluids. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased stationary equipment hydraulic fluids.

(d) *Determining overlap with an EPA-designated recovered content product*. Qualifying biobased products that fall under this item may, in some cases, overlap with the EPA-designated recovered content product: Re-refined lubricating oils. USDA is requesting that manufacturers of these qualifying biobased products provide information for the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated re-refined lubricating oils and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Stationary equipment hydraulic fluid products within this designated item can compete with hydraulic fluid products with recycled content. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated re-refined lubricating oils containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.11. EPA provides recovered materials content recommendations for re-refined lubricating oils in the May 1, 1995, Recovered Materials Advisory Notice (RMAN I). The RMAN recommendations can be found by accessing EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

[73 FR 27973, May 14, 2008]

### § 2902.29 Disposable cutlery.

(a) *Definition*. Hand-held, disposable utensils designed for one-time use in eating food.

(b) *Minimum biobased content*. The preferred procurement product must have a biobased content of at least 48 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date*. No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased disposable cutlery. By that date, Federal agencies that have the responsibility for drafting or

reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased disposable cutlery.

[73 FR 27973, May 14, 2008]

### § 2902.30 Glass cleaners.

(a) *Definition.* Cleaning products designed specifically for use in cleaning glass surfaces, such as windows, mirrors, car windows, and computer monitors.

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 49 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. If the finished product is to be diluted before use, the biobased content of the cleaner must be determined before dilution.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased glass cleaners. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased glass cleaners.

[73 FR 27973, May 14, 2008]

### § 2902.31 Greases.

(a) *Definitions.* (1) Lubricants composed of oils thickened to a semisolid or solid consistency using soaps, polymers or other solids, or other thickeners.

(2) Greases for which preferred procurement applies are:

(i) *Food grade greases.* Lubricants that are designed for use on food-processing equipment as a protective anti-rust film, as a release agent on gaskets or seals of tank closures, or on machine parts and equipment in locations in which there is exposure of the lubricated part to food.

(ii) *Multipurpose greases.* Lubricants that are designed for general use.

(iii) *Rail track greases.* Lubricants that are designed for use on railroad tracks or heavy crane tracks.

(iv) *Truck greases.* Lubricants that are designed for use on the fifth wheel of tractor trailer trucks onto which the semi-trailer rests and pivots.

(v) *Greases not elsewhere specified.* Lubricants that meet the general definition of greases as defined in paragraph (a)(1) of this section, but are not otherwise covered by paragraphs (a)(2)(i) through (iv) of this section.

(b) *Minimum biobased content.* The minimum biobased content for all greases shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents are:

(1) Food grade grease—42 percent.

(2) Multipurpose grease—72 percent.

(3) Rail track grease—30 percent.

(4) Truck grease—71 percent.

(5) Greases not elsewhere specified—75 percent.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased greases. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased greases.

[73 FR 27973, May 14, 2008]

### § 2902.32 Dust suppressants.

(a) *Definition.* Products formulated to reduce or eliminate the spread of dust associated with gravel roads, dirt parking lots, or similar sources of dust, including products used in equivalent indoor applications.

(b) *Minimum biobased content.* The preferred procurement product must have a biobased content of at least 85 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. If the finished product is to be diluted before use, the biobased content of the suppressant must be determined before dilution.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will

give a procurement preference for qualifying biobased dust suppressants. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased dust suppressants.

[73 FR 27973, May 14, 2008]

### § 2902.33 Carpets.

(a) *Definition*. Floor coverings composed of woven, tufted, or knitted fiber and a backing system.

(b) *Minimum biobased content*. The preferred procurement product must have a biobased content of at least 7 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date*. No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased carpet. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased carpet.

(d) *Determining overlap with an EPA-designated recovered content product*. Qualifying biobased products that fall under this item may, in some cases, overlap with the EPA-designated recovered content product: Carpets (polyester). USDA is requesting that manufacturers of these qualifying biobased products provide information for the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated carpets (polyester) and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Biobased carpets within this designated item can compete with polyester carpet products with recycled content. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated carpets (polyester) containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.12. EPA provides recovered materials content recommendations for carpets (polyester) in the May 1, 1995, Recovered Materials Advisory Notice (RMAN I). The RMAN recommendations can be found on EPA's Web site *http://www.epa.gov/epaoswer/non-hw/procure/products.htm* and then clicking on the appropriate product name.

[73 FR 27973, May 14, 2008]

### § 2902.34 Carpet and upholstery cleaners.

(a) *Definition*. (1) Cleaning products formulated specifically for use in cleaning carpets and upholstery, through a dry or wet process, found in locations such as houses, cars, and workplaces.

(2) Carpet and upholstery cleaners for which preferred procurement applies are:

(i) *General purpose cleaners*. Carpet and upholstery cleaners formulated for use in cleaning large areas such as the carpet in an entire room or the upholstery on an entire piece of furniture.

(ii) *Spot removers*. Carpet and upholstery cleaners formulated for use in removing spots or stains in a small confined area.

(b) *Minimum biobased content*. The minimum biobased content for all carpet and upholstery cleaners shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents are:

(1) General purpose cleaners—54 percent.

(2) Spot removers—7 percent.

(c) *Preference compliance date*. No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased carpet and upholstery cleaners. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure

that the relevant specifications require the use of biobased carpet and upholstery cleaners.

[73 FR 27973, May 14, 2008]

### § 2902.35 Bathroom and spa cleaners.

(a) *Definition.* Products that are designed to clean and/or prevent deposits on surfaces found in bathrooms and spas including, but not necessarily limited to, bath tubs and spas, shower stalls, shower doors, shower curtains, and bathroom walls, floors, doors, and counter and sink tops. Products in this item may be designed to be applied to a specific type of surface or to multiple surface types. They are available both in concentrated and ready-to-use forms.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 74 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased bathroom and spa cleaners. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased bathroom and spa cleaners.

[73 FR 27994, May 14, 2008]

### § 2902.36 Concrete and asphalt release fluids.

(a) *Definition.* Products that are designed to provide a lubricating barrier between the composite surface materials (e.g., concrete or asphalt) and the container (e.g., wood or metal forms, truck beds, roller surfaces).

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 87 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased concrete and asphalt release fluids. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased concrete and asphalt release fluids.

[73 FR 27994, May 14, 2008]

### § 2902.37 General purpose de-icers.

(a) *Definition.* Chemical products (e.g., salt, fluids) that are designed to aid in the removal of snow and/or ice, and/or in the prevention of the buildup of snow and/or ice, in general use applications by lowering the freezing point of water. Specialized de-icer products, such as those used to de-ice aircraft and airport runways, are not included.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 93 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased general purpose deicers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased general purpose deicers.

[73 FR 27994, May 14, 2008]

### § 2902.38 Firearm lubricants.

(a) *Definition.* Lubricants that are designed for use in firearms to reduce the friction and wear between the moving parts of a firearm, and to keep the weapon clean and prevent the formation of deposits that could cause the weapon to jam.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 49 percent, which shall be based

on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased firearm lubricants. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased firearm lubricants.

[73 FR 27994, May 14, 2008]

### § 2902.39 Floor strippers.

(a) *Definition.* Products that are formulated to loosen waxes, resins, or varnishes from floor surfaces. They can be in either liquid or gel form, and may also be used with or without mechanical assistance.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 78 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased floor strippers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased floor strippers.

[73 FR 27994, May 14, 2008]

### § 2902.40 Laundry products.

(a) *Definitions.* (1) Products that are designed to clean, condition, or otherwise affect the quality of the laundered material. Such products include but are not limited to laundry detergents, bleach, stain removers, and fabric softeners.

(2) Laundry products for which preferred procurement applies are:

(i) *Pretreatment/spot removers.* These are laundry products specifically used to pretreat laundry to assist in the removal of spots and stains during laundering.

(ii) *General purpose laundry products.* These are laundry products used for regular cleaning activities.

(b) *Minimum biobased content.* The minimum biobased content shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents for the preferred procurement product are:

(1) Pretreatment/spot removers—46 percent.

(2) General purpose laundry products—34 percent.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased laundry products. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased laundry products.

[73 FR 27994, May 14, 2008]

### § 2902.41 Metalworking fluids.

(a) *Definition.* (1) Fluids that are designed to provide cooling, lubrication, corrosion prevention, and reduced wear on the contact parts of machinery used for metalworking operations such as cutting, drilling, grinding, machining, and tapping.

(2) Metalworking fluids for which preferred procurement applies are:

(i) *Straight oils.* Metalworking fluids that are not diluted with water prior to use and are generally used for metalworking processes that require lubrication rather than cooling.

(ii) *General purpose soluble, semi-synthetic, and synthetic oils.* Metalworking fluids formulated for use in a re-circulating fluid system to provide cooling, lubrication, and corrosion prevention when applied to metal feedstock during normal grinding and machining operations.

(iii) *High performance soluble, semi-synthetic, and synthetic oils.* Metalworking fluids formulated for use in a re-circulating fluid system to provide

cooling, lubrication, and corrosion prevention when applied to metal feedstock during grinding and machining operations involving unusually high temperatures or corrosion potential.

(b) *Minimum biobased content.* The minimum biobased content shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents for the preferred procurement product are:

(1) Straight oils—66 percent.

(2) General purpose soluble, semi-synthetic, and synthetic oils—57 percent.

(3) High performance soluble, semi-synthetic, and synthetic oils—40 percent.

(c) *Preference compliance date.* (1) *Straight oils.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased metalworking fluids—straight oils. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased metalworking fluids—straight oils.

(2) *General purpose soluble, semi-synthetic, and synthetic oils.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased metalworking fluids—general purpose soluble, semi-synthetic, and synthetic oils. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased metalworking fluids—general purpose soluble, semi-synthetic, and synthetic oils.

(3) *High performance soluble, semi-synthetic, and synthetic oils.* Determination of the preference compliance date for metalworking fluids—high performance soluble, semi-synthetic, and synthetic oils is deferred until USDA identifies two or more manufacturers of biobased products within this subcategory. At that time, USDA will publish a document in the FEDERAL REGISTER announcing that Federal agencies have one year from the date of publication to give procurement preference to biobased metalworking fluids—high performance soluble, semi-synthetic, and synthetic oils.

[73 FR 27994, May 14, 2008]

### § 2902.42 Wood and concrete sealers.

(a) *Definition.* (1) Products that are penetrating liquids formulated to protect wood and/or concrete, including masonry and fiber cement siding, from damage caused by insects, moisture, and decaying fungi and to make surfaces water resistant.

(2) Wood and concrete sealers for which preferred procurement applies are:

(i) *Penetrating liquids.* Wood and concrete sealers that are formulated to penetrate the outer surface of the substrate.

(ii) *Membrane concrete sealers.* Concrete sealers that are formulated to form a protective layer on the surface of the substrate.

(b) *Minimum biobased content.* The minimum biobased content shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product. The applicable minimum biobased contents for the preferred procurement product are:

(1) Penetrating liquids—79 percent.

(2) Membrane concrete sealers—11 percent.

(c) *Preference compliance date.* No later than May 14, 2009, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased wood and concrete sealers. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased wood and concrete sealers.

[73 FR 27994, May 14, 2008]

### § 2902.43 Chain and cable lubricants.

(a) *Definition.* Products designed to provide lubrication in such applications as bar and roller chains, sprockets, and wire ropes and cables. Products may also prevent rust and corrosion in these applications.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 77 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased chain and cable lubricants. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased chain and cable lubricants.

[74 FR 55093, Oct. 27, 2009]

### § 2902.44 Corrosion preventatives.

(a) *Definition.* Products designed to prevent the deterioration (corrosion) of metals.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 53 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased corrosion preventatives. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased corrosion preventatives.

[74 FR 55093, Oct. 27, 2009]

### § 2902.45 Food cleaners.

(a) *Definition.* Anti-microbial products designed to clean the outer layer of various food products, such as fruit, vegetables, and meats.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 53 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased food cleaners. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased food cleaners.

[74 FR 55093, Oct. 27, 2009]

### § 2902.46 Forming lubricants.

(a) *Definition.* Products designed to provide lubrication during metalworking applications that are performed under extreme pressure. Such metalworking applications include tube bending, stretch forming, press braking, and swaging.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 68 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased forming lubricants. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased forming lubricants.

[74 FR 55093, Oct. 27, 2009]

### § 2902.47 Gear lubricants.

(a) *Definition.* Products, such as greases or oils, that are designed to reduce friction when applied to a toothed machine part (such as a wheel or cylinder) that meshes with another toothed part to transmit motion or to change speed or direction.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 58 percent, which shall be based on the amount of qualifying biobased

carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased gear lubricants. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of gear lubricants.

(d) *Determining overlap with an EPA-designated recovered content product.* Qualifying biobased products that fall under this item may, in some cases, overlap with the following EPA-designated recovered content product: Lubricating oils containing re-refined oil. USDA is requesting that manufacturers of these qualifying biobased products provide information for the BioPreferred Web site of qualifying biobased products about the intended uses of the product, information on whether or not the product contains any recovered material, in addition to biobased ingredients, and performance standards against which the product has been tested. This information will assist Federal agencies in determining whether or not a qualifying biobased product overlaps with EPA-designated re-refined lubricating oils and which product should be afforded the preference in purchasing.

NOTE TO PARAGRAPH (d): Biobased gear lubricant products within this designated item can compete with similar gear lubricant products with recycled content. Under the Resource Conservation and Recovery Act of 1976, section 6002, the U.S. Environmental Protection Agency designated re-refined lubricating oils containing recovered materials as items for which Federal agencies must give preference in their purchasing programs. The designation can be found in the Comprehensive Procurement Guideline, 40 CFR 247.11.

[74 FR 55093, Oct. 27, 2009]

### § 2902.48 General purpose household cleaners.

(a) *Definition.* Products designed to clean multiple common household surfaces. This designated item does not include products that are formulated for use as disinfectants. Task-specific cleaning products, such as spot and stain removers, upholstery cleaners, bathroom cleaners, glass cleaners, etc., are not included in this item.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 39 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased general purpose household cleaners. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased general purpose household cleaners.

[74 FR 55093, Oct. 27, 2009]

### § 2902.49 Industrial cleaners.

(a) *Definition.* Products used to remove contaminants, such as adhesives, inks, paint, dirt, soil, and grease, from parts, products, tools, machinery, equipment, vessels, floors, walls, and other production-related work areas. The cleaning products within this item are usually solvents, but may take other forms. They may be used in either straight solution or diluted with water in pressure washers, or in hand wiping applications in industrial or manufacturing settings, such as inside vessels. Task-specific cleaners used in industrial settings, such as parts wash solutions, are not included in this definition.

(b) *Minimum biobased content.* The preferred procurement product must have a minimum biobased content of at least 41 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date.* No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased industrial cleaners. By that date, Federal agencies that have the responsibility for drafting or

reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased industrial cleaners.

[74 FR 55093, Oct. 27, 2009]

### § 2902.50 Multipurpose cleaners.

(a) *Definition*. Products used to clean dirt, grease, and grime from a variety of items in both industrial and domestic settings. This designated item does not include products that are formulated for use as disinfectants.

(b) *Minimum biobased content*. The preferred procurement product must have a minimum biobased content of at least 56 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date*. No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased multipurpose cleaners. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased multipurpose cleaners.

[74 FR 55093, Oct. 27, 2009]

### § 2902.51 Parts wash solutions.

(a) *Definition*. Products that are designed to clean parts in manual or automatic cleaning systems. Such systems include, but are not limited to, soak vats and tanks, cabinet washers, and ultrasonic cleaners.

(b) *Minimum biobased content*. The preferred procurement product must have a minimum biobased content of at least 65 percent, which shall be based on the amount of qualifying biobased carbon in the product as a percent of the weight (mass) of the total organic carbon in the finished product.

(c) *Preference compliance date*. No later than October 27, 2010, procuring agencies, in accordance with this part, will give a procurement preference for qualifying biobased parts wash solutions. By that date, Federal agencies that have the responsibility for drafting or reviewing specifications for items to be procured shall ensure that the relevant specifications require the use of biobased parts wash solutions.

[74 FR 55093, Oct. 27, 2009]

# PART 2903—BIODIESEL FUEL EDUCATION PROGRAM

## Subpart A—General Information

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AUTHORITY: 7 U.S.C. 8104; 5 U.S.C. 301.

SOURCE: 68 FR 56139, Sept. 30, 2003, unless otherwise noted.

audio, equal prominence must be given the ''estimated city mpg'' and/or the ''estimated highway mpg'' figure(s);[8]

(2) The source of the non-EPA test is clearly and conspicuously identified;

(3) The driving conditions and variables simulated by the test which differ from those used to measure the ''estimated city mpg'' and/or the ''estimated highway mpg,'' and which result in a change in fuel economy, are clearly and conspicuously disclosed.[9] Such conditions and variables may include, but are not limited to, road or dynamometer test, average speed, range of speed, hot or cold start, and temperature; and

(4) The advertisement clearly and conspicuously discloses any distinctions in ''vehicle configuration'' and other equipment affecting mileage performance (e.g., design or equipment differences which distinguish subconfigurations as defined by EPA) between the automobiles tested in the non-EPA test and the EPA tests.

[60 FR 56231, Nov. 8, 1995]

# PART 260—GUIDES FOR THE USE OF ENVIRONMENTAL MARKETING CLAIMS

Sec.
260.1 Statement of purpose.
260.2 Scope of guides.
260.3 Structure of the guides.
260.4 Review procedure.
260.5 Interpretation and substantiation of environmental marketing claims.
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260.7 Environmental marketing claims.
260.8 Environmental assessment.

AUTHORITY: 15 U.S.C. 41–58.

SOURCE: 61 FR 53316, Oct. 11, 1996, unless otherwise noted.

## § 260.1 Statement of purpose.

The guides in this part represent administrative interpretations of laws administered by the Federal Trade Commission for the guidance of the public in conducting its affairs in conformity with legal requirements. These guides specifically address the application of Section 5 of the FTC Act to environmental advertising and marketing practices. They provide the basis for voluntary compliance with such laws by members of industry. Conduct inconsistent with the positions articulated in these guides may result in corrective action by the Commission under Section 5 if, after investigation, the Commission has reason to believe that the behavior falls within the scope of conduct declared unlawful by the statute.

## § 260.2 Scope of guides.

(a) These guides apply to environmental claims included in labeling, advertising, promotional materials and all other forms of marketing, whether asserted directly or by implication, through words, symbols, emblems, logos, depictions, product brand names, or through any other means, including marketing through digital or electronic means, such as the Internet or electronic mail. The guides apply to any claim about the environmental attributes of a product, package or service in connection with the sale, offering for sale, or marketing of such product, package or service for personal, family or household use, or for commercial, institutional or industrial use.

(b) Because the guides are not legislative rules under Section 18 of the FTC Act, they are not themselves enforceable regulations, nor do they have the force and effect of law. The guides themselves do not preempt regulation of other federal agencies or of state and

[8] The Commission will regard the following as constituting equal prominence. For radio and television when any other estimate is used in the audio: The estimated city and/or highway mpg must be stated, either before or after each disclosure of such other estimate at least as audibly as such other estimate.

[9] For dynamometer tests any difference between the EPA and non-EPA tests must be disclosed. For in-use tests, the Commission realizes that it is impossible to duplicate the EPA test conditions, and that in-use tests may be designed to simulate a particular driving situation. It must be clear from the context of the advertisement what driving situation is being simulated (e.g., cold weather driving, highway driving, heavy load conditions). Furthermore, any driving or vehicle condition must be disclosed if it is significantly different from that which an appreciable number of consumers (whose driving condition is being simulated) would expect to encounter.

local bodies governing the use of environmental marketing claims. Compliance with federal, state or local law and regulations concerning such claims, however, will not necessarily preclude Commission law enforcement action under Section 5.

[63 FR 24248, May 1, 1998]

### § 260.3 Structure of the guides.

The guides are composed of general principles and specific guidance on the use of environmental claims. These general principles and specific guidance are followed by examples that generally address a single deception concern. A given claim may raise issues that are addressed under more than one example and in more than one section of the guides. In many of the examples, one or more options are presented for qualifying a claim. These options are intended to provide a ''safe harbor'' for marketers who want certainty about how to make environmental claims. They do not represent the only permissible approaches to qualifying a claim. The examples do not illustrate all possible acceptable claims or disclosures that would be permissible under Section 5. In addition, some of the illustrative disclosures may be appropriate for use on labels but not in print or broadcast advertisements and vice versa. In some instances, the guides indicate within the example in what context or contexts a particular type of disclosure should be considered.

### § 260.4 Review procedure.

The Commission will review the guides as part of its general program of reviewing all industry guides on an ongoing basis. Parties may petition the Commission to alter or amend these guides in light of substantial new evidence regarding consumer interpretation of a claim or regarding substantiation of a claim. Following review of such a petition, the Commission will take such action as it deems appropriate.

### § 260.5 Interpretation and substantiation of environmental marketing claims.

Section 5 of the FTC Act makes unlawful deceptive acts and practices in or affecting commerce. The Commission's criteria for determining whether an express or implied claim has been made are enunciated in the Commission's Policy Statement on Deception.[1] In addition, any party making an express or implied claim that presents an objective assertion about the environmental attribute of a product, package or service must, at the time the claim is made, possess and rely upon a reasonable basis substantiating the claim. A reasonable basis consists of competent and reliable evidence. In the context of environmental marketing claims, such substantiation will often require competent and reliable scientific evidence, defined as tests, analyses, research, studies or other evidence based on the expertise of professionals in the relevant area, conducted and evaluated in an objective manner by persons qualified to do so, using procedures generally accepted in the profession to yield accurate and reliable results. Further guidance on the reasonable basis standard is set forth in the Commission's 1983 Policy Statement on the Advertising Substantiation Doctrine. 49 FR 30999 (1984); *appended to Thompson Medical Co.*, 104 F.T.C. 648 (1984). The Commission has also taken action in a number of cases involving alleged deceptive or unsubstantiated environmental advertising claims. A current list of environmental marketing cases and/or copies of individual cases can be obtained by calling the FTC Consumer Response Center at (202) 326–2222.

[63 FR 24248, May 1, 1998]

### § 260.6 General principles.

The following general principles apply to all environmental marketing claims, including, but not limited to, those described in § 260.7. In addition, § 260.7 contains specific guidance applicable to certain environmental marketing claims. Claims should comport with all relevant provisions of these

[1] *Cliffdale Associates, Inc.*, 103 F.T.C. 110, at 176, 176 n.7, n.8, Appendix, *reprinting* letter dated Oct. 14, 1983, from the Commission to The Honorable John D. Dingell, Chairman, Committee on Energy and Commerce, U.S. House of Representatives (1984) (''Deception Statement'').

guides, not simply the provision that seems most directly applicable.

(a) *Qualifications and disclosures.* The Commission traditionally has held that in order to be effective, any qualifications or disclosures such as those described in these guides should be sufficiently clear, prominent and understandable to prevent deception. Clarity of language, relative type size and proximity to the claim being qualified, and an absence of contrary claims that could undercut effectiveness, will maximize the likelihood that the qualifications and disclosures are appropriately clear and prominent.

(b) *Distinction between benefits of product, package and service.* An environmental marketing claim should be presented in a way that makes clear whether the environmental attribute or benefit being asserted refers to the product, the product's packaging, a service or to a portion or component of the product, package or service. In general, if the environmental attribute or benefit applies to all but minor, incidental components of a product or package, the claim need not be qualified to identify that fact. There may be exceptions to this general principle. For example, if an unqualified ''recyclable'' claim is made and the presence of the incidental component significantly limits the ability to recycle the product, then the claim would be deceptive.

*Example 1:* A box of aluminum foil is labeled with the claim ''recyclable,'' without further elaboration. Unless the type of product, surrounding language, or other context of the phrase establishes whether the claim refers to the foil or the box, the claim is deceptive if any part of either the box or the foil, other than minor, incidental components, cannot be recycled.

*Example 2:* A soft drink bottle is labeled ''recycled.'' The bottle is made entirely from recycled materials, but the bottle cap is not. Because reasonable consumers are likely to consider the bottle cap to be a minor, incidental component of the package, the claim is not deceptive. Similarly, it would not be deceptive to label a shopping bag ''recycled'' where the bag is made entirely of recycled material but the easily detachable handle, an incidental component, is not.

(c) *Overstatement of environmental attribute:* An environmental marketing claim should not be presented in a manner that overstates the environmental attribute or benefit, expressly or by implication. Marketers should avoid implications of significant environmental benefits if the benefit is in fact negligible.

*Example 1:* A package is labeled, ''50% more recycled content than before.'' The manufacturer increased the recycled content of its package from 2 percent recycled material to 3 percent recycled material. Although the claim is technically true, it is likely to convey the false impression that the advertiser has increased significantly the use of recycled material.

*Example 2:* A trash bag is labeled ''recyclable'' without qualification. Because trash bags will ordinarily not be separated out from other trash at the landfill or incinerator for recycling, they are highly unlikely to be used again for any purpose. Even if the bag is technically capable of being recycled, the claim is deceptive since it asserts an environmental benefit where no significant or meaningful benefit exists.

*Example 3:* A paper grocery sack is labeled ''reusable.'' The sack can be brought back to the store and reused for carrying groceries but will fall apart after two or three reuses, on average. Because reasonable consumers are unlikely to assume that a paper grocery sack is durable, the unqualified claim does not overstate the environmental benefit conveyed to consumers. The claim is not deceptive and does not need to be qualified to indicate the limited reuse of the sack.

*Example 4:* A package of paper coffee filters is labeled ''These filters were made with a chlorine-free bleaching process.'' The filters are bleached with a process that releases into the environment a reduced, but still significant, amount of the same harmful byproducts associated with chlorine bleaching. The claim is likely to overstate the product's benefits because it is likely to be interpreted by consumers to mean that the product's manufacture does not cause any of the environmental risks posed by chlorine bleaching. A claim, however, that the filters were ''bleached with a process that substantially reduces, but does not eliminate, harmful substances associated with chlorine bleaching'' would not, if substantiated, overstate the product's benefits and is unlikely to be deceptive.

(d) *Comparative claims:* Environmental marketing claims that include a comparative statement should be presented in a manner that makes the basis for the comparison sufficiently clear to avoid consumer deception. In addition, the advertiser should be able to substantiate the comparison.

*Example 1:* An advertiser notes that its shampoo bottle contains ''20% more recycled content.'' The claim in its context is ambiguous. Depending on contextual factors, it could be a comparison either to the advertiser's immediately preceding product or to a competitor's product. The advertiser should clarify the claim to make the basis for comparison clear, for example, by saying ''20% more recycled content than our previous package.'' Otherwise, the advertiser should be prepared to substantiate whatever comparison is conveyed to reasonable consumers.

*Example 2:* An advertiser claims that ''our plastic diaper liner has the most recycled content.'' The advertised diaper does have more recycled content, calculated as a percentage of weight, than any other on the market, although it is still well under 100% recycled. Provided the recycled content and the comparative difference between the product and those of competitors are significant and provided the specific comparison can be substantiated, the claim is not deceptive.

*Example 3:* An ad claims that the advertiser's packaging creates ''less waste than the leading national brand.'' The advertiser's source reduction was implemented sometime ago and is supported by a calculation comparing the relative solid waste contributions of the two packages. The advertiser should be able to substantiate that the comparison remains accurate.

[61 FR 53316, Oct. 11, 1996, as amended at 63 FR 24248, May 1, 1998]

### § 260.7 Environmental marketing claims.

Guidance about the use of environmental marketing claims is set forth in this section. Each guide is followed by several examples that illustrate, but do not provide an exhaustive list of, claims that do and do not comport with the guides. In each case, the general principles set forth in § 260.6 should also be followed.[2]

(a) *General environmental benefit claims.* It is deceptive to misrepresent, directly or by implication, that a product, package or service offers a general environmental benefit. Unqualified general claims of environmental benefit are difficult to interpret, and depending on their context, may convey a wide range of meanings to consumers. In many cases, such claims may convey that the product, package or service has specific and far-reaching environmental benefits. As explained in the Commission's Advertising Substantiation Statement, every express and material implied claim that the general assertion conveys to reasonable consumers about an objective quality, feature or attribute of a product or service must be substantiated. Unless this substantiation duty can be met, broad environmental claims should either be avoided or qualified, as necessary, to prevent deception about the specific nature of the environmental benefit being asserted.

*Example 1:* A brand name like ''Eco-Safe'' would be deceptive if, in the context of the product so named, it leads consumers to believe that the product has environmental benefits which cannot be substantiated by the manufacturer. The claim would not be deceptive if ''Eco-Safe'' were followed by clear and prominent qualifying language limiting the safety representation to a particular product attribute for which it could be substantiated, and provided that no other deceptive implications were created by the context.

*Example 2:* A product wrapper is printed with the claim ''Environmentally Friendly.'' Textual comments on the wrapper explain that the wrapper is ''Environmentally Friendly because it was not chlorine bleached, a process that has been shown to create harmful substances.'' The wrapper was, in fact, not bleached with chlorine. However, the production of the wrapper now creates and releases to the environment significant quantities of other harmful substances. Since consumers are likely to interpret the ''Environmentally Friendly'' claim, in combination with the textual explanation, to mean that no significant harmful substances are currently released to the environment, the ''Environmentally Friendly'' claim would be deceptive.

*Example 3:* A pump spray product is labeled ''environmentally safe.'' Most of the product's active ingredients consist of volatile organic compounds (VOCs) that may cause smog by contributing to ground-level ozone formation. The claim is deceptive because, absent further qualification, it is likely to convey to consumers that use of the product will not result in air pollution or other harm to the environment.

*Example 4:* A lawn care pesticide is advertised as ''essentially non-toxic'' and ''practically non-toxic.'' Consumers would likely interpret these claims in the context of such a product as applying not only to human

[2] These guides do not currently address claims based on a ''lifecycle'' theory of environmental benefit. The Commission lacks sufficient information on which to base guidance on such claims.

health effects but also to the product's environmental effects. Since the claims would likely convey to consumers that the product does not pose any risk to humans or the environment, if the pesticide in fact poses a significant risk to humans or environment, the claims would be deceptive.

*Example 5:* A product label contains an environmental seal, either in the form of a globe icon, or a globe icon with only the text ''Earth Smart'' around it. Either label is likely to convey to consumers that the product is environmentally superior to other products. If the manufacturer cannot substantiate this broad claim, the claim would be deceptive. The claims would not be deceptive if they were accompanied by clear and prominent qualifying language limiting the environmental superiority representation to the particular product attribute or attributes for which they could be substantiated, provided that no other deceptive implications were created by the context.

*Example 6:* A product is advertised as ''environmentally preferable.'' This claim is likely to convey to consumers that this product is environmentally superior to other products. If the manufacturer cannot substantiate this broad claim, the claim would be deceptive. The claim would not be deceptive if it were accompanied by clear and prominent qualifying language limiting the environmental superiority representation to the particular product attribute or attributes for which it could be substantiated, provided that no other deceptive implications were created by the context.

(b) *Degradable/biodegradable/photodegradable:* It is deceptive to misrepresent, directly or by implication, that a product or package is degradable, biodegradable or photodegradable. An unqualified claim that a product or package is degradable, biodegradable or photodegradable should be substantiated by competent and reliable scientific evidence that the entire product or package will completely break down and return to nature, i.e., decompose into elements found in nature within a reasonably short period of time after customary disposal. Claims of degradability, biodegradability or photodegradability should be qualified to the extent necessary to avoid consumer deception about:

(1) The product or package's ability to degrade in the environment where it is customarily disposed; and

(2) The rate and extent of degradation.

*Example 1:* A trash bag is marketed as ''degradable,'' with no qualification or other disclosure. The marketer relies on soil burial tests to show that the product will decompose in the presence of water and oxygen. The trash bags are customarily disposed of in incineration facilities or at sanitary landfills that are managed in a way that inhibits degradation by minimizing moisture and oxygen. Degradation will be irrelevant for those trash bags that are incinerated and, for those disposed of in landfills, the marketer does not possess adequate substantiation that the bags will degrade in a reasonably short period of time in a landfill. The claim is therefore deceptive.

*Example 2:* A commercial agricultural plastic mulch film is advertised as ''Photodegradable'' and qualified with the phrase, ''Will break down into small pieces if left uncovered in sunlight.'' The claim is supported by competent and reliable scientific evidence that the product will break down in a reasonably short period of time after being exposed to sunlight and into sufficiently small pieces to become part of the soil. The qualified claim is not deceptive. Because the claim is qualified to indicate the limited extent of breakdown, the advertiser need not meet the elements for an unqualified photodegradable claim, i.e., that the product will not only break down, but also will decompose into elements found in nature.

*Example 3:* A soap or shampoo product is advertised as ''biodegradable,'' with no qualification or other disclosure. The manufacturer has competent and reliable scientific evidence demonstrating that the product, which is customarily disposed of in sewage systems, will break down and decompose into elements found in nature in a short period of time. The claim is not deceptive.

*Example 4:* A plastic six-pack ring carrier is marked with a small diamond. Many state laws require that plastic six-pack ring carriers degrade if littered, and several state laws also require that the carriers be marked with a small diamond symbol to indicate that they meet performance standards for degradability. The use of the diamond, by itself, does not constitute a claim of degradability.[3]

(c) *Compostable.* (1) It is deceptive to misrepresent, directly or by implication, that a product or package is compostable. A claim that a product or

[3]The guides' treatment of unqualified degradable claims is intended to help prevent consumer deception and is not intended to establish performance standards for laws intended to ensure the degradability of products when littered.

package is compostable should be substantiated by competent and reliable scientific evidence that all the materials in the product or package will break down into, or otherwise become part of, usable compost (e.g., soil-conditioning material, mulch) in a safe and timely manner in an appropriate composting program or facility, or in a home compost pile or device. Claims of compostability should be qualified to the extent necessary to avoid consumer deception. An unqualified claim may be deceptive if:

(i) The package cannot be safely composted in a home compost pile or device; or

(ii) The claim misleads consumers about the environmental benefit provided when the product is disposed of in a landfill.

(2) A claim that a product is compostable in a municipal or institutional composting facility may need to be qualified to the extent necessary to avoid deception about the limited availability of such composting facilities.

*Example 1:* A manufacturer indicates that its unbleached coffee filter is compostable. The unqualified claim is not deceptive provided the manufacturer can substantiate that the filter can be converted safely to usable compost in a timely manner in a home compost pile or device. If this is the case, it is not relevant that no local municipal or institutional composting facilities exist.

*Example 2:* A lawn and leaf bag is labeled as ''Compostable in California Municipal Yard Trimmings Composting Facilities.'' The bag contains toxic ingredients that are released into the compost material as the bag breaks down. The claim is deceptive if the presence of these toxic ingredients prevents the compost from being usable.

*Example 3:* A manufacturer makes an unqualified claim that its package is compostable. Although municipal or institutional composting facilities exist where the product is sold, the package will not break down into usable compost in a home compost pile or device. To avoid deception, the manufacturer should disclose that the package is not suitable for home composting.

*Example 4:* A nationally marketed lawn and leaf bag is labeled ''compostable.'' Also printed on the bag is a disclosure that the bag is not designed for use in home compost piles. The bags are in fact composted in yard trimmings composting programs in many communities around the country, but such programs are not available to a substantial majority of consumers or communities where the bag is sold. The claim is deceptive because reasonable consumers living in areas not served by yard trimmings programs may understand the reference to mean that composting facilities accepting the bags are available in their area. To avoid deception, the claim should be qualified to indicate the limited availability of such programs, for example, by stating, ''Appropriate facilities may not exist in your area.'' Other examples of adequate qualification of the claim include providing the approximate percentage of communities or the population for which such programs are available.

*Example 5:* A manufacturer sells a disposable diaper that bears the legend, ''This diaper can be composted where solid waste composting facilities exist. There are currently [X number of] solid waste composting facilities across the country.'' The claim is not deceptive, assuming that composting facilities are available as claimed and the manufacturer can substantiate that the diaper can be converted safely to usable compost in solid waste composting facilities.

*Example 6:* A manufacturer markets yard trimmings bags only to consumers residing in particular geographic areas served by county yard trimmings composting programs. The bags meet specifications for these programs and are labeled, ''Compostable Yard Trimmings Bag for County Composting Programs.'' The claim is not deceptive. Because the bags are compostable where they are sold, no qualification is required to indicate the limited availability of composting facilities.

(d) *Recyclable.* It is deceptive to misrepresent, directly or by implication, that a product or package is recyclable. A product or package should not be marketed as recyclable unless it can be collected, separated or otherwise recovered from the solid waste stream for reuse, or in the manufacture or assembly of another package or product, through an established recycling program. Unqualified claims of recyclability for a product or package may be made if the entire product or package, excluding minor incidental components, is recyclable. For products or packages that are made of both recyclable and non-recyclable components, the recyclable claim should be adequately qualified to avoid consumer deception about which portions or components of the product or package are recyclable. Claims of recyclability should be qualified to the extent necessary to avoid consumer deception about any limited availability of recycling programs and collection sites. If

an incidental component significantly limits the ability to recycle a product or package, a claim of recyclability would be deceptive. A product or package that is made from recyclable material, but, because of its shape, size or some other attribute, is not accepted in recycling programs for such material, should not be marketed as recyclable.[4]

*Example 1:* A packaged product is labeled with an unqualified claim, ''recyclable.'' It is unclear from the type of product and other context whether the claim refers to the product or its package. The unqualified claim is likely to convey to reasonable consumers that all of both the product and its packaging that remain after normal use of the product, except for minor, incidental components, can be recycled. Unless each such message can be substantiated, the claim should be qualified to indicate what portions are recyclable.

*Example 2:* A nationally marketed 8 oz. plastic cottage-cheese container displays the Society of the Plastics Industry (SPI) code (which consists of a design of arrows in a triangular shape containing a number and abbreviation identifying the component plastic resin) on the front label of the container, in close proximity to the product name and logo. The manufacturer's conspicuous use of the SPI code in this manner constitutes a recyclability claim. Unless recycling facilities for this container are available to a substantial majority of consumers or communities, the claim should be qualified to disclose the limited availability of recycling programs for the container. If the SPI code, without more, had been placed in an inconspicuous location on the container (e.g., embedded in the bottom of the container) it would not constitute a claim of recyclability.

*Example 3:* A container can be burned in incinerator facilities to produce heat and power. It cannot, however, be recycled into another product or package. Any claim that the container is recyclable would be deceptive.

*Example 4:* A nationally marketed bottle bears the unqualified statement that it is ''recyclable.'' Collection sites for recycling the material in question are not available to a substantial majority of consumers or communities, although collection sites are established in a significant percentage of communities or available to a significant percentage of the population. The unqualified claim is deceptive because, unless evidence shows otherwise, reasonable consumers living in communities not served by programs may conclude that recycling programs for the material are available in their area. To avoid deception, the claim should be qualified to indicate the limited availability of programs, for example, by stating ''This bottle may not be recyclable in your area,'' or ''Recycling programs for this bottle may not exist in your area.'' Other examples of adequate qualifications of the claim include providing the approximate percentage of communities or the population to whom programs are available.

*Example 5:* A paperboard package is marketed nationally and labeled, ''Recyclable where facilities exist.'' Recycling programs for this package are available in a significant percentage of communities or to a significant percentage of the population, but are not available to a substantial majority of consumers. The claim is deceptive because, unless evidence shows otherwise, reasonable consumers living in communities not served by programs that recycle paperboard packaging may understand this phrase to mean that such programs are available in their area. To avoid deception, the claim should be further qualified to indicate the limited availability of programs, for example, by using any of the approaches set forth in Example 4 above.

*Example 6:* A foam polystyrene cup is marketed as follows: ''Recyclable in the few communities with facilities for foam polystyrene cups.'' Collection sites for recycling the cup have been established in a half-dozen major metropolitan areas. This disclosure illustrates one approach to qualifying a claim adequately to prevent deception about the limited availability of recycling programs where collection facilities are not established in a significant percentage of communities or available to a significant percentage of the population. Other examples of adequate qualification of the claim include providing the number of communities with programs, or the percentage of communities or the population to which programs are available.

*Example 7:* A label claims that the package ''includes some recyclable material.'' The package is composed of four layers of different materials, bonded together. One of the layers is made from the recyclable material,

[4] The Mercury-Containing and Rechargeable Battery Management Act establishes uniform national labeling requirements regarding certain types of nickel-cadmium rechargeable and small lead-acid rechargeable batteries to aid in battery collection and recycling. The Battery Act requires, in general, that the batteries must be labeled with the three-chasing-arrows symbol or a comparable recycling symbol, and the statement ''Battery Must Be Recycled Or Disposed Of Properly.'' 42 U.S.C. 14322(b). Batteries labeled in accordance with this federal statute are deemed to be in compliance with these guides.

but the others are not. While programs for recycling this type of material are available to a substantial majority of consumers, only a few of those programs have the capability to separate the recyclable layer from the non-recyclable layers. Even though it is technologically possible to separate the layers, the claim is not adequately qualified to avoid consumer deception. An appropriately qualified claim would be, ''includes material recyclable in the few communities that collect multi-layer products.'' Other examples of adequate qualification of the claim include providing the number of communities with programs, or the percentage of communities or the population to which programs are available.

*Example 8:* A product is marketed as having a ''recyclable'' container. The product is distributed and advertised only in Missouri. Collection sites for recycling the container are available to a substantial majority of Missouri residents, but are not yet available nationally. Because programs are generally available where the product is marketed, the unqualified claim does not deceive consumers about the limited availability of recycling programs.

*Example 9:* A manufacturer of one-time use photographic cameras, with dealers in a substantial majority of communities, collects those cameras through all of its dealers. After the exposed film is removed for processing, the manufacturer reconditions the cameras for resale and labels them as follows: ''Recyclable through our dealership network.'' This claim is not deceptive, even though the cameras are not recyclable through conventional curbside or drop off recycling programs.

*Example 10:* A manufacturer of toner cartridges for laser printers has established a recycling program to recover its cartridges exclusively through its nationwide dealership network. The company advertises its cartridges nationally as ''Recyclable. Contact your local dealer for details.'' The company's dealers participating in the recovery program are located in a significant number—but not a substantial majority—of communities. The ''recyclable'' claim is deceptive unless it contains one of the qualifiers set forth in Example 4. If participating dealers are located in only a few communities, the claim should be qualified as indicated in Example 6.

*Example 11:* An aluminum beverage can bears the statement ''Please Recycle.'' This statement is likely to convey to consumers that the package is recyclable. Because collection sites for recycling aluminum beverage cans are available to a substantial majority of consumers or communities, the claim does not need to be qualified to indicate the limited availability of recycling programs.

(e) *Recycled content.* (1) A recycled content claim may be made only for materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer). To the extent the source of recycled content includes pre-consumer material, the manufacturer or advertiser must have substantiation for concluding that the pre-consumer material would otherwise have entered the solid waste stream. In asserting a recycled content claim, distinctions may be made between pre-consumer and post-consumer materials. Where such distinctions are asserted, any express or implied claim about the specific pre-consumer or post-consumer content of a product or package must be substantiated.

(2) It is deceptive to misrepresent, directly or by implication, that a product or package is made of recycled material, which includes recycled raw material, as well as used,[5] reconditioned and remanufactured components. Unqualified claims of recycled content may be made if the entire product or package, excluding minor, incidental components, is made from recycled material. For products or packages that are only partially made of recycled material, a recycled claim should be adequately qualified to avoid consumer deception about the amount, by weight, of recycled content in the finished product or package. Additionally, for products that contain used, reconditioned or remanufactured components, a recycled claim should be adequately qualified to avoid consumer deception about the nature of such components. No such qualification would be necessary in cases where it would be clear to consumers from the context that a product's recycled content consists of used, reconditioned or remanufactured components.

*Example 1:* A manufacturer routinely collects spilled raw material and scraps left over from the original manufacturing process. After a minimal amount of reprocessing, the manufacturer combines the spills and scraps with virgin material for use in further

[5] The term ''used'' refers to parts that are not new and that have not undergone any type of remanufacturing and/or reconditioning.

production of the same product. A claim that the product contains recycled material is deceptive since the spills and scraps to which the claim refers are normally reused by industry within the original manufacturing process, and would not normally have entered the waste stream.

*Example 2:* A manufacturer purchases material from a firm that collects discarded material from other manufacturers and resells it. All of the material was diverted from the solid waste stream and is not normally reused by industry within the original manufacturing process. The manufacturer includes the weight of this material in its calculations of the recycled content of its products. A claim of recycled content based on this calculation is not deceptive because, absent the purchase and reuse of this material, it would have entered the waste stream.

*Example 3:* A greeting card is composed 30% by fiber weight of paper collected from consumers after use of a paper product, and 20% by fiber weight of paper that was generated after completion of the paper-making process, diverted from the solid waste stream, and otherwise would not normally have been reused in the original manufacturing process. The marketer of the card may claim either that the product ''contains 50% recycled fiber,'' or may identify the specific pre-consumer and/or post-consumer content by stating, for example, that the product ''contains 50% total recycled fiber, including 30% post-consumer.''

*Example 4:* A paperboard package with 20% recycled fiber by weight is labeled as containing ''20% recycled fiber.'' Some of the recycled content was composed of material collected from consumers after use of the original product. The rest was composed of overrun newspaper stock never sold to customers. The claim is not deceptive.

*Example 5:* A product in a multi-component package, such as a paperboard box in a shrink-wrapped plastic cover, indicates that it has recycled packaging. The paperboard box is made entirely of recycled material, but the plastic cover is not. The claim is deceptive since, without qualification, it suggests that both components are recycled. A claim limited to the paperboard box would not be deceptive.

*Example 6:* A package is made from layers of foil, plastic, and paper laminated together, although the layers are indistinguishable to consumers. The label claims that ''one of the three layers of this package is made of recycled plastic.'' The plastic layer is made entirely of recycled plastic. The claim is not deceptive provided the recycled plastic layer constitutes a significant component of the entire package.

*Example 7:* A paper product is labeled as containing ''100% recycled fiber.'' The claim is not deceptive if the advertiser can substantiate the conclusion that 100% by weight of the fiber in the finished product is recycled.

*Example 8:* A frozen dinner is marketed in a package composed of a cardboard box over a plastic tray. The package bears the legend, ''package made from 30% recycled material.'' Each packaging component amounts to one-half the weight of the total package. The box is 20% recycled content by weight, while the plastic tray is 40% recycled content by weight. The claim is not deceptive, since the average amount of recycled material is 30%.

*Example 9:* A paper greeting card is labeled as containing 50% recycled fiber. The seller purchases paper stock from several sources and the amount of recycled fiber in the stock provided by each source varies. Because the 50% figure is based on the annual weighted average of recycled material purchased from the sources after accounting for fiber loss during the production process, the claim is permissible.

*Example 10:* A packaged food product is labeled with a three-chasing-arrows symbol without any further explanatory text as to its meaning. By itself, the symbol is likely to convey that the packaging is both ''recyclable'' and is made entirely from recycled material. Unless both messages can be substantiated, the claim should be qualified as to whether it refers to the package's recyclability and/or its recycled content. If a ''recyclable'' claim is being made, the label may need to disclose the limited availability of recycling programs for the package. If a recycled content claim is being made and the packaging is not made entirely from recycled material, the label should disclose the percentage of recycled content.

*Example 11:* A laser printer toner cartridge containing 25% recycled raw materials and 40% reconditioned parts is labeled ''65% recycled content; 40% from reconditioned parts.'' This claim is not deceptive.

*Example 12:* A store sells both new and used sporting goods. One of the items for sale in the store is a baseball helmet that, although used, is no different in appearance than a brand new item. The helmet bears an unqualified ''Recycled'' label. This claim is deceptive because, unless evidence shows otherwise, consumers could reasonably believe that the helmet is made of recycled raw materials, when it is in fact a used item. An acceptable claim would bear a disclosure clearly stating that the helmet is used.

*Example 13:* A manufacturer of home electronics labels its video cassette recorders (''VCRs'') as ''40% recycled.'' In fact, each VCR contains 40% reconditioned parts. This claim is deceptive because consumers are unlikely to know that the VCR's recycled content consists of reconditioned parts.

*Example 14:* A dealer of used automotive parts recovers a serviceable engine from a vehicle that has been totaled. Without repairing, rebuilding, remanufacturing, or in

any way altering the engine or its components, the dealer attaches a ''Recycled'' label to the engine, and offers it for resale in its used auto parts store. In this situation, an unqualified recycled content claim is not likely to be deceptive because consumers are likely to understand that the engine is used and has not undergone any rebuilding.

*Example 15:* An automobile parts dealer purchases a transmission that has been recovered from a junked vehicle. Eighty-five percent by weight of the transmission was rebuilt and 15% constitutes new materials. After rebuilding[6] the transmission in accordance with industry practices, the dealer packages it for resale in a box labeled ''Rebuilt Transmission,'' or ''Rebuilt Transmission (85% recycled content from rebuilt parts),'' or ''Recycled Transmission (85% recycled content from rebuilt parts).'' These claims are not likely to be deceptive.

(f) *Source reduction:* It is deceptive to misrepresent, directly or by implication, that a product or package has been reduced or is lower in weight, volume or toxicity. Source reduction claims should be qualified to the extent necessary to avoid consumer deception about the amount of the source reduction and about the basis for any comparison asserted.

*Example 1:* An ad claims that solid waste created by disposal of the advertiser's packaging is ''now 10% less than our previous package.'' The claim is not deceptive if the advertiser has substantiation that shows that disposal of the current package contributes 10% less waste by weight or volume to the solid waste stream when compared with the immediately preceding version of the package.

*Example 2:* An advertiser notes that disposal of its product generates ''10% less waste.'' The claim is ambiguous. Depending on contextual factors, it could be a comparison either to the immediately preceding product or to a competitor's product. The ''10% less waste'' reference is deceptive unless the seller clarifies which comparison is intended and substantiates that comparison, or substantiates both possible interpretations of the claim.

[6] The term ''rebuilding'' means that the dealer dismantled and reconstructed the transmission as necessary, cleaned all of its internal and external parts and eliminated rust and corrosion, restored all impaired, defective or substantially worn parts to a sound condition (or replaced them if necessary), and performed any operations required to put the transmission in sound working condition.

(g) *Refillable:* It is deceptive to misrepresent, directly or by implication, that a package is refillable. An unqualified refillable claim should not be asserted unless a system is provided for the collection and return of the package for refill or the later refill of the package by consumers with product subsequently sold in another package. A package should not be marketed with an unqualified refillable claim, if it is up to the consumer to find new ways to refill the package.

*Example 1:* A container is labeled ''refillable x times.'' The manufacturer has the capability to refill returned containers and can show that the container will withstand being refilled at least x times. The manufacturer, however, has established no collection program. The unqualified claim is deceptive because there is no means for collection and return of the container to the manufacturer for refill.

*Example 2:* A bottle of fabric softener states that it is in a ''handy refillable container.'' The manufacturer also sells a large-sized container that indicates that the consumer is expected to use it to refill the smaller container. The manufacturer sells the large-sized container in the same market areas where it sells the small container. The claim is not deceptive because there is a means for consumers to refill the smaller container from larger containers of the same product.

(h) *Ozone safe and ozone friendly:* It is deceptive to misrepresent, directly or by implication, that a product is safe for or ''friendly'' to the ozone layer or the atmosphere. For example, a claim that a product does not harm the ozone layer is deceptive if the product contains an ozone-depleting substance.

*Example 1:* A product is labeled ''ozone friendly.'' The claim is deceptive if the product contains any ozone-depleting substance, including those substances listed as Class I or Class II chemicals in Title VI of the Clean Air Act Amendments of 1990, Public Law 101–549, and others subsequently designated by EPA as ozone-depleting substances. Chemicals that have been listed or designated as Class I are chlorofluorocarbons (CFCs), halons, carbon tetrachloride, 1,1,1-trichloroethane, methyl bromide and hydrobromofluorocarbons (HBFCs). Chemicals that have been listed as Class II are hydrochlorofluorocarbons (HCFCs).

*Example 2:* An aerosol air freshener is labeled ''ozone friendly.'' Some of the product's ingredients are volatile organic compounds (VOCs) that may cause smog by contributing to ground-level ozone formation.

The claim is likely to convey to consumers that the product is safe for the atmosphere as a whole, and is therefore, deceptive.

*Example 3:* The seller of an aerosol product makes an unqualified claim that its product ''Contains no CFCs.'' Although the product does not contain CFCs, it does contain HCFC–22, another ozone depleting ingredient. Because the claim ''Contains no CFCs'' may imply to reasonable consumers that the product does not harm the ozone layer, the claim is deceptive.

*Example 4:* A product is labeled ''This product is 95% less damaging to the ozone layer than past formulations that contained CFCs.'' The manufacturer has substituted HCFCs for CFC–12, and can substantiate that this substitution will result in 95% less ozone depletion. The qualified comparative claim is not likely to be deceptive.

[57 FR 36363, Aug. 13, 1992, as amended at 61 FR 53318, Oct. 11, 1996; 61 FR 67109, Dec. 19, 1996; 63 FR 24248, May 1, 1998]

### § 260.8 Environmental assessment.

(a) *National Environmental Policy Act.* In accordance with section 1.83 of the FTC's Procedures and Rules of Practice[7] and section 1501.3 of the Council on Environmental Quality's regulations for implementing the procedural provisions of National Environmental Policy Act, 42 U.S.C. 4321 et seq. (1969),[8] the Commission prepared an environmental assessment when the guides were issued in July 1992 for purposes of providing sufficient evidence and analysis to determine whether issuing the Guides for the Use of Environmental Marketing Claims required preparation of an environmental impact statement or a finding of no significant impact. After careful study, the Commission concluded that issuance of the Guides would not have a significant impact on the environment and that any such impact ''would be so uncertain that environmental analysis would be based on speculation.''[9] The Commission concluded that an environmental impact statement was therefore not required. The Commission based its conclusions on the findings in the environmental assessment that issuance of the guides would have no quantifiable environmental impact because the guides are voluntary in nature, do not preempt inconsistent state laws, are based on the FTC's deception policy, and, when used in conjunction with the Commission's policy of case-by-case enforcement, are intended to aid compliance with section 5(a) of the FTC Act as that Act applies to environmental marketing claims.

(b) The Commission has concluded that the modifications to the guides in this part will not have a significant effect on the environment, for the same reasons that the issuance of the original guides in 1992 and the modifications to the guides in 1996 were deemed not to have a significant effect on the environment. Therefore, the Commission concludes that an environmental impact statement is not required in conjunction with the issuance of the 1998 modifications to the Guides for the Use of Environmental Marketing Claims.

[63 FR 24251, May 1, 1998, as amended at 63 FR 24248, May 1, 1998]

[7] 16 CFR 1.83.

[8] 40 CFR 1501.3.

[9] 16 CFR 1.83(a).

of a currently effective determination by the Assistant Secretary of Labor that such program is compatible with the requirements of this section. Such determinations currently are in effect only in the States of Alabama, Arkansas, California, Kansas, Kentucky, Florida, Mississippi, New Hampshire, New York, North Carolina, Texas, Tennessee, Oregon, Idaho, Arizona, Colorado, Louisiana, Nebraska, Washington, Maryland, North Dakota, South Carolina, and Georgia.

[39 FR 23502, June 27, 1974, as amended at 43 FR 49746, Oct. 24, 1978; 43 FR 51759, Nov. 7, 1978; 49 FR 18295, Apr. 30, 1984; 58 FR 35309, June 30, 1993. Redesignated at 61 FR 31430, June 20, 1996]

### § 1910.1200 Hazard communication.

(a) *Purpose.* (1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets and employee training.

(2) This occupational safety and health standard is intended to address comprehensively the issue of evaluating the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, and to preempt any legal requirements of a state, or political subdivision of a state, pertaining to this subject. Evaluating the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, may include, for example, but is not limited to, provisions for: developing and maintaining a written hazard communication program for the workplace, including lists of hazardous chemicals present; labeling of containers of chemicals in the workplace, as well as of containers of chemicals being shipped to other workplaces; preparation and distribution of material safety data sheets to employees and downstream employers; and development and implementation of employee training programs regarding hazards of chemicals and protective measures. Under section 18 of the Act, no state or political subdivision of a state may adopt or enforce, through any court or agency, any requirement relating to the issue addressed by this Federal standard, except pursuant to a Federally-approved state plan.

(b) *Scope and application.* (1) This section requires chemical manufacturers or importers to assess the hazards of chemicals which they produce or import, and all employers to provide information to their employees about the hazardous chemicals to which they are exposed, by means of a hazard communication program, labels and other forms of warning, material safety data sheets, and information and training. In addition, this section requires distributors to transmit the required information to employers. (Employers who do not produce or import chemicals need only focus on those parts of this rule that deal with establishing a workplace program and communicating information to their workers. Appendix E of this section is a general guide for such employers to help them determine their compliance obligations under the rule.)

(2) This section applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.

(3) This section applies to laboratories only as follows:

(i) Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

(ii) Employers shall maintain any material safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible during each workshift to laboratory employees when they are in their work areas;

(iii) Employers shall ensure that laboratory employees are provided information and training in accordance with paragraph (h) of this section, except for the location and availability of the written hazard communication program under paragraph (h)(2)(iii) of this section; and,

(iv) Laboratory employers that ship hazardous chemicals are considered to be either a chemical manufacturer or a distributor under this rule, and thus must ensure that any containers of hazardous chemicals leaving the laboratory are labeled in accordance with paragraph (f)(1) of this section, and that a material safety data sheet is provided to distributors and other employers in accordance with paragraphs (g)(6) and (g)(7) of this section.

(4) In work operations where employees only handle chemicals in sealed containers which are not opened under normal conditions of use (such as are found in marine cargo handling, warehousing, or retail sales), this section applies to these operations only as follows:

(i) Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

(ii) Employers shall maintain copies of any material safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals, shall obtain a material safety data sheet as soon as possible for sealed containers of hazardous chemicals received without a material safety data sheet if an employee requests the material safety data sheet, and shall ensure that the material safety data sheets are readily accessible during each work shift to employees when they are in their work area(s); and,

(iii) Employers shall ensure that employees are provided with information and training in accordance with paragraph (h) of this section (except for the location and availability of the written hazard communication program under paragraph (h)(2)(iii) of this section), to the extent necessary to protect them in the event of a spill or leak of a hazardous chemical from a sealed container.

(5) This section does not require labeling of the following chemicals:

(i) Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 *et seq.*), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

(ii) Any chemical substance or mixture as such terms are defined in the Toxic Substances Control Act (15 U.S.C. 2601 *et seq.*), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency.

(iii) Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device or product, including materials intended for use as ingredients in such products (*e.g.* flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 *et seq.*) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. 151 *et seq.*), and regulations issued under those Acts, when they are subject to the labeling requirements under those Acts by either the Food and Drug Administration or the Department of Agriculture;

(iv) Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 *et seq.*) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol, Tobacco, and Firearms;

(v) Any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 *et seq.*) and Federal Hazardous Substances Act (15 U.S.C. 1261 *et seq.*) respectively, when subject to a consumer product safety standard or labeling requirement of those Acts, or regulations issued under those Acts by the Consumer Product Safety Commission; and,

(vi) Agricultural or vegetable seed treated with pesticides and labeled in accordance with the Federal Seed Act (7 U.S.C. 1551 *et seq.*) and the labeling regulations issued under that Act by the Department of Agriculture.

(6) This section does not apply to: (i) Any hazardous waste as such term is defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 *et seq.*), when subject to regulations issued under that Act by the Environmental Protection Agency;

(ii) Any hazardous substance as such term is defined by the Comprehensive Environmental Response, Compensation and Liability ACT (CERCLA) (42 U.S.C. 9601 *et seq.*) when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with Environmental Protection Agency regulations;

(iii) Tobacco or tobacco products;

(iv) Wood or wood products, including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility (wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut, generating dust, are not exempted);

(v) Articles (as that term is defined in paragraph (c) of this section);

(vi) Food or alcoholic beverages which are sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, or drinking place), and foods intended for personal consumption by employees while in the workplace;

(vii) Any drug, as that term is defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 *et seq.*), when it is in solid, final form for direct administration to the patient (*e.g.*, tablets or pills); drugs which are packaged by the chemical manufacturer for sale to consumers in a retail establishment (*e.g.*, over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (*e.g.*, first aid supplies);

(viii) Cosmetics which are packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the workplace;

(ix) Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 *et seq.*) and Federal Hazardous Substances Act (15 U.S.C. 1261 *et seq.*) respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended;

(x) Nuisance particulates where the chemical manufacturer or importer can establish that they do not pose any physical or health hazard covered under this section;

(xi) Ionizing and nonionizing radiation; and,

(xii) Biological hazards.

(c) *Definitions*. *Article* means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, *e.g.*, minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

*Assistant Secretary* means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

*Chemical* means any element, chemical compound or mixture of elements and/or compounds.

*Chemical manufacturer* means an employer with a workplace where chemical(s) are produced for use or distribution.

*Chemical name* means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.

*Combustible liquid* means any liquid having a flashpoint at or above 100 °F (37.8 °C), but below 200 °F (93.3 °C), except any mixture having components with flashpoints of 200 °F (93.3 °C), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

*Commercial account* means an arrangement whereby a retail distributor sells hazardous chemicals to an employer, generally in large quantities

over time and/or at costs that are below the regular retail price.

*Common name* means any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

*Compressed gas* means:

(i) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 °F (21.1 °C); or

(ii) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 °F (54.4 °C) regardless of the pressure at 70 °F (21.1 °C); or

(iii) A liquid having a vapor pressure exceeding 40 psi at 100 °F (37.8 °C) as determined by ASTM D–323–72.

*Container* means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

*Designated representative* means any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

*Director* means the Director, National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

*Distributor* means a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

*Employee* means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

*Employer* means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

*Explosive* means a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

*Exposure* or *exposed* means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (*e.g.* accidental or possible) exposure. ''Subjected'' in terms of health hazards includes any route of entry (*e.g.* inhalation, ingestion, skin contact or absorption.)

*Flammable* means a chemical that falls into one of the following categories:

(i) *Aerosol, flammable* means an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening;

(ii) *Gas, flammable* means: (A) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or

(B) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit;

(iii) *Liquid, flammable* means any liquid having a flashpoint below 100 °F (37.8 °C), except any mixture having components with flashpoints of 100 °F (37.8 °C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.

(iv) *Solid, flammable* means a solid, other than a blasting agent or explosive as defined in § 1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

*Flashpoint* means the minimum temperature at which a liquid gives off a

vapor in sufficient concentration to ignite when tested as follows:

(i) Tagliabue Closed Tester (See American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24–1979 (ASTM D 56–79)) for liquids with a viscosity of less than 45 Saybolt Universal Seconds (SUS) at 100 °F (37.8 °C), that do not contain suspended solids and do not have a tendency to form a surface film under test; or

(ii) Pensky-Martens Closed Tester (see American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7–1979 (ASTM D 93–79)) for liquids with a viscosity equal to or greater than 45 SUS at 100 °F (37.8 °C), or that contain suspended solids, or that have a tendency to form a surface film under test; or

(iii) Setaflash Closed Tester (see American National Standard Method of Test for Flash Point by Setaflash Closed Tester (ASTM D 3278–78)).

Organic peroxides, which undergo autoaccelerating thermal decomposition, are excluded from any of the flashpoint determination methods specified above.

*Foreseeable emergency* means any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

*Hazardous chemical* means any chemical which is a physical hazard or a health hazard.

*Hazard warning* means any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s). (See the definitions for ''physical hazard'' and ''health hazard'' to determine the hazards which must be covered.)

*Health hazard* means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term ''health hazard'' includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes. Appendix A provides further definitions and explanations of the scope of health hazards covered by this section, and Appendix B describes the criteria to be used to determine whether or not a chemical is to be considered hazardous for purposes of this standard.

*Identity* means any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label and the MSDS.

*Immediate use* means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

*Importer* means the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

*Label* means any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

*Material safety data sheet (MSDS)* means written or printed material concerning a hazardous chemical which is prepared in accordance with paragraph (g) of this section.

*Mixture* means any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

*Organic peroxide* means an organic compound that contains the bivalent -O-O-structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

*Oxidizer* means a chemical other than a blasting agent or explosive as defined

in §1910.109(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

*Physical hazard* means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

*Produce* means to manufacture, process, formulate, blend, extract, generate, emit, or repackage.

*Pyrophoric* means a chemical that will ignite spontaneously in air at a temperature of 130 °F (54.4 °C) or below.

*Responsible party* means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

*Specific chemical identity* means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

*Trade secret* means any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it. Appendix D sets out the criteria to be used in evaluating trade secrets.

*Unstable (reactive)* means a chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.

*Use* means to package, handle, react, emit, extract, generate as a byproduct, or transfer.

*Water-reactive* means a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

*Work area* means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

*Workplace* means an establishment, job site, or project, at one geographical location containing one or more work areas.

(d) *Hazard determination.* (1) Chemical manufacturers and importers shall evaluate chemicals produced in their workplaces or imported by them to determine if they are hazardous. Employers are not required to evaluate chemicals unless they choose not to rely on the evaluation performed by the chemical manufacturer or importer for the chemical to satisfy this requirement.

(2) Chemical manufacturers, importers or employers evaluating chemicals shall identify and consider the available scientific evidence concerning such hazards. For health hazards, evidence which is statistically significant and which is based on at least one positive study conducted in accordance with established scientific principles is considered to be sufficient to establish a hazardous effect if the results of the study meet the definitions of health hazards in this section. Appendix A shall be consulted for the scope of health hazards covered, and Appendix B shall be consulted for the criteria to be followed with respect to the completeness of the evaluation, and the data to be reported.

(3) The chemical manufacturer, importer or employer evaluating chemicals shall treat the following sources as establishing that the chemicals listed in them are hazardous:

(i) 29 CFR part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA); or,

(ii) *Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment*, American Conference of Governmental Industrial Hygienists (ACGIH) (latest edition). The chemical manufacturer, importer, or employer is still responsible for evaluating the hazards associated with the chemicals in these source lists in accordance with the requirements of this standard.

(4) Chemical manufacturers, importers and employers evaluating chemicals shall treat the following sources as establishing that a chemical is a carcinogen or potential carcinogen for hazard communication purposes:

(i) National Toxicology Program (NTP), *Annual Report on Carcinogens* (latest edition);

(ii) International Agency for Research on Cancer (IARC) *Monographs* (latest editions); or

(iii) 29 CFR part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration.

NOTE: The *Registry of Toxic Effects of Chemical Substances* published by the National Institute for Occupational Safety and Health indicates whether a chemical has been found by NTP or IARC to be a potential carcinogen.

(5) The chemical manufacturer, importer or employer shall determine the hazards of mixtures of chemicals as follows:

(i) If a mixture has been tested as a whole to determine its hazards, the results of such testing shall be used to determine whether the mixture is hazardous;

(ii) If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture, except that the mixture shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1 percent or greater which is considered to be a carcinogen under paragraph (d)(4) of this section;

(iii) If a mixture has not been tested as a whole to determine whether the mixture is a physical hazard, the chemical manufacturer, importer, or employer may use whatever scientifically valid data is available to evaluate the physical hazard potential of the mixture; and,

(iv) If the chemical manufacturer, importer, or employer has evidence to indicate that a component present in the mixture in concentrations of less than one percent (or in the case of carcinogens, less than 0.1 percent) could be released in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees in those concentrations, the mixture shall be assumed to present the same hazard.

(6) Chemical manufacturers, importers, or employers evaluating chemicals shall describe in writing the procedures they use to determine the hazards of the chemical they evaluate. The written procedures are to be made available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director. The written description may be incorporated into the written hazard communication program required under paragraph (e) of this section.

(e) *Written hazard communication program.* (1) Employers shall develop, implement, and maintain at each workplace, a written hazard communication program which at least describes how the criteria specified in paragraphs (f), (g), and (h) of this section for labels and other forms of warning, material safety data sheets, and employee information and training will be met, and which also includes the following:

(i) A list of the hazardous chemicals known to be present using an identity that is referenced on the appropriate material safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas); and,

(ii) The methods the employer will use to inform employees of the hazards of non-routine tasks (for example, the cleaning of reactor vessels), and the hazards associated with chemicals contained in unlabeled pipes in their work areas.

(2) *Multi-employer workplaces.* Employers who produce, use, or store hazardous chemicals at a workplace in such a way that the employees of other employer(s) may be exposed (for example, employees of a construction contractor working on-site) shall additionally ensure that the hazard communication programs developed and implemented under this paragraph (e) include the following:

(i) The methods the employer will use to provide the other employer(s) on-site access to material safety data sheets for each hazardous chemical the other employer(s)' employees may be exposed to while working;

(ii) The methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies; and,

(iii) The methods the employer will use to inform the other employer(s) of the labeling system used in the workplace.

(3) The employer may rely on an existing hazard communication program to comply with these requirements, provided that it meets the criteria established in this paragraph (e).

(4) The employer shall make the written hazard communication program available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director, in accordance with the requirements of 29 CFR 1910.20 (e).

(5) Where employees must travel between workplaces during a workshift, *i.e.*, their work is carried out at more than one geographical location, the written hazard communication program may be kept at the primary workplace facility.

(f) *Labels and other forms of warning.* (1) The chemical manufacturer, importer, or distributor shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged or marked with the following information:

(i) Identity of the hazardous chemical(s);

(ii) Appropriate hazard warnings; and

(iii) Name and address of the chemical manufacturer, importer, or other responsible party.

(2)(i) For solid metal (such as a steel beam or a metal casting), solid wood, or plastic items that are not exempted as articles due to their downstream use, or shipments of whole grain, the required label may be transmitted to the customer at the time of the initial shipment, and need not be included with subsequent shipments to the same employer unless the information on the label changes;

(ii) The label may be transmitted with the initial shipment itself, or with the material safety data sheet that is to be provided prior to or at the time of the first shipment; and,

(iii) This exception to requiring labels on every container of hazardous chemicals is only for the solid material itself, and does not apply to hazardous chemicals used in conjunction with, or known to be present with, the material and to which employees handling the items in transit may be exposed (for example, cutting fluids or pesticides in grains).

(3) Chemical manufacturers, importers, or distributors shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged, or marked in accordance with this section in a manner which does not conflict with the requirements of the Hazardous Materials Transportation Act (49 U.S.C. 1801 *et seq.*) and regulations issued under that Act by the Department of Transportation.

(4) If the hazardous chemical is regulated by OSHA in a substance-specific health standard, the chemical manufacturer, importer, distributor or employer shall ensure that the labels or other forms of warning used are in accordance with the requirements of that standard.

(5) Except as provided in paragraphs (f)(6) and (f)(7) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with the following information:

(i) Identity of the hazardous chemical(s) contained therein; and,

(ii) Appropriate hazard warnings, or alternatively, words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

(6) The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by paragraph (f)(5) of this section to be on a label. The written materials shall be readily accessible to the employees in their work area throughout each work shift.

(7) The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are

intended only for the immediate use of the employee who performs the transfer. For purposes of this section, drugs which are dispensed by a pharmacy to a health care provider for direct administration to a patient are exempted from labeling.

(8) The employer shall not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

(9) The employer shall ensure that labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

(10) The chemical manufacturer, importer, distributor or employer need not affix new labels to comply with this section if existing labels already convey the required information.

(11) Chemical manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a chemical shall revise the labels for the chemical within three months of becoming aware of the new information. Labels on containers of hazardous chemicals shipped after that time shall contain the new information. If the chemical is not currently produced or imported, the chemical manufacturer, importers, distributor, or employer shall add the information to the label before the chemical is shipped or introduced into the workplace again.

(g) *Material safety data sheets.* (1) Chemical manufacturers and importers shall obtain or develop a material safety data sheet for each hazardous chemical they produce or import. Employers shall have a material safety data sheet in the workplace for each hazardous chemical which they use.

(2) Each material safety data sheet shall be in English (although the employer may maintain copies in other languages as well), and shall contain at least the following information:

(i) The identity used on the label, and, except as provided for in paragraph (i) of this section on trade secrets:

(A) If the hazardous chemical is a single substance, its chemical and common name(s);

(B) If the hazardous chemical is a mixture which has been tested as a whole to determine its hazards, the chemical and common name(s) of the ingredients which contribute to these known hazards, and the common name(s) of the mixture itself; or,

(C) If the hazardous chemical is a mixture which has not been tested as a whole:

(*1*) The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise 1% or greater of the composition, except that chemicals identified as carcinogens under paragraph (d) of this section shall be listed if the concentrations are 0.1% or greater; and,

(*2*) The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise less than 1% (0.1% for carcinogens) of the mixture, if there is evidence that the ingredient(s) could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees; and,

(*3*) The chemical and common name(s) of all ingredients which have been determined to present a physical hazard when present in the mixture;

(ii) Physical and chemical characteristics of the hazardous chemical (such as vapor pressure, flash point);

(iii) The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity;

(iv) The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the chemical;

(v) The primary route(s) of entry;

(vi) The OSHA permissible exposure limit, ACGIH Threshold Limit Value, and any other exposure limit used or

recommended by the chemical manufacturer, importer, or employer preparing the material safety data sheet, where available;

(vii) Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Annual Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by OSHA;

(viii) Any generally applicable precautions for safe handling and use which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks;

(ix) Any generally applicable control measures which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, such as appropriate engineering controls, work practices, or personal protective equipment;

(x) Emergency and first aid procedures;

(xi) The date of preparation of the material safety data sheet or the last change to it; and,

(xii) The name, address and telephone number of the chemical manufacturer, importer, employer or other responsible party preparing or distributing the material safety data sheet, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

(3) If no relevant information is found for any given category on the material safety data sheet, the chemical manufacturer, importer or employer preparing the material safety data sheet shall mark it to indicate that no applicable information was found.

(4) Where complex mixtures have similar hazards and contents (i.e. the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture), the chemical manufacturer, importer or employer may prepare one material safety data sheet to apply to all of these similar mixtures.

(5) The chemical manufacturer, importer or employer preparing the material safety data sheet shall ensure that the information recorded accurately reflects the scientific evidence used in making the hazard determination. If the chemical manufacturer, importer or employer preparing the material safety data sheet becomes newly aware of any significant information regarding the hazards of a chemical, or ways to protect against the hazards, this new information shall be added to the material safety data sheet within three months. If the chemical is not currently being produced or imported the chemical manufacturer or importer shall add the information to the material safety data sheet before the chemical is introduced into the workplace again.

(6)(i) Chemical manufacturers or importers shall ensure that distributors and employers are provided an appropriate material safety data sheet with their initial shipment, and with the first shipment after a material safety data sheet is updated;

(ii) The chemical manufacturer or importer shall either provide material safety data sheets with the shipped containers or send them to the distributor or employer prior to or at the time of the shipment;

(iii) If the material safety data sheet is not provided with a shipment that has been labeled as a hazardous chemical, the distributor or employer shall obtain one from the chemical manufacturer or importer as soon as possible; and,

(iv) The chemical manufacturer or importer shall also provide distributors or employers with a material safety data sheet upon request.

(7)(i) Distributors shall ensure that material safety data sheets, and updated information, are provided to other distributors and employers with their initial shipment and with the first shipment after a material safety data sheet is updated;

(ii) The distributor shall either provide material safety data sheets with the shipped containers, or send them to the other distributor or employer prior to or at the time of the shipment;

(iii) Retail distributors selling hazardous chemicals to employers having

a commercial account shall provide a material safety data sheet to such employers upon request, and shall post a sign or otherwise inform them that a material safety data sheet is available;

(iv) Wholesale distributors selling hazardous chemicals to employers over-the-counter may also provide material safety data sheets upon the request of the employer at the time of the over-the-counter purchase, and shall post a sign or otherwise inform such employers that a material safety data sheet is available;

(v) If an employer without a commercial account purchases a hazardous chemical from a retail distributor not required to have material safety data sheets on file (*i.e.*, the retail distributor does not have commercial accounts and does not use the materials), the retail distributor shall provide the employer, upon request, with the name, address, and telephone number of the chemical manufacturer, importer, or distributor from which a material safety data sheet can be obtained;

(vi) Wholesale distributors shall also provide material safety data sheets to employers or other distributors upon request; and,

(vii) Chemical manufacturers, importers, and distributors need not provide material safety data sheets to retail distributors that have informed them that the retail distributor does not sell the product to commercial accounts or open the sealed container to use it in their own workplaces.

(8) The employer shall maintain in the workplace copies of the required material safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access, microfiche, and other alternatives to maintaining paper copies of the material safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)

(9) Where employees must travel between workplaces during a workshift, *i.e.*, their work is carried out at more than one geographical location, the material safety data sheets may be kept at the primary workplace facility. In this situation, the employer shall ensure that employees can immediately obtain the required information in an emergency.

(10) Material safety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a work area where it may be more appropriate to address the hazards of a process rather than individual hazardous chemicals. However, the employer shall ensure that in all cases the required information is provided for each hazardous chemical, and is readily accessible during each work shift to employees when they are in in their work area(s).

(11) Material safety data sheets shall also be made readily available, upon request, to designated representatives and to the Assistant Secretary, in accordance with the requirements of 29 CFR 1910.20(e). The Director shall also be given access to material safety data sheets in the same manner.

(h) *Employee information and training*. (1) Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (*e.g.*, flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and material safety data sheets.

(2) *Information*. Employees shall be informed of:

(i) The requirements of this section;

(ii) Any operations in their work area where hazardous chemicals are present; and,

(iii) The location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and material safety data sheets required by this section.

(3) *Training*. Employee training shall include at least:

(i) Methods and observations that may be used to detect the presence or release of a hazardous chemical in the

work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);

(ii) The physical and health hazards of the chemicals in the work area;

(iii) The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and,

(iv) The details of the hazard communication program developed by the employer, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

(i) *Trade secrets.* (1) The chemical manufacturer, importer, or employer may withhold the specific chemical identity, including the chemical name and other specific identification of a hazardous chemical, from the material safety data sheet, provided that:

(i) The claim that the information withheld is a trade secret can be supported;

(ii) Information contained in the material safety data sheet concerning the properties and effects of the hazardous chemical is disclosed;

(iii) The material safety data sheet indicates that the specific chemical identity is being withheld as a trade secret; and,

(iv) The specific chemical identity is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of this paragraph.

(2) Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity of a hazardous chemical is necessary for emergency or first-aid treatment, the chemical manufacturer, importer, or employer shall immediately disclose the specific chemical identity of a trade secret chemical to that treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement. The chemical manufacturer, importer, or employer may require a written statement of need and confidentiality agreement, in accordance with the provisions of paragraphs (i) (3) and (4) of this section, as soon as circumstances permit.

(3) In non-emergency situations, a chemical manufacturer, importer, or employer shall, upon request, disclose a specific chemical identity, otherwise permitted to be withheld under paragraph (i)(1) of this section, to a health professional (i.e. physician, industrial hygienist, toxicologist, epidemiologist, or occupational health nurse) providing medical or other occupational health services to exposed employee(s), and to employees or designated representatives, if:

(i) The request is in writing;

(ii) The request describes with reasonable detail one or more of the following occupational health needs for the information:

(A) To assess the hazards of the chemicals to which employees will be exposed;

(B) To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels;

(C) To conduct pre-assignment or periodic medical surveillance of exposed employees;

(D) To provide medical treatment to exposed employees;

(E) To select or assess appropriate personal protective equipment for exposed employees;

(F) To design or assess engineering controls or other protective measures for exposed employees; and,

(G) To conduct studies to determine the health effects of exposure.

(iii) The request explains in detail why the disclosure of the specific chemical identity is essential and that, in lieu thereof, the disclosure of the following information to the health professional, employee, or designated representative, would not satisfy the purposes described in paragraph (i)(3)(ii) of this section:

(A) The properties and effects of the chemical;

(B) Measures for controlling workers' exposure to the chemical;

(C) Methods of monitoring and analyzing worker exposure to the chemical; and,

(D) Methods of diagnosing and treating harmful exposures to the chemical;

(iv) The request includes a description of the procedures to be used to maintain the confidentiality of the disclosed information; and,

(v) The health professional, and the employer or contractor of the services of the health professional (i.e. downstream employer, labor organization, or individual employee), employee, or designated representative, agree in a written confidentiality agreement that the health professional, employee, or designated representative, will not use the trade secret information for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to OSHA, as provided in paragraph (i)(6) of this section, except as authorized by the terms of the agreement or by the chemical manufacturer, importer, or employer.

(4) The confidentiality agreement authorized by paragraph (i)(3)(iv) of this section:

(i) May restrict the use of the information to the health purposes indicated in the written statement of need;

(ii) May provide for appropriate legal remedies in the event of a breach of the agreement, including stipulation of a reasonable pre-estimate of likely damages; and,

(iii) May not include requirements for the posting of a penalty bond.

(5) Nothing in this standard is meant to preclude the parties from pursuing non-contractual remedies to the extent permitted by law.

(6) If the health professional, employee, or designated representative receiving the trade secret information decides that there is a need to disclose it to OSHA, the chemical manufacturer, importer, or employer who provided the information shall be informed by the health professional, employee, or designated representative prior to, or at the same time as, such disclosure.

(7) If the chemical manufacturer, importer, or employer denies a written request for disclosure of a specific chemical identity, the denial must:

(i) Be provided to the health professional, employee, or designated representative, within thirty days of the request;

(ii) Be in writing;

(iii) Include evidence to support the claim that the specific chemical identity is a trade secret;

(iv) State the specific reasons why the request is being denied; and,

(v) Explain in detail how alternative information may satisfy the specific medical or occupational health need without revealing the specific chemical identity.

(8) The health professional, employee, or designated representative whose request for information is denied under paragraph (i)(3) of this section may refer the request and the written denial of the request to OSHA for consideration.

(9) When a health professional, employee, or designated representative refers the denial to OSHA under paragraph (i)(8) of this section, OSHA shall consider the evidence to determine if:

(i) The chemical manufacturer, importer, or employer has supported the claim that the specific chemical identity is a trade secret;

(ii) The health professional, employee, or designated representative has supported the claim that there is a medical or occupational health need for the information; and,

(iii) The health professional, employee or designated representative has demonstrated adequate means to protect the confidentiality.

(10)(i) If OSHA determines that the specific chemical identity requested under paragraph (i)(3) of this section is not a *bona fide* trade secret, or that it is a trade secret, but the requesting health professional, employee, or designated representative has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement, and has shown adequate means to protect the confidentiality of the information, the chemical manufacturer, importer, or employer will be subject to citation by OSHA.

(ii) If a chemical manufacturer, importer, or employer demonstrates to OSHA that the execution of a confidentiality agreement would not provide

sufficient protection against the potential harm from the unauthorized disclosure of a trade secret specific chemical identity, the Assistant Secretary may issue such orders or impose such additional limitations or conditions upon the disclosure of the requested chemical information as may be appropriate to assure that the occupational health services are provided without an undue risk of harm to the chemical manufacturer, importer, or employer.

(11) If a citation for a failure to release specific chemical identity information is contested by the chemical manufacturer, importer, or employer, the matter will be adjudicated before the Occupational Safety and Health Review Commission in accordance with the Act's enforcement scheme and the applicable Commission rules of procedure. In accordance with the Commission rules, when a chemical manufacturer, importer, or employer continues to withhold the information during the contest, the Administrative Law Judge may review the citation and supporting documentation *in camera* or issue appropriate orders to protect the confidentiality of such matters.

(12) Notwithstanding the existence of a trade secret claim, a chemical manufacturer, importer, or employer shall, upon request, disclose to the Assistant Secretary any information which this section requires the chemical manufacturer, importer, or employer to make available. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the Assistant Secretary so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

(13) Nothing in this paragraph shall be construed as requiring the disclosure under any circumstances of process or percentage of mixture information which is a trade secret.

(j) *Effective dates.* Chemical manufacturers, importers, distributors, and employers shall be in compliance with all provisions of this section by March 11, 1994.

NOTE: The effective date of the clarification that the exemption of wood and wood products from the Hazard Communication standard in paragraph (b)(6)(iv) only applies to wood and wood products including lumber which will not be processed, where the manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility, and that the exemption does not apply to wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut generating dust has been stayed from March 11, 1994 to August 11, 1994.

## APPENDIX A TO § 1910.1200—HEALTH HAZARD DEFINITIONS (MANDATORY)

Although safety hazards related to the physical characteristics of a chemical can be objectively defined in terms of testing requirements (e.g. flammability), health hazard definitions are less precise and more subjective. Health hazards may cause measurable changes in the body—such as decreased pulmonary function. These changes are generally indicated by the occurrence of signs and symptoms in the exposed employees—such as shortness of breath, a non-measurable, subjective feeling. Employees exposed to such hazards must be apprised of both the change in body function and the signs and symptoms that may occur to signal that change.

The determination of occupational health hazards is complicated by the fact that many of the effects or signs and symptoms occur commonly in non-occupationally exposed populations, so that effects of exposure are difficult to separate from normally occurring illnesses. Occasionally, a substance causes an effect that is rarely seen in the population at large, such as angiosarcomas caused by vinyl chloride exposure, thus making it easier to ascertain that the occupational exposure was the primary causative factor. More often, however, the effects are common, such as lung cancer. The situation is further complicated by the fact that most chemicals have not been adequately tested to determine their health hazard potential, and data do not exist to substantiate these effects.

There have been many attempts to categorize effects and to define them in various ways. Generally, the terms ''acute'' and ''chronic'' are used to delineate between effects on the basis of severity or duration. ''Acute'' effects usually occur rapidly as a result of short-term exposures, and are of short duration. ''Chronic'' effects generally occur as a result of long-term exposure, and are of long duration.

The acute effects referred to most frequently are those defined by the American National Standards Institute (ANSI) standard for Precautionary Labeling of Hazardous Industrial Chemicals (Z129.1–1988)—irritation, corrosivity, sensitization and lethal dose. Although these are important health

effects, they do not adequately cover the considerable range of acute effects which may occur as a result of occupational exposure, such as, for example, narcosis.

Similarly, the term chronic effect is often used to cover only carcinogenicity, teratogenicity, and mutagenicity. These effects are obviously a concern in the workplace, but again, do not adequately cover the area of chronic effects, excluding, for example, blood dyscrasias (such as anemia), chronic bronchitis and liver atrophy.

The goal of defining precisely, in measurable terms, every possible health effect that may occur in the workplace as a result of chemical exposures cannot realistically be accomplished. This does not negate the need for employees to be informed of such effects and protected from them. Appendix B, which is also mandatory, outlines the principles and procedures of hazard assessment.

For purposes of this section, any chemicals which meet any of the following definitions, as determined by the criteria set forth in Appendix B are health hazards. However, this is not intended to be an exclusive categorization scheme. If there are available scientific data that involve other animal species or test methods, they must also be evaluated to determine the applicability of the HCS.7

1. *Carcinogen:* A chemical is considered to be a carcinogen if:

(a) It has been evaluated by the International Agency for Research on Cancer (IARC), and found to be a carcinogen or potential carcinogen; or

(b) It is listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or,

(c) It is regulated by OSHA as a carcinogen.

2. *Corrosive:* A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a chemical is considered to be corrosive if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in appendix A to 49 CFR part 173, it destroys or changes irreversibly the structure of the tissue at the site of contact following an exposure period of four hours. This term shall not refer to action on inanimate surfaces.

3. *Highly toxic:* A chemical falling within any of the following categories:

(a) A chemical that has a median lethal dose ($LD_{50}$) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

(b) A chemical that has a median lethal dose ($LD_{50}$) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.

(c) A chemical that has a median lethal concentration ($LC_{50}$) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

4. *Irritant:* A chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A chemical is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of 16 CFR 1500.41 for four hours exposure or by other appropriate techniques, it results in an empirical score of five or more. A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques.

5. *Sensitizer:* A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

6. *Toxic.* A chemical falling within any of the following categories:

(a) A chemical that has a median lethal dose ($LD_{50}$) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

(b) A chemical that has a median lethal dose ($LD_{50}$) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.

(c) A chemical that has a median lethal concentration ($LC_{50}$) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than two milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

7. *Target organ effects.*

The following is a target organ categorization of effects which may occur, including examples of signs and symptoms and chemicals which have been found to cause such effects. These examples are presented to illustrate the range and diversity of effects and hazards found in the workplace, and the broad scope employers must consider in this area, but are not intended to be all-inclusive.

a. Hepatotoxins: Chemicals which produce liver damage3

Signs & Symptoms: Jaundice; liver enlargement

Chemicals: Carbon tetrachloride; nitrosamines

b. Nephrotoxins: Chemicals which produce kidney damage
Signs & Symptoms: Edema; proteinuria
Chemicals: Halogenated hydrocarbons; uranium

c. Neurotoxins: Chemicals which produce their primary toxic effects on the nervous system
Signs & Symptoms: Narcosis; behavioral changes; decrease in motor functions
Chemicals: Mercury; carbon disulfide

d. Agents which act on the blood or hematopoietic system: Decrease hemoglobin function; deprive the body tissues of oxygen
Signs & Symptoms: Cyanosis; loss of consciousness
Chemicals: Carbon monoxide; cyanides

e. Agents which damage the lung: Chemicals which irritate or damage pulmonary tissue
Signs & Symptoms: Cough; tightness in chest; shortness of breath
Chemicals: Silica; asbestos

f. Reproductive toxins: Chemicals which affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis)
Signs & Symptoms: Birth defects; sterility
Chemicals: Lead; DBCP

g. Cutaneous hazards: Chemicals which affect the dermal layer of the body
Signs & Symptoms: Defatting of the skin; rashes; irritation
Chemicals: Ketones; chlorinated compounds

h. Eye hazards: Chemicals which affect the eye or visual capacity
Signs & Symptoms: Conjunctivitis; corneal damage
Chemicals: Organic solvents; acids

## APPENDIX B TO § 1910.1200—HAZARD DETERMINATION (MANDATORY)

The quality of a hazard communication program is largely dependent upon the adequacy and accuracy of the hazard determination. The hazard determination requirement of this standard is performance-oriented. Chemical manufacturers, importers, and employers evaluating chemicals are not required to follow any specific methods for determining hazards, but they must be able to demonstrate that they have adequately ascertained the hazards of the chemicals produced or imported in accordance with the criteria set forth in this Appendix.

Hazard evaluation is a process which relies heavily on the professional judgment of the evaluator, particularly in the area of chronic hazards. The performance-orientation of the hazard determination does not diminish the duty of the chemical manufacturer, importer or employer to conduct a thorough evaluation, examining all relevant data and producing a scientifically defensible evaluation. For purposes of this standard, the following criteria shall be used in making hazard determinations that meet the requirements of this standard.

1. *Carcinogenicity:* As described in paragraph (d)(4) of this section and Appendix A of this section, a determination by the National Toxicology Program, the International Agency for Research on Cancer, or OSHA that a chemical is a carcinogen or potential carcinogen will be considered conclusive evidence for purposes of this section. In addition, however, all available scientific data on carcinogenicity must be evaluated in accordance with the provisions of this Appendix and the requirements of the rule.

2. *Human data:* Where available, epidemiological studies and case reports of adverse health effects shall be considered in the evaluation.

3. *Animal data:* Human evidence of health effects in exposed populations is generally not available for the majority of chemicals produced or used in the workplace. Therefore, the available results of toxicological testing in animal populations shall be used to predict the health effects that may be experienced by exposed workers. In particular, the definitions of certain acute hazards refer to specific animal testing results (see Appendix A).

4. *Adequacy and reporting of data.* The results of any studies which are designed and conducted according to established scientific principles, and which report statistically significant conclusions regarding the health effects of a chemical, shall be a sufficient basis for a hazard determination and reported on any material safety data sheet. *In vitro* studies alone generally do not form the basis for a definitive finding of hazard under the HCS since they have a positive or negative result rather than a statistically significant finding.

The chemical manufacturer, importer, or employer may also report the results of other scientifically valid studies which tend to refute the findings of hazard.

## APPENDIX C TO § 1910.1200 [RESERVED]

## APPENDIX D TO § 1910.1200—DEFINITION OF ''TRADE SECRET'' (MANDATORY)

The following is a reprint of the *Restatement of Torts* section 757, comment *b* (1939):

*b. Definition of trade secret.* A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. It may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or other device, or a list of customers. It differs from other secret information in a business (see

s759 of the *Restatement of Torts* which is not included in this Appendix) in that it is not simply information as to single or ephemeral events in the conduct of the business, as, for example, the amount or other terms of a secret bid for a contract or the salary of certain employees, or the security investments made or contemplated, or the date fixed for the announcement of a new policy or for bringing out a new model or the like. A trade secret is a process or device for continuous use in the operations of the business. Generally it relates to the production of goods, as, for example, a machine or formula for the production of an article. It may, however, relate to the sale of goods or to other operations in the business, such as a code for determining discounts, rebates or other concessions in a price list or catalogue, or a list of specialized customers, or a method of bookkeeping or other office management.

*Secrecy*. The subject matter of a trade secret must be secret. Matters of public knowledge or of general knowledge in an industry cannot be appropriated by one as his secret. Matters which are completely disclosed by the goods which one markets cannot be his secret. Substantially, a trade secret is known only in the particular business in which it is used. It is not requisite that only the proprietor of the business know it. He may, without losing his protection, communicate it to employees involved in its use. He may likewise communicate it to others pledged to secrecy. Others may also know of it independently, as, for example, when they have discovered the process or formula by independent invention and are keeping it secret. Nevertheless, a substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring the information. An exact definition of a trade secret is not possible. Some factors to be considered in determining whether given information is one's trade secret are: (1) The extent to which the information is known outside of his business; (2) the extent to which it is known by employees and others involved in his business; (3) the extent of measures taken by him to guard the secrecy of the information; (4) the value of the information to him and his competitors; (5) the amount of effort or money expended by him in developing the information; (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.

*Novelty and prior art*. A trade secret may be a device or process which is patentable; but it need not be that. It may be a device or process which is clearly anticipated in the prior art or one which is merely a mechanical improvement that a good mechanic can make. Novelty and invention are not requisite for a trade secret as they are for patentability. These requirements are essential to patentability because a patent protects against unlicensed use of the patented device or process even by one who discovers it properly through independent research. The patent monopoly is a reward to the inventor. But such is not the case with a trade secret. Its protection is not based on a policy of rewarding or otherwise encouraging the development of secret processes or devices. The protection is merely against breach of faith and reprehensible means of learning another's secret. For this limited protection it is not appropriate to require also the kind of novelty and invention which is a requisite of patentability. The nature of the secret is, however, an important factor in determining the kind of relief that is appropriate against one who is subject to liability under the rule stated in this Section. Thus, if the secret consists of a device or process which is a novel invention, one who acquires the secret wrongfully is ordinarily enjoined from further use of it and is required to account for the profits derived from his past use. If, on the other hand, the secret consists of mechanical improvements that a good mechanic can make without resort to the secret, the wrongdoer's liability may be limited to damages, and an injunction against future use of the improvements made with the aid of the secret may be inappropriate.

## APPENDIX E TO § 1910.1200—(ADVISORY)—GUIDELINES FOR EMPLOYER COMPLIANCE

The Hazard Communication Standard (HCS) is based on a simple concept—that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working. They also need to know what protective measures are available to prevent adverse effects from occurring. The HCS is designed to provide employees with the information they need.

Knowledge acquired under the HCS will help employers provide safer workplaces for their employees. When employers have information about the chemicals being used, they can take steps to reduce exposures, substitute less hazardous materials, and establish proper work practices. These efforts will help prevent the occurrence of work-related illnesses and injuries caused by chemicals.

The HCS addresses the issues of evaluating and communicating hazards to workers. Evaluation of chemical hazards involves a number of technical concepts, and is a process that requires the professional judgment of experienced experts. That's why the HCS is designed so that employers who simply use chemicals, rather than produce or import them, are not required to evaluate the hazards of those chemicals. Hazard determination is the responsibility of the producers and importers of the materials. Producers and importers of chemicals are then required to provide the hazard information to employers that purchase their products.

Employers that don't produce or import chemicals need only focus on those parts of the rule that deal with establishing a workplace program and communicating information to their workers. This appendix is a general guide for such employers to help them determine what's required under the rule. It does not supplant or substitute for the regulatory provisions, but rather provides a simplified outline of the steps an average employer would follow to meet those requirements.

*1. Becoming Familiar With The Rule.*

OSHA has provided a simple summary of the HCS in a pamphlet entitled ''Chemical Hazard Communication,'' OSHA Publication Number 3084. Some employers prefer to begin to become familiar with the rule's requirements by reading this pamphlet. A copy may be obtained from your local OSHA Area Office, or by contacting the OSHA Publications Office at (202) 523–9667.

The standard is long, and some parts of it are technical, but the basic concepts are simple. In fact, the requirements reflect what many employers have been doing for years. You may find that you are already largely in compliance with many of the provisions, and will simply have to modify your existing programs somewhat. If you are operating in an OSHA-approved State Plan State, you must comply with the State's requirements, which may be different than those of the Federal rule. Many of the State Plan States had hazard communication or ''right-to-know'' laws prior to promulgation of the Federal rule. Employers in State Plan States should contact their State OSHA offices for more information regarding applicable requirements.

The HCS requires information to be prepared and transmitted regarding all hazardous chemicals. The HCS covers both physical hazards (such as flammability), and health hazards (such as irritation, lung damage, and cancer). Most chemicals used in the workplace have some hazard potential, and thus will be covered by the rule.

One difference between this rule and many others adopted by OSHA is that this one is performance-oriented. That means that you have the flexibility to adapt the rule to the needs of your workplace, rather than having to follow specific, rigid requirements. It also means that you have to exercise more judgment to implement an appropriate and effective program.

The standard's design is simple. Chemical manufacturers and importers must evaluate the hazards of the chemicals they produce or import. Using that information, they must then prepare labels for containers, and more detailed technical bulletins called material safety data sheets (MSDS).

Chemical manufacturers, importers, and distributors of hazardous chemicals are all required to provide the appropriate labels and material safety data sheets to the employers to which they ship the chemicals. The information is to be provided automatically. Every container of hazardous chemicals you receive must be labeled, tagged, or marked with the required information. Your suppliers must also send you a properly completed material safety data sheet (MSDS) at the time of the first shipment of the chemical, and with the next shipment after the MSDS is updated with new and significant information about the hazards.

You can rely on the information received from your suppliers. You have no independent duty to analyze the chemical or evaluate the hazards of it.

Employers that ''use'' hazardous chemicals must have a program to ensure the information is provided to exposed employees. ''Use'' means to package, handle, react, or transfer. This is an intentionally broad scope, and includes any situation where a chemical is present in such a way that employees may be exposed under normal conditions of use or in a foreseeable emergency.

The requirements of the rule that deal specifically with the hazard communication program are found in this section in paragraphs (e), written hazard communication program; (f), labels and other forms of warning; (g), material safety data sheets; and (h), employee information and training. The requirements of these paragraphs should be the focus of your attention. Concentrate on becoming familiar with them, using paragraphs (b), scope and application, and (c), definitions, as references when needed to help explain the provisions.

There are two types of work operations where the coverage of the rule is limited. These are laboratories and operations where chemicals are only handled in sealed containers (*e.g.*, a warehouse). The limited provisions for these workplaces can be found in paragraph (b) of this section, scope and application. Basically, employers having these types of work operations need only keep labels on containers as they are received; maintain material safety data sheets that are received, and give employees access to them; and provide information and training for employees. Employers do not have to have written hazard communication programs and lists of chemicals for these types of operations.

The limited coverage of laboratories and sealed container operations addresses the obligation of an employer to the workers in the operations involved, and does not affect the employer's duties as a distributor of chemicals. For example, a distributor may have warehouse operations where employees would be protected under the limited sealed container provisions. In this situation, requirements for obtaining and maintaining MSDSs are limited to providing access to

those received with containers while the substance is in the workplace, and requesting MSDSs when employees request access for those not received with the containers. However, as a distributor of hazardous chemicals, that employer will still have responsibilities for providing MSDSs to downstream customers at the time of the first shipment and when the MSDS is updated. Therefore, although they may not be required for the employees in the work operation, the distributor may, nevertheless, have to have MSDSs to satisfy other requirements of the rule.

*2. Identify Responsible Staff*

Hazard communication is going to be a continuing program in your facility. Compliance with the HCS is not a ''one shot deal.'' In order to have a successful program, it will be necessary to assign responsibility for both the initial and ongoing activities that have to be undertaken to comply with the rule. In some cases, these activities may already be part of current job assignments. For example, site supervisors are frequently responsible for on-the-job training sessions. Early identification of the responsible employees, and involvement of them in the development of your plan of action, will result in a more effective program design. Evaluation of the effectiveness of your program will also be enhanced by involvement of affected employees.

For any safety and health program, success depends on commitment at every level of the organization. This is particularly true for hazard communication, where success requires a change in behavior. This will only occur if employers understand the program, and are committed to its success, and if employees are motivated by the people presenting the information to them.

*3. Identify Hazardous Chemicals in the Workplace.*

The standard requires a list of hazardous chemicals in the workplace as part of the written hazard communication program. The list will eventually serve as an inventory of everything for which an MSDS must be maintained. At this point, however, preparing the list will help you complete the rest of the program since it will give you some idea of the scope of the program required for compliance in your facility.

The best way to prepare a comprehensive list is to survey the workplace. Purchasing records may also help, and certainly employers should establish procedures to ensure that in the future purchasing procedures result in MSDSs being received before a material is used in the workplace.

The broadest possible perspective should be taken when doing the survey. Sometimes people think of ''chemicals'' as being only liquids in containers. The HCS covers chemicals in all physical forms—liquids, solids, gases, vapors, fumes, and mists—whether they are ''contained'' or not. The hazardous nature of the chemical and the potential for exposure are the factors which determine whether a chemical is covered. If it's not hazardous, it's not covered. If there is no potential for exposure (e.g., the chemical is inextricably bound and cannot be released), the rule does not cover the chemical.

Look around. Identify chemicals in containers, including pipes, but also think about chemicals generated in the work operations. For example, welding fumes, dusts, and exhaust fumes are all sources of chemical exposures. Read labels provided by suppliers for hazard information. Make a list of all chemicals in the workplace that are potentially hazardous. For your own information and planning, you may also want to note on the list the location(s) of the products within the workplace, and an indication of the hazards as found on the label. This will help you as you prepare the rest of your program.

Paragraph (b) of this section, scope and application, includes exemptions for various chemicals or workplace situations. After compiling the complete list of chemicals, you should review paragraph (b) of this section to determine if any of the items can be eliminated from the list because they are exempted materials. For example, food, drugs, and cosmetics brought into the workplace for employee consumption are exempt. So rubbing alcohol in the first aid kit would not be covered.

Once you have compiled as complete a list as possible of the potentially hazardous chemicals in the workplace, the next step is to determine if you have received material safety data sheets for all of them. Check your files against the inventory you have just compiled. If any are missing, contact your supplier and request one. It is a good idea to document these requests, either by copy of a letter or a note regarding telephone conversations. If you have MSDSs for chemicals that are not on your list, figure out why. Maybe you don't use the chemical anymore. Or maybe you missed it in your survey. Some suppliers do provide MSDSs for products that are not hazardous. These do not have to be maintained by you.

You should not allow employees to use any chemicals for which you have not received an MSDS. The MSDS provides information you need to ensure proper protective measures are implemented prior to exposure.

*4. Preparing and Implementing a Hazard Communication Program*

All workplaces where employees are exposed to hazardous chemicals must have a written plan which describes how the standard will be implemented in that facility.

Preparation of a plan is not just a paper exercise—all of the elements must be implemented in the workplace in order to be in compliance with the rule. See paragraph (e) of this section for the specific requirements regarding written hazard communication programs. The only work operations which do not have to comply with the written plan requirements are laboratories and work operations where employees only handle chemicals in sealed containers. See paragraph (b) of this section, scope and application, for the specific requirements for these two types of workplaces.

The plan does not have to be lengthy or complicated. It is intended to be a blueprint for implementation of your program—an assurance that all aspects of the requirements have been addressed.

Many trade associations and other professional groups have provided sample programs and other assistance materials to affected employers. These have been very helpful to many employers since they tend to be tailored to the particular industry involved. You may wish to investigate whether your industry trade groups have developed such materials.

Although such general guidance may be helpful, you must remember that the written program has to reflect what you are doing in your workplace. Therefore, if you use a generic program it must be adapted to address the facility it covers. For example, the written plan must list the chemicals present at the site, indicate who is to be responsible for the various aspects of the program in your facility, and indicate where written materials will be made available to employees.

If OSHA inspects your workplace for compliance with the HCS, the OSHA compliance officer will ask to see your written plan at the outset of the inspection. In general, the following items will be considered in evaluating your program.

The written program must describe how the requirements for labels and other forms of warning, material safety data sheets, and employee information and training, are going to be met in your facility. The following discussion provides the type of information compliance officers will be looking for to decide whether these elements of the hazard communication program have been properly addressed:

*A. Labels and Other Forms of Warning*

In-plant containers of hazardous chemicals must be labeled, tagged, or marked with the identity of the material and appropriate hazard warnings. Chemical manufacturers, importers, and distributors are required to ensure that every container of hazardous chemicals they ship is appropriately labeled with such information and with the name and address of the producer or other responsible party. Employers purchasing chemicals can rely on the labels provided by their suppliers. If the material is subsequently transferred by the employer from a labeled container to another container, the employer will have to label that container unless it is subject to the portable container exemption. See paragraph (f) of this section for specific labeling requirements.

The primary information to be obtained from an OSHA-required label is an identity for the material, and appropriate hazard warnings. The identity is any term which appears on the label, the MSDS, and the list of chemicals, and thus links these three sources of information. The identity used by the supplier may be a common or trade name (''Black Magic Formula''), or a chemical name (1,1,1,-trichloroethane). The hazard warning is a brief statement of the hazardous effects of the chemical (''flammable,'' ''causes lung damage''). Labels frequently contain other information, such as precautionary measures (''do not use near open flame''), but this information is provided voluntarily and is not required by the rule. Labels must be legible, and prominently displayed. There are no specific requirements for size or color, or any specified text.

With these requirements in mind, the compliance officer will be looking for the following types of information to ensure that labeling will be properly implemented in your facility:

1. Designation of person(s) responsible for ensuring labeling of in-plant containers;
2. Designation of person(s) responsible for ensuring labeling of any shipped containers;
3. Description of labeling system(s) used;
4. Description of written alternatives to labeling of in-plant containers (if used); and,
5. Procedures to review and update label information when necessary.

Employers that are purchasing and using hazardous chemicals—rather than producing or distributing them—will primarily be concerned with ensuring that every purchased container is labeled. If materials are transferred into other containers, the employer must ensure that these are labeled as well, unless they fall under the portable container exemption (paragraph (f)(7) of this section). In terms of labeling systems, you can simply choose to use the labels provided by your suppliers on the containers. These will generally be verbal text labels, and do not usually include numerical rating systems or symbols that require special training. The most important thing to remember is that this is a continuing duty—all in-plant containers of hazardous chemicals must always be labeled. Therefore, it is important to designate someone to be responsible for ensuring that the labels are maintained as required on the containers in your facility, and that newly purchased materials are checked for labels prior to use.

*B. Material Safety Data Sheets*

Chemical manufacturers and importers are required to obtain or develop a material safety data sheet for each hazardous chemical they produce or import. Distributors are responsible for ensuring that their customers are provided a copy of these MSDSs. Employers must have an MSDS for each hazardous chemical which they use. Employers may rely on the information received from their suppliers. The specific requirements for material safety data sheets are in paragraph (g) of this section.

There is no specified format for the MSDS under the rule, although there are specific information requirements. OSHA has developed a non-mandatory format, OSHA Form 174, which may be used by chemical manufacturers and importers to comply with the rule. The MSDS must be in English. You are entitled to receive from your supplier a data sheet which includes all of the information required under the rule. If you do not receive one automatically, you should request one. If you receive one that is obviously inadequate, with, for example, blank spaces that are not completed, you should request an appropriately completed one. If your request for a data sheet or for a corrected data sheet does not produce the information needed, you should contact your local OSHA Area Office for assistance in obtaining the MSDS.

The role of MSDSs under the rule is to provide detailed information on each hazardous chemical, including its potential hazardous effects, its physical and chemical characteristics, and recommendations for appropriate protective measures. This information should be useful to you as the employer responsible for designing protective programs, as well as to the workers. If you are not familiar with material safety data sheets and with chemical terminology, you may need to learn to use them yourself. A glossary of MSDS terms may be helpful in this regard. Generally speaking, most employers using hazardous chemicals will primarily be concerned with MSDS information regarding hazardous effects and recommended protective measures. Focus on the sections of the MSDS that are applicable to your situation.

MSDSs must be readily accessible to employees when they are in their work areas during their workshifts. This may be accomplished in many different ways. You must decide what is appropriate for your particular workplace. Some employers keep the MSDSs in a binder in a central location (*e.g.*, in the pick-up truck on a construction site). Others, particularly in workplaces with large numbers of chemicals, computerize the information and provide access through terminals. As long as employees can get the information when they need it, any approach may be used. The employees must have access to the MSDSs themselves—simply having a system where the information can be read to them over the phone is only permitted under the mobile worksite provision, paragraph (g)(9) of this section, when employees must travel between workplaces during the shift. In this situation, they have access to the MSDSs prior to leaving the primary worksite, and when they return, so the telephone system is simply an emergency arrangement.

In order to ensure that you have a current MSDS for each chemical in the plant as required, and that employee access is provided, the compliance officers will be looking for the following types of information in your written program:

1. Designation of person(s) responsible for obtaining and maintaining the MSDSs;
2. How such sheets are to be maintained in the workplace (*e.g.*, in notebooks in the work area(s) or in a computer with terminal access), and how employees can obtain access to them when they are in their work area during the work shift;
3. Procedures to follow when the MSDS is not received at the time of the first shipment;
4. For producers, procedures to update the MSDS when new and significant health information is found; and,
5. Description of alternatives to actual data sheets in the workplace, if used.

For employers using hazardous chemicals, the most important aspect of the written program in terms of MSDSs is to ensure that someone is responsible for obtaining and maintaining the MSDSs for every hazardous chemical in the workplace. The list of hazardous chemicals required to be maintained as part of the written program will serve as an inventory. As new chemicals are purchased, the list should be updated. Many companies have found it convenient to include on their purchase orders the name and address of the person designated in their company to receive MSDSs.

*C. Employee Information and Training*

Each employee who may be ''exposed'' to hazardous chemicals when working must be provided information and trained prior to initial assignment to work with a hazardous chemical, and whenever the hazard changes. ''Exposure'' or ''exposed'' under the rule means that ''an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.) and includes potential (*e.g.*, accidental or possible) exposure.'' See paragraph (h) of this section for specific requirements. Information and training may be done either by individual chemical, or by categories of hazards (such as flammability or carcinogenicity). If there are only a few chemicals in the workplace, then you may want to discuss each one individually. Where there are large numbers of chemicals, or the chemicals change

frequently, you will probably want to train generally based on the hazard categories (*e.g.*, flammable liquids, corrosive materials, carcinogens). Employees will have access to the substance-specific information on the labels and MSDSs.

Information and training is a critical part of the hazard communication program. Information regarding hazards and protective measures are provided to workers through written labels and material safety data sheets. However, through effective information and training, workers will learn to read and understand such information, determine how it can be obtained and used in their own workplaces, and understand the risks of exposure to the chemicals in their workplaces as well as the ways to protect themselves. A properly conducted training program will ensure comprehension and understanding. It is not sufficient to either just read material to the workers, or simply hand them material to read. You want to create a climate where workers feel free to ask questions. This will help you to ensure that the information is understood. You must always remember that the underlying purpose of the HCS is to reduce the incidence of chemical source illnesses and injuries. This will be accomplished by modifying behavior through the provision of hazard information and information about protective measures. If your program works, you and your workers will better understand the chemical hazards within the workplace. The procedures you establish regarding, for example, purchasing, storage, and handling of these chemicals will improve, and thereby reduce the risks posed to employees exposed to the chemical hazards involved. Furthermore, your workers' comprehension will also be increased, and proper work practices will be followed in your workplace.

If you are going to do the training yourself, you will have to understand the material and be prepared to motivate the workers to learn. This is not always an easy task, but the benefits are worth the effort. More information regarding appropriate training can be found in OSHA Publication No. 2254 which contains voluntary training guidelines prepared by OSHA's Training Institute. A copy of this document is available from OSHA's Publications Office at (202) 219–4667.

In reviewing your written program with regard to information and training, the following items need to be considered:

1. Designation of person(s) responsible for conducting training;
2. Format of the program to be used (audiovisuals, classroom instruction, etc.);
3. Elements of the training program (should be consistent with the elements in paragraph (h) of this section); and,
4. Procedure to train new employees at the time of their initial assignment to work with a hazardous chemical, and to train employees when a new hazard is introduced into the workplace.

The written program should provide enough details about the employer's plans in this area to assess whether or not a good faith effort is being made to train employees. OSHA does not expect that every worker will be able to recite all of the information about each chemical in the workplace. In general, the most important aspects of training under the HCS are to ensure that employees are aware that they are exposed to hazardous chemicals, that they know how to read and use labels and material safety data sheets, and that, as a consequence of learning this information, they are following the appropriate protective measures established by the employer. OSHA compliance officers will be talking to employees to determine if they have received training, if they know they are exposed to hazardous chemicals, and if they know where to obtain substance-specific information on labels and MSDSs.

The rule does not require employers to maintain records of employee training, but many employers choose to do so. This may help you monitor your own program to ensure that all employees are appropriately trained. If you already have a training program, you may simply have to supplement it with whatever additional information is required under the HCS. For example, construction employers that are already in compliance with the construction training standard (29 CFR 1926.21) will have little extra training to do.

An employer can provide employees information and training through whatever means are found appropriate and protective. Although there would always have to be some training on-site (such as informing employees of the location and availability of the written program and MSDSs), employee training may be satisfied in part by general training about the requirements of the HCS and about chemical hazards on the job which is provided by, for example, trade associations, unions, colleges, and professional schools. In addition, previous training, education and experience of a worker may relieve the employer of some of the burdens of informing and training that worker. Regardless of the method relied upon, however, the employer is always ultimately responsible for ensuring that employees are adequately trained. If the compliance officer finds that the training is deficient, the employer will be cited for the deficiency regardless of who actually provided the training on behalf of the employer.

*D. Other Requirements*

In addition to these specific items, compliance officers will also be asking the following questions in assessing the adequacy of the program:

Does a list of the hazardous chemicals exist in each work area or at a central location?

Are methods the employer will use to inform employees of the hazards of non-routine tasks outlined?

Are employees informed of the hazards associated with chemicals contained in unlabeled pipes in their work areas?

On multi-employer worksites, has the employer provided other employers with information about labeling systems and precautionary measures where the other employers have employees exposed to the initial employer's chemicals?

Is the written program made available to employees and their designated representatives?

If your program adequately addresses the means of communicating information to employees in your workplace, and provides answers to the basic questions outlined above, it will be found to be in compliance with the rule.

*5. Checklist for Compliance*

The following checklist will help to ensure you are in compliance with the rule:

Obtained a copy of the rule. _____

Read and understood the requirements. _____

Assigned responsibility for tasks. _____

Prepared an inventory of chemicals. _____

Ensured containers are labeled. _____

Obtained MSDS for each chemical. _____

Prepared written program. _____

Made MSDSs available to workers. _____

Conducted training of workers. _____

Established procedures to maintain current program. _____

Established procedures to evaluate effectiveness. _____

*6. Further Assistance*

If you have a question regarding compliance with the HCS, you should contact your local OSHA Area Office for assistance. In addition, each OSHA Regional Office has a Hazard Communication Coordinator who can answer your questions. Free consultation services are also available to assist employers, and information regarding these services can be obtained through the Area and Regional offices as well.

The telephone number for the OSHA office closest to you should be listed in your local telephone directory. If you are not able to obtain this information, you may contact OSHA's Office of Information and Consumer Affairs at (202) 219–8151 for further assistance in identifying the appropriate contacts.

[59 FR 6170, Feb. 9, 1994, as amended at 59 FR 17479, Apr. 13, 1994; 59 FR 65948, Dec. 22, 1994; 61 FR 9245, Mar. 7. 1996]

### § 1910.1201 Retention of DOT markings, placards and labels.

(a) Any employer who receives a package of hazardous material which is required to be marked, labeled or placarded in accordance with the U. S. Department of Transportation's Hazardous Materials Regulations (49 CFR Parts 171 through 180) shall retain those markings, labels and placards on the package until the packaging is sufficiently cleaned of residue and purged of vapors to remove any potential hazards.

(b) Any employer who receives a freight container, rail freight car, motor vehicle, or transport vehicle that is required to be marked or placarded in accordance with the Hazardous Materials Regulations shall retain those markings and placards on the freight container, rail freight car, motor vehicle or transport vehicle until the hazardous materials which require the marking or placarding are sufficiently removed to prevent any potential hazards.

(c) Markings, placards and labels shall be maintained in a manner that ensures that they are readily visible.

(d) For non-bulk packages which will not be reshipped, the provisions of this section are met if a label or other acceptable marking is affixed in accordance with the Hazard Communication Standard (29 CFR 1910.1200).

(e) For the purposes of this section, the term ''hazardous material'' and any other terms not defined in this section have the same definition as in the Hazardous Materials Regulations (49 CFR Parts 171 through 180).

[59 FR 36700, July 19, 1994]

### § 1910.1450 Occupational exposure to hazardous chemicals in laboratories.

(a) *Scope and application.* (1) This section shall apply to all employers engaged in the laboratory use of hazardous chemicals as defined below.

(2) Where this section applies, it shall supersede, for laboratories, the requirements of all other OSHA health standards in 29 CFR part 1910, subpart Z, except as follows:

(g) *HCFC 141b exemption allowances—Reporting and recordkeeping.* (1) Any person allocated HCFC-141b exemption allowances who confers a quantity of the HCFC-141b exemption allowances to a producer or import and places an order for the production or import of HCFC-141b with a verification that the HCFC-141b will only be used for the exempted purpose and not be resold must submit semi-annual reports, due 30 days after the end of the second and fourth respectively, to the Administrator containing the following information:

(i) Total quantity (in kilograms) HCFC-141b received during the 6 month period; and

(ii) The identity of the supplier of HCFC-141b on a shipment-by-shipment basis during the 6 month period.

(2) Any person allocated HCFC-141b exemption allowances must keep records of letters to producers and importers conferring unexpended HCFC-141b exemption allowances for the specified control period in the notice, orders for the production or import of HCFC-141b under those letters and written verifications that the HCFC-141b was produced or imported for the express purpose of meeting HCFC-141b exemption needs in accordance with information submitted under §82.16(h), and that the quantity will not be resold.

[68 FR 2848, Jan. 21, 2003, as amended at 71 FR 41172, July 20, 2006]

## APPENDIX A TO SUBPART A OF PART 82—CLASS I CONTROLLED SUBSTANCES

| Class 1 controlled substances | ODP |
|---|---|
| A. Group I: | |
| $CFCl_3$-Trichlorofluoromethane (CFC-ll) | 1.0 |
| $CF_2$ $Cl_2$-Dichlorofifluoromethane (CFC-12) | 1.0 |
| $C_2$ $F_3$ $Cl_3$-Trichlorotrifluoroethane (CFC-113) | 0.8 |
| $C_2$ $F_4$ $Cl_2$-Dichlorotetrafluoroethane (CFC-114) | 1.0 |
| $C_2$ $F_5$ Cl-Monochloropentafluoroethane (CFC-115) | 0.6 |
| All isomers of the above chemicals | |
| B. Group II: | |
| $CF_2$ ClBr-Bromochlorodifluoromethane (Halon-1211) | 3.0 |
| $CF_3$ Br-Bromotrifluoromethane (Halon-1301) | 10.0 |
| $C_2$ $F_4$ $Br_2$-Dibromotetrafluoroethane (Halon-2402) | 6.0 |
| All isomers of the above chemicals | |
| C. Group III: | |
| $CF_3$ Cl-Chlorotrifluoromethane (CFC-13) | 1.0 |
| $C_2$ $FCl_5$-(CFC-111) | 1.0 |
| $C_2$ $F_2$ $Cl_4$-(CFC-112) | 1.0 |
| $C_3$ $FCl_7$-(CFC-211) | 1.0 |
| $C_3$ $F_2$ $Cl_6$-(CFC-212) | 1.0 |
| $C_3$ $F_3$ $Cl_5$-(CFC-213) | 1.0 |
| $C_3$ $F_4$ $Cl_4$-(CFC-214) | 1.0 |
| $C_3$ $F_5$ $Cl_3$-(CFC-215) | 1.0 |
| $C_3$ $F_6$ $Cl_2$-(CFC-216) | 1.0 |
| $C_3$ $F_7$ Cl-(CFC-217) | 1.0 |
| All isomers of the above chemicals | |
| D. Group IV: $CCl_4$-Carbon Tetrachloride | 1.1 |
| E. Group V: | |
| $C_2$ $H_3$ $Cl_3$-1,1,1 Trichloroethane (Methyl chloroform) | 0.1 |
| All isomers of the above chemical except 1,1,2-trichloroethane | |
| F. Group VI: $CH_3$ Br—Bromomethane (Methyl Bromide) | 0.7 |
| G. Group VII: | |
| $CHFBR_2$ | 1.00 |
| $CHF_2$ Br (HBFC–2201) | 0.74 |
| $CH_2$ FBr | 0.73 |
| $C_2$ $HFBr_4$ | 0.3–0.8 |
| $C_2$ $HF_2$ $Br_3$ | 0.5–1.8 |
| $C_2$ $HF_3$ $Br_2$ | 0.4–1.6 |
| $C_2$ $HF_4$ Br | 0.7–1.2 |
| $C_2$ $H_2$ $FBr_3$ | 0.1–1.1 |
| $C_2$ $H_2$ $F_2$ $Br_2$ | 0.2–1.5 |
| $C_2$ $H_2$ $F_3$ Br | 0.7–1.6 |
| $C_2$ $H_2$ $FBr_2$ | 0.1–1.7 |
| $C_2$ $H_3$ $F_2$ Br | 0.2–1.1 |
| $C_2$ $H_4$ FBr | 0.07–0.1 |
| $C_3$ $HFBr_6$ | 0.3–1.5 |
| $C_3$ $HF_2$ $Br_5$ | 0.2–1.9 |
| $C_3$ $HF_3$ $Br_4$ | 0.3–1.8 |
| $C_3$ $HF_4$ $Br_3$ | 0.5–2.2 |
| $C_3$ $HF_5$ $Br_2$ | 0.9–2.0 |
| $C_3$ $HF_6$ Br | 0.7–3.3 |
| $C_3$ $H_2$ $FBR_5$ | 0.1–1.9 |
| $C_3$ $H_2$ $F_2$ $BR_4$ | 0.2–2.1 |
| $C_3$ $H_2$ $F_3$ $Br_3$ | 0.2–5.6 |
| $C_3$ $H_2$ $F_4$ $Br_2$ | 0.3–7.5 |
| $C_3$ $H_2$ $F_5$ BR | 0.9–14 |
| $C_3$ $H_3$ $FBR_4$ | 0.08–1.9 |
| $C_3$ $H_3$ $F_2$ $Br_3$ | 0.1–3.1 |
| $C_3$ $H_3$ $F_3$ $Br_2$ | 0.1–2.5 |
| $C_3$ $H_3$ $F_4$ Br | 0.3–4.4 |
| $C_3$ $H_4$ $FBr_3$ | 0.03–0.3 |
| $C_3$ $H_4$ $F_2$ $Br_2$ | 0.1–1.0 |
| $C_3$ $H_4$ $F_3$ Br | 0.07–0.8 |
| $C_3$ $H_5$ $FBr_2$ | 0.04–0.4 |
| $C_3$ $H_5$ $F_2$ Br | 0.07–0.8 |
| $C_3$ $H_6$ FB | 0.02–0.7 |
| H. Group VIII: | |
| CH2BrCl (Chlorobromomethane 0.12. | |

[60 FR 24986, May 10, 1995, as amended at 68 FR 42892, July 18, 2003]

## APPENDIX B TO SUBPART A OF PART 82—CLASS II CONTROLLED SUBSTANCES [A]

| Controlled Substance | ODP |
|---|---|
| 1. Dichlorofluoromethane (HCFC-21) | 0.04 |
| 2. Monochlorodifluoromethane (HCFC-22). | 0.055 |
| 3. Monochlorofluoromethane (HCFC-31) | 0.02 |
| 4. Tetrachlorofluoroethane (HCFC-121) | 0.01–0.04 |
| 5. Trichlorodifluoroethane (HCFC-122) | 0.02–0.08 |
| 6. Dichlorotrifluoroethane (HCFC-123) | 0.02 |
| 7. Monochlorotetrafluoroethane (HCFC-124). | 0.022 |
| 8. Trichlorofluoroethane (HCFC-131) | 0.007–0.05 |
| 9. Dichlorodifluoroethane (HCFC-132) | 0.008–0.05 |

| Controlled Substance | ODP |
|---|---|
| 10. Monochlorotrifluoroethane (HCFC-133). | 0.02–0.06 |
| 11. Dichlorofluoroethane (HCFC-141b) ... | 0.11 |
| 12. Monochlorodifluoroethane (HCFC-142b). | 0.065 |
| 13. Chlorofluoroethane (HCFC-151) ..... | 0.003–0.005 |
| 14. Hexachlorofluoropropane (HCFC-221). | 0.015–0.07 |
| 15. Pentachlorodifluoropropane (HCFC-222). | 0.01–0.09 |
| 16. Tetrachlorotrifluoropropane (HCFC-223). | 0.01–0.08 |
| 17. Trichlorotetrafluoropropane (HCFC-224). | 0.01–0.09 |
| 18. Dichloropentafluoropropane (HCFC-225ca). | 0.025 |
| 19. Dichloropentafluoropropane (HCFC-225cb). | 0.033 |
| 20. Monochlorohexafluoropropane (HCFC-226). | 0.02–0.10 |
| 21. Pentachlorofluoropropane (HCFC-231). | 0.05–0.09 |
| 22. Tetrachlorodifluoropropane (HCFC-232). | 0.008–0.10 |
| 23. Trichlorotrifluoropropane (HCFC-233) | 0.007–0.23 |
| 24. Dichlorotetrafluoropropane (HCFC-234). | 0.01–0.28 |
| 25. Monochloropentafluoropropane (HCFC-235). | 0.03–0.52 |
| 26. Tetrachlorofluoropropane (HCFC-241). | 0.004–0.09 |
| 27. Trichlorodifluoropropane (HCFC-242) | 0.005–0.13 |
| 28. Dichlorotrifluoropropane (HCFC-243) | 0.007–0.12 |
| 29. Monochlorotetrafluoropropane (HCFC-244). | 0.009–0.14 |
| 30. Trichlorofluoropropane (HCFC-251) .. | 0.001–0.01 |
| 31. Dichlorodifluoropropane (HCFC-252) | 0.005–0.04 |
| 32. Monochlorotrifluoropropane (HCFC-253). | 0.003–0.03 |
| 33. Dichlorofluoropropane (HCFC-261) .. | 0.002–0.02 |
| 34. Monochlorodifluoropropane (HCFC-262). | 0.002–0.02 |
| 35. Monochlorofluoropropane (HCFC-271). | 0.001–0.03 |

[a] According to Annex C of the Montreal Protocol, ''Where a range of ODPs is indicated, the highest value in that range shall be used for the purposes of the Protocol. The ODPs listed as a single value have been determined from calculations based on laboratory measurements. Those listed as a range are based on estimates and are less certain. The range pertains to an isomeric group. The upper value is the estimate of the ODP of the isomer with the highest ODP, and the lower value is the estimate of the ODP of the isomer with the lowest ODP.''

[68 FR 2859, Jan. 21, 2003]

## Appendix C to Subpart A of Part 82—Parties to the Montreal Protocol, and Nations Complying With, But Not Parties to, the Protocol

### Annex 1 to Appendix C of Subpart A—Parties to the Montreal Protocol (as of January 29, 2003)

The check mark [✓] means the particular country ratified the Protocol or the specific Amendment package. Amendment packages are identified by the name of the city where the amendment package was negotiated and agreed. Updated lists of Parties to the Protocol and the Amendments can be located at: *http://www.unep.org/ozone/ratif.shtml*.

| Foreign state | Montreal protocol | London amendments | Copenhagen amendments | Montreal amendments | Beijing amendments |
|---|---|---|---|---|---|
| Albania | ✓ | | | | |
| Algeria | ✓ | ✓ | ✓ | | |
| Angola | ✓ | | | | |
| Antigua and Barbuda | ✓ | ✓ | ✓ | ✓ | |
| Argentina | ✓ | ✓ | ✓ | ✓ | |
| Armenia | ✓ | | | | |
| Australia | ✓ | ✓ | ✓ | ✓ | |
| Austria | ✓ | ✓ | ✓ | ✓ | |
| Azerbaijan | ✓ | ✓ | ✓ | ✓ | |
| Bahamas | ✓ | ✓ | ✓ | | |
| Bahrain | ✓ | ✓ | ✓ | ✓ | |
| Bangladesh | ✓ | ✓ | ✓ | ✓ | |
| Barbados | ✓ | ✓ | ✓ | ✓ | ✓ |
| Belarus | ✓ | ✓ | | | |
| Belgium | ✓ | ✓ | ✓ | | |
| Belize | ✓ | ✓ | ✓ | | |
| Benin | ✓ | ✓ | ✓ | | |
| Bolivia | ✓ | ✓ | ✓ | ✓ | |
| Bosnia and Herzegovina | ✓ | | | | |
| Botswana | ✓ | ✓ | ✓ | | |
| Brazil | ✓ | ✓ | ✓ | | |
| Brunei Darussalam | ✓ | | | | |
| Bulgaria | ✓ | ✓ | ✓ | ✓ | ✓ |
| Burkina Faso | ✓ | ✓ | ✓ | ✓ | ✓ |
| Burundi | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cambodia | ✓ | | | | |
| Cameroon | ✓ | ✓ | ✓ | | |
| Canada | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cape Verde | ✓ | ✓ | ✓ | ✓ | |
| Central African Republic | ✓ | | | | |
| Chad | ✓ | ✓ | ✓ | ✓ | |
| Chile | ✓ | ✓ | ✓ | ✓ | ✓ |

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Hansen, P. Solid waste recycling projects—a national directory. Environmental Protection Publication SW–45. Washington, U.S. Government Printing Office, 1973. 284 p.
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Paper Stock Conservation Committee. Wastepaper recycling. American Paper Institute, Inc. Publication. New York, New York. 12 p.
SCS Engineers, Inc. Analysis of source separate collection of recyclable solid waste collection center studies. Environmental Protection Publication SW–95c.2. U.S. Environmental Protection Agency, 1974. 70 p. (Distributed by National Technical Information Service, Springfield, Virginia, as PB–239 776.)
SCS Engineers, Inc. Analysis of source separate collection of recyclable solid waste; office buildings. U.S. Environmental Protection Agency, 1976. (To be distributed by National Technical Information Service, Springfield, Virginia.)
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# PART 247—COMPREHENSIVE PROCUREMENT GUIDELINE FOR PRODUCTS CONTAINING RECOVERED MATERIALS

## Subpart A—General

Sec.
247.1 Purpose and scope.
247.2 Applicability.
247.3 Definitions.
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247.5 Specifications.
247.6 Affirmative procurement programs.
247.7 Effective date.

## Subpart B—Item Designations

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247.13 Transportation products.
247.14 Park and recreation products.
247.15 Landscaping products.
247.16 Non-paper office products.
247.17 Miscellaneous products.

AUTHORITY: 42 U.S.C. 6912(a) and 6962; EO 13423, 72 FR 3919, 3 CFR, 1998 Comp., p. 210.

SOURCE: 60 FR 21381, May 1, 1995, unless otherwise noted.

## Subpart A—General

### § 247.1 Purpose and scope.

(a) The purpose of this guideline is to assist procuring agencies in complying with the requirements of section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6962, and Executive Order 12873, as they apply to the procurement of the items designated in subpart B of this part.

(b) This guideline designates items that are or can be made with recovered materials and whose procurement by procuring agencies will carry out the objectives of section 6002 of RCRA. EPA's recommended practices with respect to the procurement of specific designated items are found in the companion Recovered Materials Advisory Notice(s).

(c) EPA believes that adherence to the recommendations in the Recovered Materials Advisory Notice(s) constitutes compliance with RCRA section 6002. However, procuring agencies may adopt other types of procurement programs consistent with RCRA section 6002.

### § 247.2 Applicability.

(a)(1) This guideline applies to all procuring agencies and to all procurement actions involving items designated by EPA in this part, where the procuring agency purchases $10,000 or more worth of one of these items during the course of a fiscal year, or where the cost of such items or of functionally equivalent items purchased during the preceding fiscal year was $10,000 or more.

(2) This guideline applies to Federal agencies, to State and local agencies using appropriated Federal funds to procure designated items, and to persons contracting with any such agencies with respect to work performed under such contracts. Federal procuring agencies should note that the requirements of RCRA section 6002 apply to them whether or not appropriated Federal funds are used for procurement of designated items.

(3) The $10,000 threshold applies to procuring agencies as a whole rather than to agency subgroups such as regional offices or subagencies of a larger department or agency.

(b) The term *procurement actions* includes:

(1) Purchases made directly by a procuring agency and purchases made directly by any person (e.g., a contractor) in support of work being performed for a procuring agency, and

(2) Any purchases of designated items made ''indirectly'' by a procuring agency, as in the case of procurements resulting from grants, loans, funds, and similar forms of disbursements of monies.

(c)(1) This guideline does not apply to purchases of designated items which are unrelated to or incidental to Federal funding, i.e., not the direct result of a contract or agreement with, or a grant, loan, or funds disbursement to, a procuring agency.

(2) This guideline also does not apply to purchases made by private party recipients (e.g., individuals, non-profit organizations) of Federal funds pursuant to grants, loans, cooperative agreements, and other funds disbursements.

(d) RCRA section 6002(c)(1) requires procuring agencies to procure designated items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, considering such guidelines. Procuring agencies may decide not to procure such items if they are not reasonably available in a reasonable period of time; fail to meet reasonable performance standards; or are only available at an unreasonable price.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60973, Nov. 13, 1997]

**§ 247.3 Definitions.**

As used in this procurement guideline and the related Recovered Materials Advisory Notice(s):

*Act* or *RCRA* means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C 6901 *et seq;*

*Awards and plaques* refers to free-standing statues and boardlike products generally used as wall-hangings.

*Bike racks* are free-standing or anchored units that provide a method for cyclists to secure their bicycles safely.

*Blanket insulation* means relatively flat and flexible insulation in coherent sheet form, furnished in units of substantial area. Batt insulation is included in this term;

*Blasting grit* is a type of industrial abrasive used to shape, cut, sharpen, polish, or finish surfaces and materials.

*Board insulation* means semi-rigid insulation preformed into rectangular units having a degree of suppleness, particularly related to their geometrical dimensions;

*Building insulation* means a material, primarily designed to resist heat flow, which is installed between the conditioned volume of a building and adjacent unconditioned volumes or the outside. This term includes but is not limited to insulation products such as blanket, board, spray-in-place, and loose-fill that are used as ceiling, floor, foundation, and wall insulation;

*Carpet cushion,* also known as carpet underlay, is padding placed beneath carpet to reduce carpet wear caused by foot traffic or furniture indentation, enhance comfort, and prolong appearance.

*Cellulose fiber loose-fill* means a basic material of recycled wood-based cellulosic fiber made from selected paper, paperboard stock, or ground wood stock, excluding contaminated materials which may reasonably be expected to be retained in the finished product, with suitable chemicals introduced to provide properties such as flame resistance, processing and handling characteristics. The basic cellulosic material may be processed into a form suitable for installation by pneumatic or pouring methods;

*Cenospheres,* a naturally-occurring waste component of coal fly ash, are

very small, inert, lightweight, hollow, ''glass'' spheres composed of silica and alumina and filled with air or other gases.

*Channelizers* means highly visible barrels or drums that can be positioned to direct traffic through detours;

*Compost* is a thermophilic converted product with high humus content. Compost can be used as a soil amendment and can also be used to prevent or remediate pollutants in soil, air, and storm water run-off.

*Delineator* means a highly visible pavement marker that can be positioned to direct traffic or define boundaries;

*Engine lubricating oils* means petroleum-based oils used for reducing friction in engine parts;

*Federal agency* means any department, agency, or other instrumentality of the Federal government; any independent agency or establishment of the Federal government including any government corporation; and the Government Printing Office;

*Fertilizer made from recovered organic materials* is a single or blended substance, made from organic matter such as plant and animal by-products, manure-based or biosolid products, and rock and mineral powders, that contains one or more recognized plant nutrient(s) and is used primarily for its plant nutrient content and is designed for use or claimed to have value in promoting plant growth.

*Fiberglass insulation* means insulation which is composed principally of glass fibers, with or without binders;

*Flexible delineator* means a highly visible marker that can be positioned to direct traffic or define boundaries and that will flex if struck by a vehicle to prevent damage to the vehicle or the delineator;

*Flowable fill* is a low strength material that is mixed to a wet, flowable slurry and used as an economical fill or backfill material in place of concrete, compacted soils, or sand.

*Foam-in-place insulation* is rigid cellular foam produced by catalyzed chemical reactions that hardens at the site of the work. The term includes spray-applied and injected applications such as spray-in-place foam and pour-in-place;

*Garden hose* means a flexible tubing that conducts water to a specific location;

*Gear oils* means petroleum-based oils used for lubricating machinery gears;

*Hydraulic fluids* means petroleum-based hydraulic fluids;

*Hydraulic mulch* means a mulch that is a cellulose-based (paper or wood) protective covering that is mixed with water and applied through mechanical spraying in order to aid the germination of seeds and to prevent soil erosion;

*Hydroseeding* means the process of spraying seeds mixed with water through a mechanical sprayer (hydroseeder). Hydraulic mulch, fertilizer, a tacking agent, or a wetting agent can also be added to the water/seed mix for enhanced performance;

*Industrial drums* are cylindrical containers used for shipping and storing liquid or solid materials.

*Laminated paperboard* means board made from one or more plies of kraft paper bonded together, with or without facers, that is used for decorative, structural, or insulating purposes;

*Latex paint* means a water-based decorative or protective covering having a latex binder;

*Lawn edging* means a barrier used between lawns and landscaped areas or garden beds to prevent grass roots or weeds from spreading to the landscaped areas;

*Loose-fill insulation* means insulation in granular, nodular, fibrous, powdery, or similar form, designed to be installed by pouring, blowing or hand placement;

*Manual-grade strapping* refers to straps of material used with transport packaging to hold products in place on pallets or in other methods of commercial, bulk shipment. Strapping can also prevent tampering and pilferage during shipping.

*Mats* are temporary or semipermanent protective floor coverings used for numerous applications, including home and office carpet protection, car and truck floor board protection, traction on slippery surfaces, cushion from floor hardness, and reduction of injury risk during athletic events.

*Mineral fiber insulation* means insulation (rock wool or fiberglass) which is composed principally of fibers manufactured from rock, slag or glass, with or without binders;

*Modular threshold ramps* are ramps used to modify existing door thresholds and other small rises to remove access barriers created by differentials in landing levels.

*Nonpressure pipe* is pipe used to drain waste and wastewater, to vent gases, and to channel cable and conduit in various applications.

*Office furniture* is furniture typically used in offices, including seating, desks, storage units, file cabinets, tables, and systems furniture (or ''cubicles'').

*Pallet* means a portable platform for storing or moving cargo or freight;

*Paper* means one of two broad subdivisions of paper products, the other being paperboard. Paper is generally lighter in basis weight, thinner, and more flexible than paperboard. Sheets 0.012 inch or less in thickness are generally classified as paper. Its primary uses are for printing, writing, wrapping, and sanitary purposes. However, in this guideline, the term paper is also used as a generic term that includes both paper and paperboard.

*Paper product* means any item manufactured from paper or paperboard. The term paper product is used in this guideline to distinguish such items as boxes, doilies, and paper towels from printing and writing papers.

*Park benches and picnic tables* are recreational furniture found in parks, outdoor recreational facilities, and the grounds of office buildings and other facilities.

*Parking stop* means a barrier used to mark parking spaces and keep parked vehicles from rolling beyond a designated parking area;

*Perlite composite board* means insulation board composed of expanded perlite and fibers formed into rigid, flat, rectangular units with a suitable sizing material incorporated in the product. It may have on one or both surfaces a facing or coating to prevent excessive hot bitumen strike-in during roofing installation;

*Person* means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, Federal agency, State, municipality, commission, political subdivision of a State, or any interstate body;

*Phenolic insulation* means insulation made with phenolic plastics which are plastics based on resins made by the condensation of phenols, such as phenol or cresol, with aldehydes;

*Plastic fencing* means a barrier with an open-weave pattern that can be used to control drifting snow or sand by restricting the force of wind and to provide a warning or barrier in construction and other areas;

*Plastic lumber landscaping timbers and posts* are used to enhance the appearance of and control erosion in parks, highways, housing developments, urban plazas, zoos, and the exteriors of office buildings, military facilities, schools, and other public use areas.

*Playground equipment* includes many components, like slides, merry-go-rounds, hand rails, etc., and is found in parks, schools, child care facilities, institutions, multiple family dwellings, restaurants, resort and recreational developments, and other public use areas.

*Polyisocyanurate insulation* means insulation produced principally by the polymerization of polymeric polyisocyanates, usually in the presence of polyhydroxyl compounds with the addition of cell stabilizers, blowing agents, and appropriate catalyst to produce a polyisocyanurate chemical structure;

*Polystyrene insulation* means an organic foam composed principally of polymerized styrene resin processed to form a homogenous rigid mass of cells;

*Polyurethane insulation* means insulation composed principally of the catalyzed reaction product of polyisocyanates and polyhydroxyl compounds, processed usually with a blowing agent to form a rigid foam having a predominantly closed cell structure;

*Postconsumer material* means a material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item. *Postconsumer material* is a part of the broader category of *recovered materials*.

*Postconsumer recovered paper* means:

(1) Paper, paperboard and fibrous wastes from retail stores, office buildings, homes and so forth, after they have passed through their end-usage as a consumer item including: Used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards and used cordage; and

(2) All paper, paperboard and fibrous wastes that enter and are collected from municipal solid waste;

*Practicable* means capable of being used consistent with: Performance in accordance with applicable specifications, availability at a reasonable price, availability within a reasonable period of time, and maintenance of a satisfactory level of competition;

*Printer ribbon* means a nylon fabric designed to hold ink and used in dot matrix and other types of impact printers;

*Procurement item* means any device, good, substance, material, product, or other item, whether real or personal property, which is the subject of any purchase, barter, or other exchange made to procure such item;

*Procuring agency* means any Federal agency, or any State agency or agency of a political subdivision of a State, which is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract;

*Purchasing* means the act of and the function of responsibility for the acquisition of equipment, materials, supplies, and services, including: Buying, determining the need, selecting the supplier, arriving at a fair and reasonable price and terms and conditions, preparing the contract or purchase order, and follow-up;

*Railroad grade crossing surfaces* are materials placed between railroad tracks, and between the track and the road at highway and street railroad crossings, to enhance automobile and pedestrian safety.

*Rebuilt vehicular parts* are vehicular parts that have been remanufactured, reusing parts in their original form.

*Recovered materials* means waste materials and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process;

*Recovered materials*, for purposes of purchasing paper and paper products, means waste material and byproducts that have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process. In the case of paper and paper products, the term *recovered materials* includes:

(1) Postconsumer materials such as—

(i) Paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: Used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; and

(ii) All paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste, and

(2) Manufacturing, forest residues, and other wastes such as—

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel in smaller rolls of rough sheets) including: Envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others;

(iii) Fibrous byproducts of harvesting, manufacturing, extractive, or wood-cutting processes, flax, straw, linters, bagasse, slash, and other forest residues;

(iv) Wastes generated by the conversion of goods made from fibrous material (that is, waste rope from cordage manufacture, textile mill waste, and cuttings); and

(v) Fibers recovered from waste water which otherwise would enter the waste stream.

*Re-refined oils* means used oils from which the physical and chemical contaminants acquired through previous use have been removed through a refining process;

*Restroom divider/partition* means a barrier used to provide privacy in public restroom facilities;

*Retread tire* means a worn automobile, truck, or other motor vehicle tire whose tread has been replaced;

*Rock wool insulation* means insulation which is composed principally from fibers manufactured from slag or natural rock, with or without binders;

*Roofing materials* are materials used to construct a protective cover over a structure to shield its interior from the natural elements.

*Shower divider/partition* means a water-proof barrier used to provide privacy in public shower facilities;

*Signage* (including sign posts and supports) is used for identification and directional purposes for public roads and highways, and inside and outside office buildings, museums, parks, and other public places.

*Silica fume* is a waste byproduct of alloyed metal production.

*Soaker hose* means a perforated flexible tubing that is used to deliver gentle irrigation to plants;

*Sorbents* (i.e., absorbents and adsorbents) are materials used to retain liquids and gases in a diverse number of environmental, industrial, agricultural, medical, and scientific applications. Absorbents incorporate a substance while adsorbents gather substances on their surfaces.

*Specification* means a description of the technical requirements for a material, product, or service that includes the criteria for determining whether these requirements are met. In general, specifications are in the form of written commercial designations, industry standards, and other descriptive references;

*Spray-in-place insulation* means insulation material that is sprayed onto a surface or into cavities and includes cellulose fiber spray-on as well as plastic rigid foam products;

*Spray-in-place foam* is rigid cellular polyurethane or polyisocyanurate foam produced by catalyzed chemical reactions that hardens at the site of the work. The term includes spray-applied and injected applications;

*State* means any of the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands;

*Structural fiberboard* means a fibrous-felted, homogenous panel made from lignocellulosic fibers (usually wood, cane, or paper) and having a density of less than 31 lbs/ft$^3$ but more than 10 lbs/ft$^3$. It is characterized by an integral bond which is produced by interfelting of the fibers, but which has not been consolidated under heat or pressure as a separate stage of manufacture;

*Tire* means the following types of tires: Passenger car tires, light- and heavy-duty truck tires, high-speed industrial tires, bus tires, and special service tires (including military, agricultural, off-the-road, and slow-speed industrial);

[60 FR 21381, May 1, 1995, as amended at 62 FR 60973, Nov. 13, 1997; 65 FR 3080, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004; 72 FR 52488, Sept. 14, 2007]

### § 247.4 Contracting officer requirements.

Within one year after the effective date of each item designation, contracting officers shall require that vendors:

(a) Certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by applicable specifications or other contractual requirements, and

(b) Estimate the percentage of total material utilized for the performance of the contract which is recovered materials.

### § 247.5 Specifications.

(a) RCRA section 6002(d)(1) required Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies to revise their specifications by May 8, 1986, to eliminate any exclusion of recovered materials and any requirement that items be manufactured from virgin materials.

(b) RCRA section 6002(d)(2) requires that within one year after the publication date of each item designation by the EPA, each procuring agency must assure that its specifications for these items require the use of recovered materials to the maximum extent possible without jeopardizing the intended end use of these items.

### § 247.6 Affirmative procurement programs.

RCRA section 6002(i) provides that each procuring agency which purchases items designated by EPA must establish an affirmative procurement program, containing the four elements listed below, for procuring such items containing recovered materials to the maximum extent practicable:

(a) Preference program for purchasing the designated items;

(b) Promotion program;

(c) Procedures for obtaining estimates and certifications of recovered materials content and for verifying the estimates and certifications; and

(d) Annual review and monitoring of the effectiveness of the program.

### § 247.7 Effective date.

Within one year after the date of publication of any item designation, procuring agencies which purchase that designated item must comply with the following requirements of RCRA: affirmative procurement of the designated item (6002(c)(1) and (i)), specifications revision (6002(d)(2)), vendor certification and estimation of recovered materials content of the item (6002(c)(3) and (i)(2)(C)), and verification of vendor estimates and certifications (6002(i)(2)C)).

## Subpart B—Item Designations

### § 247.10 Paper and paper products.

Paper and paper products, excluding building and construction paper grades.

### § 247.11 Vehicular products.

(a) Lubricating oils containing re-refined oil, including engine lubricating oils, hydraulic fluids, and gear oils, excluding marine and aviation oils.

(b) Tires, excluding airplane tires.

(c) Reclaimed engine coolants, excluding coolants used in non-vehicular applications.

(d) Rebuilt vehicular parts.

[60 FR 21381, May 1, 1995, as amended at 69 FR 24038, Apr. 30, 2004]

### § 247.12 Construction products.

(a) Building insulation products, including the following items:

(1) Loose-fill insulation, including but not limited to cellulose fiber, mineral fibers (fiberglass and rock wool), vermiculite, and perlite;

(2) Blanket and batt insulation, including but not limited to mineral fibers (fiberglass and rock wool);

(3) Board (sheathing, roof decking, wall panel) insulation, including but not limited to structural fiberboard and laminated paperboard products, perlite composite board, polyurethane, polyisocyanurate, polystyrene, phenolics, and composites; and

(4) Spray-in-place insulation, including but not limited to foam-in-place polyurethane and polyisocyanurate, and spray-on cellulose.

(b) Structural fiberboard and laminated paperboard products for applications other than building insulation, including building board, sheathing, shingle backer, sound deadening board, roof insulating board, insulating wallboard, acoustical and non-acoustical ceiling tile, acoustical and non-acoustical lay-in panels, floor underlayments, and roof overlay (coverboard).

(c) Cement and concrete, including concrete products such as pipe and block containing:

(1) Coal fly ash;

(2) Ground granulated blast furnace slag (GGBF);

(3) Cenospheres; or

(4) Silica fume from silicon and ferrosilicon metal production.

(d) Carpet made from polyester fiber made from recovered materials for use in moderate-wear applications such as single-family housing and similar wear applications.

(e) Floor tiles and patio blocks containing recovered rubber or plastic.

(f) Shower and restroom dividers/partitions containing recovered plastic or steel.

(g)(1) Consolidated latex paint used for covering graffiti; and

(2) Reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutter boards; and concrete, stucco, masonry, wood, and metal surfaces.

(h) Carpet cushion made from bonded polyurethane, jute, synthetic fibers, or rubber containing recovered materials.

(i) Flowable fill containing coal fly ash and/or ferrous foundry sands.

(j) Railroad grade crossing surfaces made from cement and concrete containing fly ash, recovered rubber, recovered steel, recovered wood, or recovered plastic.

(k) Modular threshold ramps containing recovered steel, rubber, or aluminum.

(l) Nonpressure pipe containing recovered steel, plastic, or cement.

(m) Roofing materials containing recovered steel, aluminum, fiber, rubber, plastic or plastic composites, or cement.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004]

### § 247.13 Transportation products.

(a) Traffic barricades and traffic cones used in controlling or restricting vehicular traffic.

(b) Parking stops made from concrete or containing recovered plastic or rubber.

(c) Channelizers containing recovered plastic or rubber.

(d) Delineators containing recovered plastic, rubber, or steel.

(e) Flexible delineators containing recovered plastic.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997]

### § 247.14 Park and recreation products.

(a) Playground surfaces and running tracks containing recovered rubber or plastic.

(b) Plastic fencing containing recovered plastic for use in controlling snow or sand drifting and as a warning/safety barrier in construction or other applications.

(c) Park benches and picnic tables containing recovered steel, aluminum, plastic, or concrete.

(d) Playground equipment containing recovered plastic, steel, or aluminum.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000]

### § 247.15 Landscaping products.

(a) Hydraulic mulch products containing recovered paper or recovered wood used for hydroseeding and as an over-spray for straw mulch in landscaping, erosion control, and soil reclamation.

(b) Compost made from recovered organic materials.

(c) Garden and soaker hoses containing recovered plastic or rubber.

(d) Lawn and garden edging containing recovered plastic or rubber.

(e) Plastic lumber landscaping timbers and posts containing recovered materials.

(f) Fertilizer made from recovered organic materials.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000; 72 FR 52488, Sept. 14, 2007]

### § 247.16 Non-paper office products.

(a) Office recycling containers and office waste receptacles.

(b) Plastic desktop accessories.

(c) Toner cartridges.

(d) Plastic-covered binders containing recovered plastic; chipboard and pressboard binders containing recovered paper; and solid plastic binders containing recovered plastic.

(e) Plastic trash bags.

(f) Printer ribbons.

(g) Plastic envelopes.

(h) Plastic clipboards containing recovered plastic.

(i) Plastic file folders containing recovered plastic.

(j) Plastic clip portfolios containing recovered plastic.

(k) Plastic presentation folders containing recovered plastic.

(l) Office furniture containing recovered steel, aluminum, wood, agricultural fiber, or plastic.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004]

### § 247.17 Miscellaneous products.

(a) Pallets containing recovered wood, plastic, or paperboard.

(b) Sorbents containing recovered materials for use in oil and solvent clean-ups and as animal bedding.

(c) Industrial drums containing recovered steel, plastic, or paper.

(d) Awards and plaques containing recovered glass, wood, paper, or plastic.

(e) Mats containing recovered rubber and/or plastic.

(f)(1) Non-road signs containing recovered plastic or aluminum and road signs containing recovered aluminum.

(2) Sign supports and posts containing recovered plastic or steel.

(g) Manual-grade strapping containing recovered steel or plastic.

(h) Bike racks containing recovered steel or plastic.

(i) Blasting grit containing recovered steel, coal and metal slag, bottom ash, glass, plastic, fused alumina oxide, or walnut shells.

[62 FR 60974, Nov. 13, 1997, as amended at 65 FR 3081, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004]

## PART 254—PRIOR NOTICE OF CITIZEN SUITS

Sec.
254.1 Purpose.
254.2 Service of notice.
254.3 Contents of notice.

AUTHORITY: Sec. 7002, Pub. L. 94–580, 90 Stat. 2825 (42 U.S.C. 6972).

SOURCE: 42 FR 56114, Oct. 21, 1977, unless otherwise noted.

### § 254.1 Purpose.

Section 7002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, authorizes suit by any person to enforce the Act. These suits may be brought where there is alleged to be a violation by any person (including (a) the United States, and (b) any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution) of any permit, standard, regulation, condition, requirement, or order which has become effective under the Act, or a failure of the Administrator to perform any act or duty under the Act, which is not discretionary with the Administrator. These actions are to be filed in accordance with the rules of the district court in which the action is instituted. The purpose of this part is to prescribe procedures governing the notice requirements of subsections (b) and (c) of section 7002 as a prerequisite to the commencement of such actions.

### § 254.2 Service of notice.

(a) Notice of intent to file suit under subsection 7002(a)(1) of the Act shall be served upon an alleged violator of any permit, standard, regulation, condition, requirement, or order which has become effective under this Act in the following manner:

(1) If the alleged violator is a private individual or corporation, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the owner or site manager of the building, plant, installation, or facility alleged to be in violation. A copy of the notice shall be mailed to the Administrator of the Environmental Protection Agency, the Regional Administrator of the Environmental Protection Agency for the region in which the violation is alleged to have occurred, and the chief administrative officer of the solid waste management agency for the State in which the violation is alleged to have occurred. If the alleged violator is a corporation, a copy of the notice shall also be mailed to the registered agent, if any, of that corporation in the State in which such violation is alleged to have occurred.

(2) If the alleged violator is a State or local agency, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the head of that agency. A copy of the notice shall be mailed to the chief administrator of the solid waste management agency for the State in which the violation is alleged to have occurred, the Administrator of the Environmental Protection Agency, and the Regional Administrator of the Environmental Protection Agency for the region in which the violation is alleged to have occurred.

Federal Register

Thursday,
August 2, 2001

# Part V

# The President

## Executive Order 13221—Energy Efficient Standby Power Devices

Federal Register
Vol. 66, No. 149
Thursday, August 2, 2001

# Presidential Documents

**Title 3—**

## The President

**Executive Order 13221 of July 31, 2001**

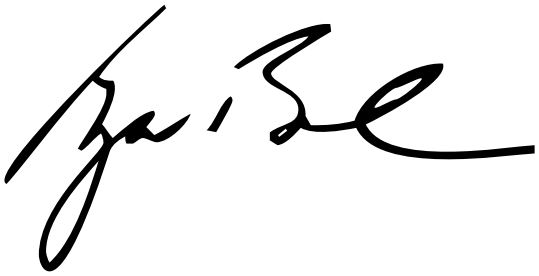
## Energy Efficient Standby Power Devices

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the National Energy Conservation Policy Act (Public Law 95–619, 92 Stat. 3206, 42 U.S.C. 8252 *et seq.*), as amended by the Energy Policy Act of 1992 (EPACT) (Public Law 102–486, 106 Stat. 2776), and section 301 of title 3, United States Code, and in order to further encourage energy conservation by the Federal Government, it is hereby ordered as follows:

**Section 1.** *Energy Efficient Standby Power Devices.* Each agency, when it purchases commercially available, off-the-shelf products that use external standby power devices, or that contain an internal standby power function, shall purchase products that use no more than one watt in their standby power consuming mode. If such products are not available, agencies shall purchase products with the lowest standby power wattage while in their standby power consuming mode. Agencies shall adhere to these requirements, when life-cycle cost-effective and practicable and where the relevant product's utility and performance are not compromised as a result. By December 31, 2001, and on an annual basis thereafter, the Department of Energy, in consultation with the Department of Defense and the General Services Administration, shall compile a preliminary list of products to be subject to these requirements. The Department of Energy shall finalize the list and may remove products deemed inappropriate for listing.

**Sec. 2.** *Independent Agencies.* Independent agencies are encouraged to comply with the provisions of this order.

**Sec. 3.** *Definition.* ''Agency'' means an executive agency as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C. 102, are covered by the Department of Defense.



THE WHITE HOUSE,
*July 31, 2001.*

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Federal Register

Friday,
January 26, 2007

# Part II

# The President

## Executive Order 13423—Strengthening Federal Environmental, Energy, and Transportation Management

Federal Register
Vol. 72, No. 17
Friday, January 26, 2007

# Presidential Documents

**Title 3—**

**The President**

**Executive Order 13423 of January 24, 2007**

## Strengthening Federal Environmental, Energy, and Transportation Management

By the authority vested in me as President by the Constitution and the laws of the United States of America, and to strengthen the environmental, energy, and transportation management of Federal agencies, it is hereby ordered as follows:

**Section 1.** *Policy*. It is the policy of the United States that Federal agencies conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner.

**Sec. 2.** *Goals for Agencies*. In implementing the policy set forth in section 1 of this order, the head of each agency shall:

(a) improve energy efficiency and reduce greenhouse gas emissions of the agency, through reduction of energy intensity by (i) 3 percent annually through the end of fiscal year 2015, or (ii) 30 percent by the end of fiscal year 2015, relative to the baseline of the agency's energy use in fiscal year 2003;

(b) ensure that (i) at least half of the statutorily required renewable energy consumed by the agency in a fiscal year comes from new renewable sources, and (ii) to the extent feasible, the agency implements renewable energy generation projects on agency property for agency use;

(c) beginning in FY 2008, reduce water consumption intensity, relative to the baseline of the agency's water consumption in fiscal year 2007, through life-cycle cost-effective measures by 2 percent annually through the end of fiscal year 2015 or 16 percent by the end of fiscal year 2015;

(d) require in agency acquisitions of goods and services (i) use of sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy-efficient, water-efficient, and recycled-content products, and (ii) use of paper of at least 30 percent post-consumer fiber content;

(e) ensure that the agency (i) reduces the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency, (ii) increases diversion of solid waste as appropriate, and (iii) maintains cost-effective waste prevention and recycling programs in its facilities;

(f) ensure that (i) new construction and major renovation of agency buildings comply with the *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings set forth in the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006)*, and (ii) 15 percent of the existing Federal capital asset building inventory of the agency as of the end of fiscal year 2015 incorporates the sustainable practices in the Guiding Principles;

(g) ensure that, if the agency operates a fleet of at least 20 motor vehicles, the agency, relative to agency baselines for fiscal year 2005, (i) reduces the fleet's total consumption of petroleum products by 2 percent annually through the end of fiscal year 2015, (ii) increases the total fuel consumption that is non-petroleum-based by 10 percent annually, and (iii) uses plug-in hybrid (PIH) vehicles when PIH vehicles are commercially available at

a cost reasonably comparable, on the basis of life-cycle cost, to non-PIH vehicles; and

(h) ensure that the agency (i) when acquiring an electronic product to meet its requirements, meets at least 95 percent of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product, (ii) enables the Energy Star feature on agency computers and monitors, (iii) establishes and implements policies to extend the useful life of agency electronic equipment, and (iv) uses environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life.

**Sec. 3.** *Duties of Heads of Agencies*. In implementing the policy set forth in section 1 of this order, the head of each agency shall:

(a) implement within the agency sustainable practices for (i) energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction, (ii) renewable energy, including bioenergy, (iii) water conservation, (iv) acquisition, (v) pollution and waste prevention and recycling, (vi) reduction or elimination of acquisition and use of toxic or hazardous chemicals, (vii) high performance construction, lease, operation, and maintenance of buildings, (viii) vehicle fleet management, and (ix) electronic equipment management;

(b) implement within the agency environmental management systems (EMS) at all appropriate organizational levels to ensure (i) use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities, including environmental aspects of energy and transportation functions, (ii) establishment of agency objectives and targets to ensure implementation of this order, and (iii) collection, analysis, and reporting of information to measure performance in the implementation of this order;

(c) establish within the agency programs for (i) environmental management training, (ii) environmental compliance review and audit, and (iii) leadership awards to recognize outstanding environmental, energy, or transportation management performance in the agency;

(d) within 30 days after the date of this order (i) designate a senior civilian officer of the United States, compensated annually in an amount at or above the amount payable at level IV of the Executive Schedule, to be responsible for implementation of this order within the agency, (ii) report such designation to the Director of the Office of Management and Budget and the Chairman of the Council on Environmental Quality, and (iii) assign the designated official the authority and duty to (A) monitor and report to the head of the agency on agency activities to carry out subsections (a) and (b) of this section, and (B) perform such other duties relating to the implementation of this order within the agency as the head of the agency deems appropriate;

(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;

(f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order;

(g) provide reports on agency implementation of this order to the Chairman of the Council on such schedule and in such format as the Chairman of the Council may require; and

(h) provide information and assistance to the Director of the Office of Management and Budget, the Chairman of the Council, and the Federal Environmental Executive.

**Sec. 4.** *Additional Duties of the Chairman of the Council on Environmental Quality*. In implementing the policy set forth in section 1 of this order, the Chairman of the Council on Environmental Quality:

(a) (i) shall establish a Steering Committee on Strengthening Federal Environmental, Energy, and Transportation Management to advise the Director of the Office of Management and Budget and the Chairman of the Council on the performance of their functions under this order that shall consist exclusively of (A) the Federal Environmental Executive, who shall chair, convene and preside at meetings of, determine the agenda of, and direct the work of, the Steering Committee, and (B) the senior officials designated under section 3(d)(i) of this order, and (ii) may establish subcommittees of the Steering Committee, to assist the Steering Committee in developing the advice of the Steering Committee on particular subjects;

(b) may, after consultation with the Director of the Office of Management and Budget and the Steering Committee, issue instructions to implement this order, other than instructions within the authority of the Director to issue under section 5 of this order; and

(c) shall administer a presidential leadership award program to recognize exceptional and outstanding environmental, energy, or transportation management performance and excellence in agency efforts to implement this order.

**Sec. 5.** *Duties of the Director of the Office of Management and Budget*. In implementing the policy set forth in section 1 of this order, the Director of the Office of Management and Budget shall, after consultation with the Chairman of the Council and the Steering Committee, issue instructions to the heads of agencies concerning:

(a) periodic evaluation of agency implementation of this order;

(b) budget and appropriations matters relating to implementation of this order;

(c) implementation of section 2(d) of this order; and

(d) amendments of the Federal Acquisition Regulation as necessary to implement this order.

**Sec. 6.** *Duties of the Federal Environmental Executive*. A Federal Environmental Executive designated by the President shall head the Office of the Federal Environmental Executive, which shall be maintained in the Environmental Protection Agency for funding and administrative purposes. In implementing the policy set forth in section 1 of this order, the Federal Environmental Executive shall:

(a) monitor, and advise the Chairman of the Council on, performance by agencies of functions assigned by sections 2 and 3 of this order;

(b) submit a report to the President, through the Chairman of the Council, not less often than once every 2 years, on the activities of agencies to implement this order; and

(c) advise the Chairman of the Council on the Chairman's exercise of authority granted by subsection 4(c) of this order.

**Sec. 7.** *Limitations*. (a) This order shall apply to an agency with respect to the activities, personnel, resources, and facilities of the agency that are located within the United States. The head of an agency may provide that this order shall apply in whole or in part with respect to the activities, personnel, resources, and facilities of the agency that are not located within the United States, if the head of the agency determines that such application is in the interest of the United States.

(b) The head of an agency shall manage activities, personnel, resources, and facilities of the agency that are not located within the United States, and with respect to which the head of the agency has not made a determination under subsection (a) of this section, in a manner consistent with the policy set forth in section 1 of this order to the extent the head of the agency determines practicable.

**Sec. 8.** *Exemption Authority.* (a) The Director of National Intelligence may exempt an intelligence activity of the United States, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 10, to the extent the Director determines necessary to protect intelligence sources and methods from unauthorized disclosure.

(b) The head of an agency may exempt law enforcement activities of that agency, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 10, to the extent the head of an agency determines necessary to protect undercover operations from unauthorized disclosure.

(c) (i) The head of an agency may exempt law enforcement, protective, emergency response, or military tactical vehicle fleets of that agency from the provisions of this order, other than this subsection and section 10.

(ii) Heads of agencies shall manage fleets to which paragraph (i) of this subsection refers in a manner consistent with the policy set forth in section 1 of this order to the extent they determine practicable.

(d) The head of an agency may submit to the President, through the Chairman of the Council, a request for an exemption of an agency activity, and related personnel, resources, and facilities, from this order.

**Sec. 9.** *Definitions.* As used in this order:

(a) ''agency'' means an executive agency as defined in section 105 of title 5, United States Code, excluding the Government Accountability Office;

(b) ''Chairman of the Council'' means the Chairman of the Council on Environmental Quality, including in the Chairman's capacity as Director of the Office of Environmental Quality;

(c) ''Council'' means the Council on Environmental Quality;

(d) ''environmental'' means environmental aspects of internal agency operations and activities, including those environmental aspects related to energy and transportation functions;

(e) ''greenhouse gases'' means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride;

(f) ''life-cycle cost-effective'' means the life-cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product);

(g) ''new renewable sources'' means sources of renewable energy placed into service after January 1, 1999;

(h) ''renewable energy'' means energy produced by solar, wind, biomass, landfill gas, ocean (including tidal, wave, current and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project;

(i) ''energy intensity'' means energy consumption per square foot of building space, including industrial or laboratory facilities;

(j) ''Steering Committee'' means the Steering Committee on Strengthening Federal Environmental, Energy, and Transportation Management established under subsection 4(b) of this order;

(k) ''sustainable'' means to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling

the social, economic, and other requirements of present and future generations of Americans; and

(l) ''United States'' when used in a geographical sense, means the fifty states, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Northern Mariana Islands, and associated territorial waters and airspace.

**Sec. 10.** *General Provisions.* (a) This order shall be implemented in a manner consistent with applicable law and subject to the availability of appropriations.

(b) Nothing in this order shall be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating to budget, administrative, or legislative proposals.

(c) This order is intended only to improve the internal management of the Federal Government and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by a party against the United States, its departments, agencies, instrumentalities, entities, officers, employees or agents, or any other person.

**Sec. 11.** *Revocations; Conforming Provisions.* (a) The following are revoked:

(i) Executive Order 13101 of September 14, 1998;

(ii) Executive Order 13123 of June 3, 1999;

(iii) Executive Order 13134 of August 12, 1999, as amended;

(iv) Executive Order 13148 of April 21, 2000; and

(v) Executive Order 13149 of April 21, 2000.

(b) In light of subsection 317(e) of the National Defense Authorization Act for Fiscal Year 2002 (Public Law 107–107), not later than January 1 of each year through and including 2010, the Secretary of Defense shall submit to the Senate and the House of Representatives a report regarding progress made toward achieving the energy efficiency goals of the Department of Defense.

(c) Section 3(b)(vi) of Executive Order 13327 of February 4, 2004, is amended by striking ''Executive Order 13148 of April 21, 2000'' and inserting in lieu thereof ''other executive orders''.

THE WHITE HOUSE,
*January 24, 2007.*

[FR Doc. 07–374
Filed 1–25–07; 8:50 am]
Billing code 3195–01–P

# INSTRUCTIONS FOR IMPLEMENTING EXECUTIVE ORDER 13423

"Strengthening Federal Environmental, Energy, and Transportation Management"

March 29, 2007

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# I. Introduction

The Federal government has made significant progress in improving environmental and energy performance through a series of executive orders, Memoranda of Understanding, and other guidance. Executive Order 13423 (E.O.), *Strengthening Federal Environmental, Energy, and Transportation Management*, intends to build on that body of work and success by integrating and updating prior practices and requirements into a cohesive, strategic approach to further ensure enhanced performance and compliance with statutory and other legal requirements.

Section 2 of the E.O. directs Federal agencies to implement sustainable practices for:

- Energy efficiency and reductions in greenhouse gas emissions.
- Use of renewable energy.
- Reduction in water consumption intensity.
- Acquisition of green products and services.
- Pollution prevention, including reduction or elimination of the use of toxic and hazardous chemicals and materials.
- Cost-effective waste prevention and recycling programs.
- Increased diversion of solid waste.
- Sustainable design/high performance buildings.
- Vehicle fleet management, including the use of alternative fuel vehicles and alternative fuels and the further reduction of petroleum consumption.
- Electronics stewardship.

## A. Purpose

The purpose of this document is to define agency requirements for implementing E.O. 13423 and to define broad strategies for achieving them. This document is the first of such E.O. implementing instructions. In order to ensure effective and efficient implementation, and to meet the goals and objectives of the E.O., it is mandatory that executive departments and agencies implement the activities described in these instructions in accordance with Sections 1, 2, 3, and 4(b) of the E.O.

## B. Authority

These instructions are issued under the authority of Section 4(b) of the E.O. This section authorizes the Chairman of the Council on Environmental Quality (CEQ) to issue instructions on implementing the E.O. after consultation with the Director of the Office of Management and Budget (OMB) and the interagency Steering Committee.

## C. Organization and Oversight

The organizational structure of the entities established to coordinate and oversee implementation of E.O. 13423 is shown in Figure 1. The organizational structure as well as the roles and responsibilities of each entity are described below.

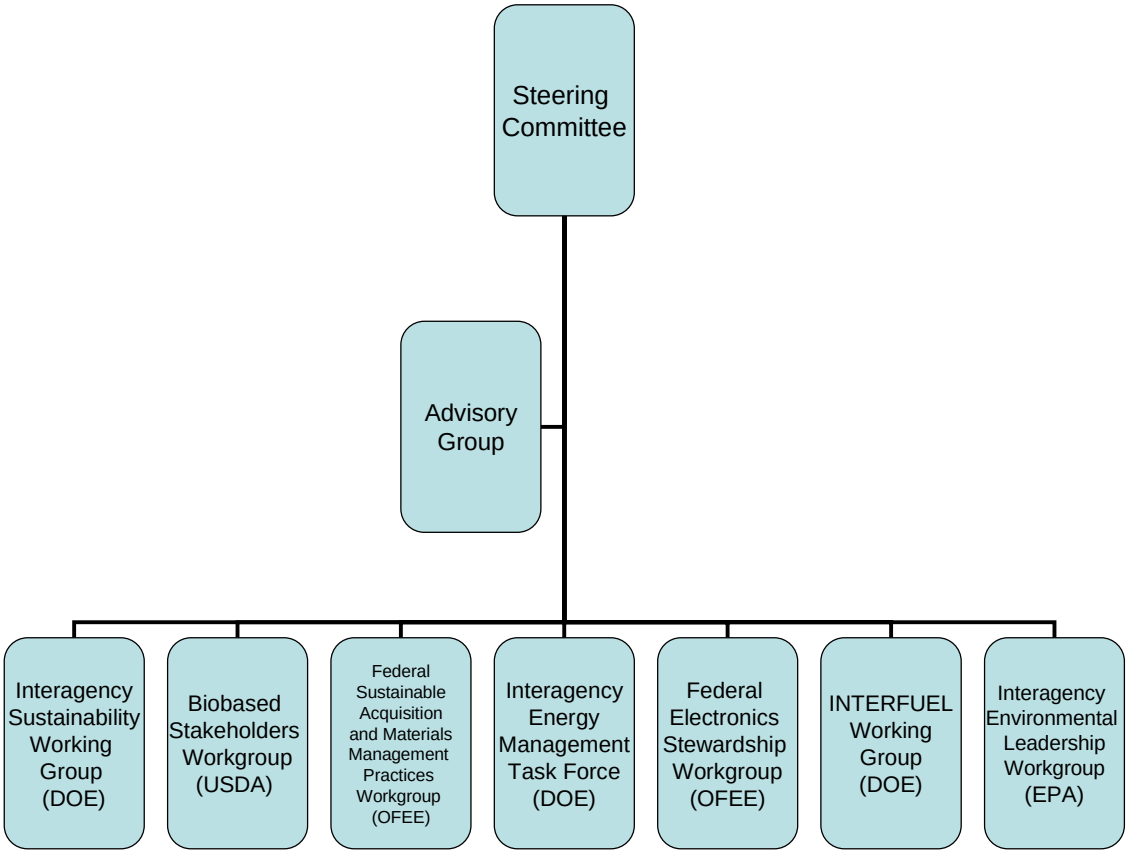


**Figure 1.** Organization of entities established to implement E.O. 13423. The agency chair of each Working Group is shown in parentheses.

(1) Steering Committee. In accordance with the E.O., agencies will designate Senior Officials, who will comprise the Steering Committee. The Steering Committee will be responsible and accountable for implementation of the E.O. and these instructions. Semiannual meetings will be held, usually in February and August. Additional meetings of the Steering Committee may be called by the Federal Environmental Executive (FEE), as appropriate.

(2) E.O. Advisory Group. This group shall consist of Office of the Federal Environmental Executive (OFEE), OMB, Department of Energy (DOE), and Environmental Protection Agency (EPA) staff and others as appropriate as determined by the Chairman of CEQ. The Advisory Group will support the Steering Committee by scheduling meetings, providing logistical support, coordinating approval of guidance documents, conducting assessments of agency implementation, and ensuring cooperation and coordination between workgroups. The Advisory Group shall coordinate reporting

requirements and help ensure government-wide implementation of the requirements of the E.O.

(3) Workgroups. OFEE, DOE's Federal Energy Management Program (FEMP), EPA, and the U.S. Department of Agriculture (USDA) shall continue to convene the following sustainable practice area workgroups established to implement statutory requirements and prior executive orders with respect to the sustainable practices addressed in E.O. 13423.

- Interagency Sustainability Working Group – chaired by FEMP
- Interagency Energy Management Task Force – chaired by FEMP
- INTERFUEL – chaired by FEMP
- Federal Sustainable Acquisition and Materials Management Practices Workgroup (formerly the E.O. 13101 Interagency Advisory Group) – chaired by OFEE
- Federal Electronics Stewardship Working Group – chaired by OFEE
- Interagency Environmental Leadership Workgroup – chaired by EPA
- Biobased Stakeholders Workgroup – chaired by USDA

Each workgroup shall provide a forum for information exchange and coordinate interagency efforts to promote agency implementation of one or more goals of E.O. 13423. Each workgroup will help to develop policies, guidance, reporting metrics, and other documents and tools required by the E.O. In addition, workgroups may establish subcommittees to make recommendations for addressing E.O. implementation issues identified by the workgroups.

The workgroups shall be considered to be subcommittees of the Steering Committee established by E.O. 13423. From time to time, upon recommendation of the Advisory Group, or as they otherwise determine necessary, the CEQ Chair or the Director of OMB may establish additional workgroups to assist and advise the FEE and the Steering Committee.

The agency chairing each workgroup shall ultimately be responsible for issuing guidance and other documents as directed by these instructions or as appropriate. Agency chairs of each workgroup shall consult with workgroup member agencies before issuing guidance documents.

The FEE and OMB, with assistance from the Advisory Group, will ensure that there is no redundancy or conflicting activities or guidance from the workgroups and any new groups created under the E.O., coordinate reporting requirements, and ensure government-wide implementation of the requirements of the E.O.

Chapters II – XII identify the workgroup corresponding to implementation of environmental management systems and each sustainable practice area.

## D. Overarching Policy and Directives

> *E.O. 13423, Section 1: It is the policy of the United States that Federal agencies conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner.*

In implementing the policy, goals, and objectives of E.O. 13423, agencies shall apply the following overarching directives:

(1) Environmental management systems. E.O. 13423 directs Federal agencies to implement environmental management systems (EMS) at all appropriate organizational levels to ensure the use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities, including the environmental aspects of energy and transportation functions; establishment of agency objectives and targets to ensure implementation of the E.O.; and collection, analysis, and reporting of information to measure performance in the implementation of the E.O.

(2) Environmental compliance. Compliance with environmental and energy legal and regulatory requirements is a fundamental responsibility of Federal agencies and Federal employees at all levels. Federal facilities must strive to be good neighbors to the citizens they serve by adhering to applicable environmental protection and energy conservation laws and regulations.

(3) Life-cycle costs. Each agency shall consider life-cycle costs and savings in planning and making determinations about investments in all capital assets, services, and procurements, which will lower the government's costs, achieve sustainable design principles, reduce energy and water consumption, and reduce the environmental impact/footprint of the government's operations as it implements its primary mission and improves the quality of service and effectiveness of government. In some cases, evaluation of life-cycle costs may result in a higher up-front cost with significantly lower maintenance costs, or longer life.

(4) Performance evaluations. In order to ensure accountability, each agency shall include successful implementation of the E.O. in performance standards and performance evaluations (or equivalent) of senior agency officials designated as responsible under E.O. 13423, and relevant agency staff, such as facility managers, environmental and energy program managers, vehicle fleet managers, contracting officials, and others as appropriate.

(5) Award programs. Each agency should employ incentive and award programs to reward exceptional individual and team performance in implementing the goals of the E.O.

(6) Use of cross-functional teams. Each agency should designate a cross-functional support team or teams consisting of procurement, legal, budget, facility and energy management, vehicle fleet management, environmental management, technical support and others as appropriate to expedite implementation of this order and collaborate with other agencies.

(7) Compliance with OMB guidance. Guidance documents issued under the E.O. and these implementing instructions are subject to the requirements of the OMB Agency Good Guidance Practices Bulletin (Bulletin No. 07-02; 72 FR 3432 (January 25, 2007)) and of Section 9 of E.O. 12866 (as amended by E.O. 13422).

## II. Environmental Management Systems

> *E.O. 13423, Sec. 3(b), excerpted:*
> *In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
> *(b) implement, within the agency, environmental management systems (EMS) at all appropriate organizational levels to ensure (i) use of EMS as the primary management approach for addressing the environmental aspects of internal agency operations and activities, including environmental aspects of energy and transportation functions, (ii) establishment of agency objectives and targets to ensure implementation of this order, and (iii) collection, analysis, and reporting of information to measure performance in the implementation of this order;*
>
> *Technical Lead: EPA*
> *Workgroup: Interagency Environmental Leadership Workgroup*

An EMS is a tool used to pursue policies and goals established by an organization by properly managing its operations and activities. It is not a stand-alone environmental program or a data management program. In other words, the management system is a framework within which existing and new organizational responsibilities, programs, and activities are linked. The management system model of "Plan, Do, Check, Act" provides rigor to existing operations and programs to further ensure continual improvement.

When properly implemented, a management system enables an organization to clearly identify and establish goals, develop and implement plans to meet the goals, determine measurable progress towards the goals, and make improvements to ensure continual improvement. Where programs to support the sustainable practices related to environmental-, transportation-, or energy-related activities already exist within an organization, they are not replaced or overtaken by the management system but contribute to and, are enhanced by, the system. For example, leadership, management, and operations addressing a specific program can remain, except the management system now recognizes that program as one contributing towards meeting the organizational goals and as a source of information for overall reporting.

The true benefit of the management system model is that it ensures existing or new programs are closely linked to the organization's environmental and energy footprint and legal and other requirements. The management system helps to ensure that efforts are properly deployed in regard to training, monitoring and measurement, and reporting. The management system also ensures that senior management plays an active role in evaluating status and progress and makes decisions towards the commitment to continual improvement.

### A. Use of Environmental Management Systems

Each agency shall, at all appropriate organizational levels, including agency, sub-agency, bureau, service, command, and/or facility, develop, implement, and maintain an EMS to

be used to identify and address agency environmental, transportation, and energy issues. The EMS shall reflect the EMS elements and framework found in the ISO 14001:2004(E) International Standard or equivalent. The EMS objectives shall include the goals identified in Section 2 of the E.O.

(1) Management framework. The management system will serve as the management framework under which agencies and their facilities or organizations identify, manage, and improve the sustainable practices identified in Section 2 of the E.O. and identify and collect performance measurement information to address the reporting requirements of Section 3(g) of the E.O. EMS also shall be used to support compliance with environmental and energy regulations, to enable the prevention of pollution and efficient energy management, and to support other objectives identified by the organization.

(2) Review and update. Once implemented, an EMS shall be reviewed and updated annually or more frequently, as appropriate, by senior leadership accountable for implementation of that EMS. This annual management review does not require a conformance determination as set forth in section II.C below.

(3) External communication. To facilitate communication between Federal agencies, their stakeholders, and their neighbors, as part of the EMS, agencies shall commit to proactive communications with interested parties. EMSs should support appropriate inclusion of local participation, consistent with the objectives of E.O. 13352 of August, 2004, *Facilitation of Cooperative Conservation*.[1]

## B. Applicability and Schedule

(1) Appropriate organizational level(s) for EMS. Where an agency's environmental issues, including the goals identified in section 2 of the E.O., are best addressed in management of the operational elements of its facilities or organizations, and/or where pursuit of sustainable practices is best carried out at the facility or organizational level, the agency shall ensure that all appropriate facilities or organizations develop, implement, and maintain an EMS.

Where an agency's environmental issues, including the goals identified in the E.O., are primarily represented in the administrative, decision-making, and/or business infrastructure actions of that agency or its component organizations, and/or where pursuit of sustainable practices is best carried out at the agency or component level, the agency shall develop, implement, and maintain an EMS at that level to respond to those issues and opportunities. Where appropriate, agencies may develop, implement, and maintain an EMS at both the organizational or facility level and at the agency or component level.

(2) Tenant, contractor, and concessionaire activities. Where tenant, contractor, and concessionaire activities affect an agency's environmental, transportation, or energy issues, those activities shall be addressed in the development, implementation, and

[1] http://cooperativeconservation.gov

maintenance of the EMS. Requirements shall be included in all appropriate contracts to ensure that the contractors' roles and responsibilities under the EMS are properly addressed. Where an agency owns or manages public lands on which non-governmental entities are present and whose activities are permitted, licensed, or otherwise authorized or regulated, that agency shall, at a minimum, consider the environmental impacts of such activities in its EMS.

(3) Schedules. Facilities previously identified under E.O. 13148 as "appropriate facilities" and already underway with implementation as of the date of the E.O., shall ensure their EMS is fully implemented by December, 2008, and maintained as specified in this chapter of the instructions. Agencies may revise schedules relative to this deadline after consultation with OFEE, specifically in regard to the definition of "fully implemented" requiring an external audit.

Agencies developing additional EMSs as a result of E.O. 13423 and these implementing instructions shall establish an EMS implementation schedule, in consultation with OFEE.

## C. Declaration of Conformance

(1) Full implementation. For the purpose of conformance to E.O. 13423, an EMS shall be considered fully implemented when (1) it has been the subject of a formal audit by a qualified party outside the control or scope of the EMS, (2) audit findings have been recognized by the appropriate level of the agency implementing the EMS, and (3) the appropriate senior manager accountable for implementation of the EMS has declared conformance to EMS requirements.

(2) Audits. Once conformance has been declared, the EMS shall then be audited by a qualified party outside of the control or scope of the EMS at least every three years from the date of the initial declaration. Conformance declaration shall be renewed as appropriate based on agency guidance.

## D. Guidance

EPA, in consultation with OFEE and DOE, will develop guidance on incorporating the new E.O. goals, including the multi-year energy and transportation goals, into EMSs. In addition, EPA, through the Interagency Environmental Leadership Workgroup, will develop additional EMS guidance from time to time, as needed.

Agencies shall continue their EMS development, implementation, and improvement activities and shall not delay in actively addressing the goals set forth in Section 2 of the E.O. pending issuance of the additional EPA guidance.

## III. Compliance Management Plans

*E.O. 13423, Sec. 3(c), excerpted:*
*In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(c) establish within the agency programs for … (ii) environmental compliance review and audit….*

*Lead Agency: EPA*

### A. Applicability

Agencies where no EMS exists shall develop and implement compliance management plans, at all appropriate organizational levels and in accordance with the schedule to be agreed upon between the agency and OFEE. The plans shall be based on the recommendations outlined in the *Environmental Compliance Management Improvement Initiative*, dated October 6, 2004, issued by CEQ and OFEE as directed by the OMB Deputy Director of Management and the President's Management Council. Where an EMS exists at the appropriate organization level, the elements of the Compliance Management Plan shall be part of the EMS, and a separate compliance management plan is not required.

Agency development, implementation, and maintenance of compliance management plans developed under the E.O. and these instructions shall not affect, pre-empt, nor supersede EPA's environmental regulatory and enforcement requirements.

### B. Contents

Each compliance management plan shall formally include the following elements at the appropriate level:

- A clear, sustained, and up-to-date commitment by senior leadership to achieve and maintain environmental compliance. This commitment shall be integrated into agency strategic plans and agency policies.
- Clearly articulated roles and responsibilities related to environmental performance at all levels to ensure accountability for less than desired environmental performance.
- Implementation of an environmental compliance review and audit program that identifies compliance needs and possible root cause of non-compliance.
- Integration of compliance management system information and resource allocation procedures to ensure that audit findings and possible non-compliance root causes are tracked and addressed, including allocation of funding.

## IV. Reporting

> *E.O. 13423, sec. 3(g): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
> *(g) provide reports on agency implementation of this order to the Chairman of the Council on such schedule and in such format as the Chairman of the Council may require.*

Existing reporting procedures in place as of January 24, 2007 shall continue until and unless superseded pursuant to sections 3(g) and 4 of the E.O. This includes statutorily required reporting, such as annual reporting to DOE on facility and fleet energy use, which shall continue in accordance with the established reporting deadlines for those reports.

OFEE and OMB, in consultation with DOE, EPA, USDA, and any other agencies responsible for current statutory and prior executive order reports, will periodically meet to streamline, consolidate, and simplify reporting requirements and address metrics and other elements relevant to the E.O. OFEE and OMB will also coordinate and ensure that reporting requirements for the E.O. do not create redundant or conflicting requirements with E.O. 13352 of August 26, 2004 and E.O. 13327 of February 4, 2004.

## V. Training

> *E.O. 13423, sec. 3(c), excerpted: In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
> *Establish within the agency programs for (i) environmental management training….*

### A. Required Training

Each agency shall ensure that all personnel whose actions are affected by the E.O. receive initial awareness training as well as necessary refresher training on the goals of the E.O and any related instructions, including the environmental impacts of the employees' actions.

The interagency workgroups shall discuss training needs and develop guidance on training, as appropriate.

### B. Scope and Sources

Each agency shall provide environmental management training to its employees. Each agency shall identify the specific training needs of individual employees, which shall be a function of operations and responsibilities related to the E.O. goals and other legal requirements. The training shall address the role of individual employees in ensuring the agency pursues the policy, goals, and objectives set forth in the E.O. and emphasize the benefit of improved environmental, energy, and transportation management to the mission of the organization. Training shall be provided to employees and others, such as contractors, as appropriate, at all levels, and repeated as necessary to ensure improved awareness.

Training can be, but is not limited to, agency-developed training, training provided by a third party such as a contractor or non-profit organization, training provided by another agency, Defense Acquisition University or Federal Acquisition Institute courses, or educational sessions provided during relevant conferences such as the annual Federal environmental symposium, annual GSA Expo, DoD's annual Joint Services Environmental Management conference, FedFleet, or the annual Energy conference.

## VI. Energy and Water Management

*E.O. 13423, sec. 2(a), (b), and (c): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) improve energy efficiency and reduce greenhouse gas emissions of the agency, through reduction of energy intensity by (i) 3 percent annually through the end of FY 2015, or (ii) 30 percent by the end of FY 2015, relative to the baseline of the agency's energy use in FY 2003;*
*(b) ensure that (i) at least half of the statutorily required renewable energy consumed by the agency in a fiscal year comes from new renewable sources, and (ii) to the extent feasible, the agency implements renewable energy generation projects on agency property for agency use;*
*(c) beginning in FY 2008, reduce water consumption intensity, relative to the baseline of the agency's water consumption in FY 2007, through life-cycle cost-effective measures by 2 percent annually through the end of FY 2015 or 16 percent by the end of FY 2015.*

*Sec. 3(a), excerpt: In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) implement within the agency sustainable practices for (i) energy efficiency, greenhouse emissions avoidance or reduction, and petroleum products use reduction, (ii) renewable energy, including bioenergy, (iii) water conservation….*

*Technical Lead: DOE*
*Workgroup: Interagency Energy Management Task Force*

### A. Strategies and Tools

Each agency shall use a variety of energy and water management strategies and tools to meet the goals of the order. Strategies and tools include, but are not limited to, the following:

(1) Funding. The following instruments should be utilized to the maximum extent practical to implement energy efficiency management projects, water management projects, and renewable energy projects with energy conservation measures (ECMs) having long- and short-term payback periods that can be incorporated into life-cycle cost effective contracts. Appropriated funds may be combined with Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs) to leverage government funding and optimize project scope and reductions in energy use and cost of facility operations. Renewable energy measures shall be considered in each ESPC or UESC proposal and be implemented where practical.

- **ESPCs.** ESPCs can facilitate and accelerate completion of large projects that can incorporate ECMs with long- and short-term payback periods, through life-cycle cost-effective performance contracts.

- **UESCs.** UESCs enable projects in States where the utility companies are permitted and encouraged to perform energy savings services, especially in peak load constrained regions of the country.
- **Direct Appropriated Funding.** Appropriations should be requested in annual budget requests and prioritized for application in projects or measures that do not generate savings sufficient to support private sector financing or for application as cost share to ESPCs/UESCs so that larger, more comprehensive projects can be undertaken..
- **Enhanced Use Leasing.** This tool can be utilized for large or long-term renewable and cogeneration projects and where appropriate and authorized.
- **Ratepayer Incentives.** Incentives such as ratepayer supported rebates from public benefit funds or utilities should be utilized at every opportunity to enhance energy reduction.
- **Retention of Funds**. Retention of unused appropriated funds directly related to energy and water cost savings by all agencies can be used for reinvestment in energy or water conservation and sustainable building requirements.

(2) Distributed Generation. Where life-cycle cost effective, each agency shall implement distributed generation systems in new construction or retrofit projects, including renewable systems such as solar electric, solar lighting, geo (or ground coupled) thermal, small wind turbines, as well as other generation systems such as fuel cell, cogeneration, or highly efficient alternatives. In addition, agencies are encouraged to use distributed generation systems when a substantial contribution is made toward enhancing energy reliability or security.

(3) Metering. To the maximum extent practicable, agencies should install metering devices that measure consumption of potable water, electricity, and thermal energy in Federal buildings and other facilities and grounds. Data collected shall be incorporated into Federal tracking systems and be made available to Federal facility managers. Agencies should consider inclusion of metering requirements in all ESPCs and UESCs, as appropriate.

(4) Auditing. Agencies should conduct energy and water audits of at least 10 percent of facility square footage annually and conduct new audits at least every 10 years, thereafter. This audit requirement can be met by audits done in conjunction with ESPC or UESC projects.

(5) Energy Star® Tools. For applicable facilities, agencies should meet Energy Star® Building criteria, and score the energy performance of buildings using the Energy Star® Portfolio Manager rating tool as part of comprehensive facility audits. Agencies may use the Energy Star Portfolio Manager rating tool to track energy and water use in all facilities.

(6) Labs21. Agencies should explore efficiency opportunities in applicable facilities and programs such as the Labs21 partnership to encourage the development of sustainable, high performance, and low-energy laboratories nationwide.

(7) Energy Purchasing. Agencies should purchase electricity and thermal energy from sources that use high efficiency and low-carbon generating technologies in order to reduce greenhouse gas intensity to the extent possible.

(8) Water Efficient Products. Where applicable, agencies should purchase WaterSense (SM) labeled products and choose irrigation contractors who are certified through a WaterSense labeled program.[2]

**B. Exclusions**

The goals set forth in section 2(a) and 2(b) of E.O. 13423 are subject to the exclusions set forth in Section 102(c), (d), and (e) of EPAct 2005 and the DOE Guidelines Establishing Criteria for Excluding Buildings from the Energy Performance Requirements of Section 543 of the National Energy Conservation Policy Act, as amended by EPAct 2005, issued on January 27, 2006.

**C. Additional Guidance**

(1) Energy efficiency. Within 90 days of issuance of these instructions, DOE, in consultation with the Interagency Energy Management Task Force, shall issue or update guidance on:

- Long term planning and strategies for achieving energy goals.
- The renewable energy goal and use of renewable energy credits.
- Use of alternatively financed projects such as ESPCs and UESCs.
- Use of and investment in renewable energy generation.
- Calculating and validating funds available for retention in accordance with Section 102(f) of EPAct 2005.

DOE guidance should clarify that each agency shall begin reporting performance toward the reduction goal for FY 2007, which for that year requires a 6 percent reduction, relative to the FY 2003 baseline, in order to be considered on track to meet 30 percent reduction goal in 2015.

(2) Life-cycle costs. Guidance on measuring life-cycle costs is provided in 10 CFR 436, Subpart A. Additional guidance on measuring cost-effectiveness is provided in 10 CFR 436.18(a), (b), and (c), 436.20, and 436.21.

(3) Water conservation. By September 30, 2007, DOE, in coordination with EPA, shall issue guidance with respect to a 2007 baseline for potable, landscape, and other water consumption intensity and meeting the water conservation goal of Section 2(c) of the E.O.

[2] EPA's WaterSense program is a voluntary public-private partnership that identifies and promotes high-performance products and programs that help preserve the nation's water supply. More information can be found at www.epa.gov/watersense.

## VII. Acquisition and Green Product Designations

*E.O. 13423, sec. 2(d) and (h), excerpted: In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(d) require in agency acquisitions of goods and services (i) use of sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy-efficient, water-efficient, and recycled-content products, and (ii) use of paper of at least 30 percent postconsumer fiber content;*
*(h) ensure that the agency (i) when acquiring an electronic product to meet its requirements, meets at least 95 percent of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product….*

*Sec. 3(a), excerpted, (e), and (f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) implement within the agency sustainable practices for… (iv) acquisition ….*
*(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;*
*(f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order.*

*Technical Lead - Acquisition: Office of Federal Procurement Policy*
*Technical Leads – Product Designations and Guidance: EPA, DOE, and USDA*
*Workgroup: Federal Sustainable Acquisition and Materials Management Practices Workgroup*

### A. Office of Federal Procurement Policy Guidance

Within 90 days of the issuance of the implementing instructions, the Office of Federal Procurement Policy (OFPP) will issue proposed guidance directed to the acquisition community on green product procurement policies and strategies for compliance with the acquisition directives of the E.O. that are coordinated and consistent with other Federal procurement statutes.

### B. Federal Green Purchasing Program

Each agency shall give preference in their procurement and acquisition programs to the purchase of:

- Recycled content products designated in EPA's Comprehensive Procurement Guidelines.
- Energy Star® products identified by DOE and EPA, as well as FEMP-designated energy-efficient products.
- Water-efficient products, including those meeting EPA's WaterSense standards.
- Energy from renewable sources.
- Biobased products designated by the U.S. Department of Agriculture in the BioPreferred program.
- Environmentally preferable products and services, including EPEAT-registered electronic products.
- Alternative fuel vehicles and alternative fuels required by EPAct.
- Products with low or no toxic or hazardous constituents, consistent with section VIII.A of these instructions.
- Non-ozone depleting substances, as identified in EPA's Significant New Alternatives Program.

## C. Green Products Standards, Coordination, and Review

(1) Minimum Content Standard for Printing and Writing Paper. Each agency shall continue to use the following minimum content standards when purchasing printing and writing papers, including office paper products, or support services that include the supply of written documents:

- 30 percent postconsumer fiber.
- 20 percent postconsumer fiber, IF papers containing 30 percent postconsumer fiber are not reasonably available, do not meet reasonable performance requirements, or are only available at an unreasonable price.

EPA shall review the recommended content levels for printing and writing papers in the existing Paper Products Recovered Materials Advisory Notice and adjust the recommendations, where appropriate. EPA shall report its decisions to the FEE.

(2) Review of Comprehensive Procurement Guidelines. EPA shall review existing product designations in the Comprehensive Procurement Guidelines for effectiveness, obsolescence, and consistency with the biobased products designation program, environmentally preferable purchasing program, and Energy Star® and FEMP-designated energy efficient products program. EPA shall delete those designations that are ineffective in meeting the objectives of the Resource Conservation and Recovery Act section 6002 or are obsolete due to market changes.

(3) Environmentally Preferable Products and Services. Each agency shall purchase environmentally preferable products and services, using EPA's Guidance on the Acquisition of Environmentally Preferable Products and Services[3].

[3] For EPA's guidance, go to http://www.epa.gov/epp/pubs/guidance/guidancepage.htm. Guidance on specific products or product categories is found at http://www.epa.gov/epp/pubs/products/products.htm.

EPA will assist Federal agencies to purchase environmentally preferable products and services by developing environmental performance criteria for products and services, providing technical assistance, and reviewing and updating the guidance periodically.

(4) Energy Efficient Standby Power Devices. When purchasing commercially available, off-the-shelf energy-consuming products, agencies shall purchase products that use no more than one watt of standby power as defined and measured by International Electrotechnical Commission (IEC) code 62301, or otherwise meet FEMP specifications for low standby power consumption. If FEMP has not specified a standby power level for a product category, agencies shall purchase products with the lowest standby power consumption available. Agencies shall adhere to these requirements, when life-cycle cost-effective and practicable, and where the relevant product's utility and performance are not compromised as a result.

When designating Energy Star® products, DOE and EPA shall require that such products also meet FEMP specifications for standby power. If FEMP has not specified a standby level for a product category under consideration for Energy Star® qualification, DOE and EPA shall designate that the product meet the lowest standby power level commercially available within the product category.

Agencies which procure electronic devices for resale, such as military exchanges, shall establish a policy which limits procurement and sale of items which do not meet FEMP specifications for low standby power.

**D. Program Coordination, Guidance, and Models**

(1) Coordination. In order to improve Federal stewardship efforts by promoting efficient and cost-effective Federal procurement of green products and services, EPA, DOE, and USDA shall coordinate their individual efforts to designate or identify green products and to provide guidance to Federal agencies for purchasing these products. The objective of such coordination efforts shall be to minimize conflicting green product designations or identifications while maximizing the goals and objectives of each of the green product programs and E.O. 13423. The following programs shall coordinate their efforts:

- Comprehensive Procurement Guidelines (EPA).
- Environmentally Preferable Purchasing (EPA).
- Energy Star (EPA and DOE).
- WaterSense (EPA).
- FEMP-designated products and standby-power devices (DOE).
- Alternative Fuel Vehicles (DOE).
- BioPreferred (USDA).

(2) Guidance. Each of the programs listed in subsection (1) shall provide explicit guidance to Federal agencies for minimizing conflicts in program implementation or for

meeting the requirements of multiple programs (e.g., Energy Star roofing materials containing recovered materials or biobased materials).

(3) Model Programs. EPA, DOE, and USDA shall create and maintain model programs for implementation of these programs and assist other agencies' implementation efforts through outreach, promotion, guidance, and technical assistance.

## VIII. Pollution Prevention and Management of Toxic and Hazardous Materials

*E.O. 13423, Sec. 2(e): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(e) ensure that the agency (i) reduces the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency, (ii) increases diversion of solid waste as appropriate, and (iii) maintains cost-effective waste prevention and recycling programs in its facilities.*

*Sec. 3(a), excerpted, (e), and (f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) implement within the agency sustainable practices for…(v) pollution and waste prevention and recycling, (vi) reduction or elimination of acquisition and use of toxic or hazardous chemicals…*
*(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;*
*(f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order.*

*Technical Lead: EPA*
*Workgroup: Interagency Environmental Leadership Workgroup*

### A. Goals and Plans for Toxic and Hazardous Chemicals

No later than January 24, 2008, each agency, at all appropriate organizational levels including appropriate facilities, organizations, and acquisition activities, shall develop written goals and support actions to identify and reduce the release and use of toxic and hazardous chemicals and materials, including toxic chemicals, hazardous substances, ozone-depleting substances (ODSs), and other pollutants that may result in significant harm to human health or the environment.

In identifying the list of toxic chemicals, hazardous substances, and other pollutants, each agency shall consider:

- Quantity of the chemical or material in use by the agency.
- Human and/or environmental toxicity of the chemical.
- Potential for human and/or environmental exposure to the chemical or material.

- Potential harm to the environment associated with the use or release of the chemical or material, including impacts to air quality, surface water, groundwater, soils/land, and climate systems.
- Persistence of the chemical in the environment.
- Availability of controls to manage identifiable risks.
- Impacts on mission capability and business costs.
- Existing environmental hazard lists such as priority chemicals identified by EPA's Resource Conservation Challenge, and any agency-specific toxic or hazardous chemicals lists.
- The available substitutes for ODSs identified by EPA's Significant New Alternatives Policy Program.
- Contaminants identified by the U.S. Geological Survey as part of its National Reconnaissance of Emerging Contaminants.[4]
- Where appropriate, regional- and watershed-based environmental improvement efforts such as the Chesapeake Bay Prioritized Chemicals of Concern Program, the Great Lakes Bi-national Strategy or local watershed efforts.

**B. Ozone-Depleting Substances**

(1) Alternatives. Each agency shall ensure that it maximizes the use of safe alternatives to ODSs, as approved by the EPA's Significant New Alternatives Policy (SNAP) program.

(2) Agency plans. Agency plans to replace ODSs should target cost effective reduction of environmental risk by eliminating the use of ODSs in new equipment and facilities and by phasing out ODS applications as the existing equipment using those substances reaches its expected service life. In developing ODS-related actions, agencies shall consider (1) maintaining equipment to prevent or fix leaks and (2) replacing leaking equipment when repair is no longer cost-effective or where it is life-cycle cost-effective to replace the equipment.

(3) Revision of personal property management policies. Each agency shall amend its personal property management policies and procedures to preclude the disposal of ODSs removed or reclaimed from its facilities or equipment, including disposal as part of a contract, trade, or donation, without prior coordination with the Department of Defense (DoD).

(4) Transfer to DoD. Where the recovered ODS is a critical requirement for DoD missions, the agency shall transfer the materials to DoD. DoD will bear the costs of such transfer.

[4] The national reconnaissance is an on-going initiative to track contaminants commonly derived from wastewater sources and found to be present in the environment on a global scale. A list of target compounds identified as emerging contaminants can be found at https://toxics.usgs.gov/regional/contaminants.html.

**C. Compliance with the Emergency Planning and Community Right-to-Know Act and the Pollution Prevention Act**

(1) EPCRA reporting. As part of managing toxic and hazardous chemicals as required by sections 2(e)(i) and 3(a)(vi) of the E.O. and meeting the reporting requirements of section 3(g) of the E.O., each agency shall continue to comply with the provisions set forth in sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA), section 6607 of the Pollution Prevention Act (PPA), all implementing regulations, and future amendments to these authorities, in light of applicable EPA guidance and without regard to the Standard Industrial Classification (SIC) or North American Industrial Classification System (NAICS) delineations. Each agency reporting under EPCRA section 313 shall do so using Internet reporting as provided in EPA's EPCRA section 313 guidance.

(2) Contractor reporting. In addition, as required in section 3(e) of the E.O., in contracts providing for contractor performance at Federal facilities, each agency shall include a requirement that the contractor provide the information needed by the Federal facility to comply with EPCRA, PPA, and the E.O.

## IX. Solid Waste Diversion and Recycling

*E.O. 13423, Sec. 2(e): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(e) ensure that the agency…(ii) increases diversion of solid waste as appropriate, and (iii) maintains cost-effective waste prevention and recycling programs in its facilities.*

*Sec. 3(a), excerpted, (e), and (f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) implement within the agency sustainable practices for…(v) pollution and waste prevention and recycling…*
*(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;*
*(f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order.*

*Technical Leads: OFEE, EPA, and GSA*
*Working Group: Federal Sustainable Acquisition and Materials Management Practices Workgroup*

### A. Waste Diversion Goals

By April 24, 2007, each agency shall establish and submit to the FEE solid waste diversion goals to be achieved by December 31, 2010. Where an agency has already established a goal and reported it to the FEE, it shall re-affirm to the FEE that the previous goal is still in effect. Agencies establishing a goal for the first time shall use FY 2000 as the base year.

### B. Recycling Programs

(1) Establishment and maintenance of programs. Each agency shall maintain waste prevention and recycling programs in all of its facilities in the most cost-effective manner possible, and where appropriate, leased facilities and facilities managed by the General Services Administration (GSA). In GSA-managed facilities, GSA shall manage the recycling program, but agencies shall work with GSA to ensure that there is a recycling program that meets the agencies' needs.

(2) Recycling goals. At a minimum, each agency shall strive to meet the national 35 percent recycling goal established by EPA. Those agencies that have a 35 percent or higher recycling rate shall strive for annual continuous improvement. Each agency shall recycle materials to the maximum extent practicable, considering cost, cost avoidance, return on investment, and availability of markets.

(3) Compliance with applicable requirements. Recycling programs shall comply with applicable Federal, State, and local recycling requirements and can include cooperative programs with other Federal facilities, State or local agencies, or non-profit organizations.

(4) Facility recycling coordinators. Each agency also shall continue to designate recycling coordinators for each facility or installation that has a recycling program.

## C. Retention of Recycling Revenue

The GSA Administrator shall continue the program that returns to agencies the proceeds from the sale of recycled materials.

(1) Uses of recycling revenue. Public Law 103-329, section 608, stipulates recycling revenues may be used for:

- Acquisition, waste prevention, and recycling programs, including any programs using the proceeds already in place prior to October 20, 1993.
- Other Federal agency environmental management programs including, but not limited to, those for developing and implementing hazardous waste management and pollution prevention.
- Other employee programs as authorized by law or as deemed appropriate by the head of the Federal agency (e.g., Federal building/agency day-care programs).

It should be noted that this public law does not change the way revenues from precious metals or excessed property are handled.

(2) Other uses of recycling revenue. An agency shall not use recycling revenues for uses other than those enumerated in section 608 of P.L. 103-329 without a written authorization, submitted to the FEE by the agency senior official, that there is a compelling need for such other use. The FEE shall consult with OMB on resolution of the authorization for the other uses.

(3) Programs in non-GSA managed facilities. Each agency in non-GSA managed facilities, to the extent permitted by law, shall continue to implement plans to incorporate incentives for recycling based on retention of the proceeds from the sale of recovered materials, including items requiring demilitarization prior to recycling.

## X. Sustainable Design/High Performance Buildings

*E.O. 13423, sec. 2(f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(f) ensure that (i) new construction and major renovation of agency buildings comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings set forth in the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006), and (ii) 15 percent of the existing Federal capital asset building inventory of the agency as of the end of fiscal year 2015 incorporates the sustainable practices in the Guiding Principles.*

*Sec. 3(a), excerpted, (e), and (f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) implement within the agency sustainable practices for… (vii) high performance construction, lease, operation, and maintenance of buildings ….*
*(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;*
*(f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order.*

*Technical Leads: DOE, GSA, EPA, and OFEE*
*Workgroup: Interagency Sustainability Working Group*

### A. Objectives

Each agency shall pursue the following objectives regarding high performance buildings:

- Reduction in life-cycle cost of facilities' environmental and energy attributes.
- Improvement in energy efficiency, water conservation, and utilization of renewable energy.
- Provision of safe, healthy, and productive built environments.
- Promotion of sustainable environmental stewardship.

To accomplish these objectives, each agency shall locate, design, construct, maintain, and operate its buildings and facilities in a resource-efficient, sustainable, and economically viable manner, consistent with its mission.

**B. Requirements**

(1) New construction and renovation. Beginning with the FY 2007 funding cycle, when planning the funding and design for construction of buildings that meet the agency-defined capital asset threshold, each agency shall meet or exceed statutory goals and address each of the five *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles)*[5]. Written justification must be provided to OFEE and OMB if an agency proposes not to comply.

In order to apply the *Guiding Principles* to building projects, all business cases for new building construction or major renovations, developed per OMB A-11, Part 7, Section 300, shall incorporate the *Guiding Principles* to the greatest extent practicable. These requirements apply to construction of new Federal buildings; new, renegotiation, or extension of leases for Federal occupancy, or major renovation projects.[6]

(2) Existing buildings. In addition, by the end of 2015, agencies shall meet the 15 percent goal in E.O. 13423 section 2(f)(ii) for incorporating the sustainable practices in the *Guiding Principles* into their Federal capital asset building inventory. The 15 percent goal for existing buildings applies to an agency's full building inventory as it exists in FY 2015, including any new buildings brought on line and excluding any unneeded buildings disposed of or sold prior to 2015. Therefore, agencies should strongly consider incorporating sustainable practices into projects underway and selling or disposing of unneeded assets.

(3) High performance building plans. By August 15, 2007, and annually thereafter, each agency shall submit a plan to OMB and OFEE that addresses how the agency will ensure that (1) all new facilities and renovation projects implement design, construction, and maintenance and operation practices in support of the sustainable design/high-performance buildings goals of the E.O. and statutory requirements and (2) existing facilities' maintenance and operation practices in support of the goals of the E.O.

Within 45 days of the issuance of the implementing instructions, OMB will issue guidance identifying required components to be addressed in the agency plans. At a minimum, the plans shall address the following:

- Employment of integrated design principles, optimization of energy efficiency and use of renewable energy, protection and conservation of water, enhancement of indoor environmental quality, and reduction of environmental impacts of materials in accordance with the *Guiding Principles* and the other building and construction-related E.O. 13423 goals and instructions.
- An assessment of policy, criteria, contracts, and other areas, identifying gaps in the agency's sustainable building program.
- Key action items, including major milestones and responsible parties.

[5] The *Guiding Principles* are set forth in the 2006 *Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding.*
[6] The agency determines the threshold for major renovation projects.

In addition, all government-owned military housing shall incorporate the sustainable design/high performance building goals/principles described in section 2(f) of the E.O.

## C. High Performance Federal Buildings Database

Each agency shall report its success stories and lessons learned for at least one major building project per year into the High Performance Federal Buildings Database, www.eere.energy.gov/femp/highperformance/index.cfm, unless the agency does not have an applicable project to report. The Energy Star® rating of each facility's energy performance shall be included in each success story.

## D. Leased Facilities

To the greatest extent practicable, each agency shall include a preference for buildings that meet the goals of the *Guiding Principles* in the selection criteria for acquiring leased buildings. When entering into leases for Federal occupancy, including the renegotiation or extension of existing leases, agencies shall include criteria encouraging lease provisions that support the *Guiding Principles*. Build-to-suit lease solicitations shall incorporate criteria for sustainable design and development, energy efficiency, and verification of building performance in accordance with the *Guiding Principles*.

## E. Technical Guidance

Technical Guidance for implementing the *Guiding Principles* and other best practices developed by the Interagency Sustainability Working Group (ISWG) can be found in the Whole Building Design Guide, www.wbdg.org. Contents of the WBDG include clarification of requirements; related mandates; additional recommendations and considerations; and resources for implementation, including model contract and specification language per the *Federal Green Construction Guide for Specifiers*.

The ISWG shall review the *Guiding Principles* and Technical Guidance periodically for updates and to consider adopting additional principles or goals addressing issues such as conservation plantings, integrated pest management, deconstruction, and siting.

## XI. Vehicle Fleet Management

*E.O. 13423, sec. 2(g): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(g) ensure that, if the agency operates a fleet of at least 20 motor vehicles, the agency, relative to agency baselines for fiscal year 2005, (i) reduces the fleet's total consumption of petroleum products by 2 percent annually through the end of fiscal year 2015, (ii) increases the total fuel consumption that is non-petroleum-based by 10 percent annually, and (iii) uses plug-in hybrid (PIH) vehicles when PIH vehicles are commercially available at a cost reasonably comparable, on the basis of life-cycle cost, to non-PIH vehicles.*

*Sec. 3(a), excerpted, and (e): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) implement within the agency sustainable practices for… (viii) vehicle fleet management ….*
*(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles.*

*Lead Agencies: DOE and GSA*
*Workgroup: INTERFUEL*

### A. Applicability and Exemptions

All agencies that operate 20 or more motor vehicles within the U.S. must comply with these instructions. Each such agency shall, when calculating the replacement or reduction levels required in section 2(g) of the E.O., include fuel use from all vehicles, including light-duty, medium-duty, and heavy-duty vehicles unless such vehicles meet the following exemptions or the agency applies for exemptions in accordance with Section 8 of the E.O. (DOE will determine if vehicles have been properly exempted by auditing the data agencies provide in the Federal Automotive Statistical Tool (FAST)):

- Motor vehicles used for motor vehicle manufacturer product evaluations or tests.
- Law enforcement and emergency vehicles, including those vehicles that are used in an emergency capacity, by the agency, greater than 75 percent of the year. Agencies with vehicles meeting this definition (as approved by DOE) will have a baseline (and related record-keeping) adjustment to reflect this change.
- Military tactical vehicles, defined as motor vehicles (excluding general-purpose motor vehicles) designed to military specification or a commercially designed motor vehicle modified to military specification to meet direct transportation support of combat or tactical operations and protection of nuclear weapons. These vehicles are inherently mission-critical and are used for no other purpose.
- Vehicles owned and operated by the Central Intelligence Agency.

- Vehicles that are not licensed for use on all roads and highways.
- Federally owned vehicles operated solely by Indian nations or state-run Fish and Wildlife services, as applicable.
- Vehicles operated outside of the U.S.

**B. Alternative Fuel Usage**

The requirement to annually increase the use of alternative fuels by 10 percent is measured relative to the prior year's alternative fuel usage levels. If an agency fails to attain the 10 percent increase in any year, in the following year it shall attain both the percentage missed and the 10 percent increase due for that following year.

**C. Petroleum Reduction**

The requirement to reduce covered petroleum use by 2 percent annually is measured relative to the baseline year 2005 petroleum usage levels. In planning for petroleum use reductions, agencies shall assess their petroleum needs across their sub-organizations, taking into account mission needs, and make adjustments where necessary to attain the 2 percent goal on average for the entire agency. If an agency fails to meet the 2 percent petroleum reduction goal in any year, in the following year it shall reduce both the percentage it missed and the 2 percent reduction due for that following year.

**D. Strategies and Tools**

To achieve the petroleum reduction goal of Section 2(g) of the E.O., each agency shall strive to:

- Reduce vehicle miles traveled through such methods as trip consolidation practices, increased use of videoconferencing and web conferencing, and the use of mass transportation/agency shuttles.
- Increase overall fleet fuel economy through acquisition of higher fuel economy vehicles (e.g., smaller sized vehicles, hybrid-electric vehicles, and other advanced technology vehicles).
- "Right-size" its fleet, employing the most fuel-efficient vehicle for the required task and having the appropriate number of vehicles relative to need.
- Employ efficiency strategies such as low rolling resistant tire, synthetic oil, and other technologies.

## E. Plug-In Hybrid Electric Vehicles (PHEVs)

GSA shall issue a fleet order for PHEVs in all vehicle categories when PHEVs become commercially available at a cost reasonably comparable, on the basis of life-cycle cost, to non-PHEVs. Agencies shall consider the use of PHEVs as a strategy to help meet the goals of the E.O. To be considered eligible for dual-fuel vehicle status, PHEVS must meet the alternative fuel definitions of EPAct 1992, as amended by EPAct 2005; to do so, PHEVs will have to meet the minimum driving range as specified by the U.S. Department of Transportation and use electricity generated from a non-petroleum source or from the grid.

## F. Data and Tracking

(1) Agency annual reports. Each covered agency is required to provide compliance data to DOE no later than December 31 of each year, starting with the FY 2007 data and each year thereafter. Each agency shall implement internal policies that will ensure accurate tracking of the vehicle acquisitions and inventory, mileage, fuel consumption by fuel type, and other relevant data. DOE shall specify the reporting format and collection methods for data to be submitted. DOE and GSA shall continue to work together on updating and maintaining FAST to reflect the goals of the E.O. and these instructions.

(2) GSA monthly reports. GSA shall supply to each agency on a monthly basis, by vehicle tag number, fuel use data (by fuel type for all petroleum and alternative fuels) for covered GSA-leased vehicles. Each agency shall track these data to ensure its accuracy and also track comparable data for all covered agency-owned and commercially leased vehicles.

(3) Credits. Federal alternative fuel vehicle (AFV) acquisition requirements are provided in section 303 of EPAct 1992. Vehicles acquired under section 303 means (i) new purchase, (ii) a newly leased vehicle, or (iii) a leased vehicle that replaces an existing leased vehicle. In calculating agency AFV acquisition compliance, each agency shall receive the following credits:

- One credit for each dual-fuel AFV (flexible fuel or bi-fuel), regardless of vehicle size class as long as the vehicle meets the AFV definition of EPAct 1992, as amended by EPAct 2005.
- Two credits for each dedicated light-duty AFV.
- Three credits for each dedicated medium-duty AFV.
- Four credits for each dedicated heavy-duty AFV.

No credit is provided for AFVs that are not licensed for use on all roads and highways.

## G. Requirements for Agencies with Exempt Vehicles and Other Mobility Assets

Within 180 days of the issuance of these instructions, in recognition of the national importance of reducing petroleum use, each agency operating any exempt vehicle listed above or any other petroleum mobility asset such as aircraft, ships and other ground vehicles shall submit recommendations to DOE addressing:

- Potential goals, incentives, and methods to attain measurable reductions in petroleum in non-covered mobility assets.
- Identification of older, inefficient engines and related systems that can be cost effectively replaced or upgraded to reduce oil use.

## H. Guidance

DOE shall issue further guidance from time to time to provide more detailed instructions toward compliance with these measures.

## XII. Electronics Stewardship

*E.O. 13423, sec. 2(h): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(h) ensure that the agency (i) when acquiring an electronic product to meet its requirements, meets at least 95 percent of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product, (ii) enables the Energy Star® feature on agency computers and monitors, (iii) establishes and implements policies to extend the useful life of agency electronic equipment, and (iv) uses environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life.*

*Sec. 3(a), excerpted, and (f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:*
*(a) implement within the agency sustainable practices for… (ix) electronic equipment management ….*
*(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles.*

*Lead Agencies: OFEE and EPA*
*Workgroup: Federal Electronics Stewardship Workgroup*

### A. Life-Cycle Activities

Each agency shall seek to reduce the environmental and energy impacts of its electronic equipment purchase, use, and disposal through continual improvements to the acquisition, design, specifications, material choices, distribution, and use of new electronic equipment, and the reuse, de-manufacturing, and recycling of surplus electronic equipment.

In meeting the electronics stewardship goal of section 2(h) of the E.O., each agency shall:

- Acquire more energy efficient and environmentally sustainable electronic equipment that is cost effective, while maintaining or improving equipment quality and performance.
- Identify and implement best life-cycle management business practices for electronic equipment.
- Reduce the economic and environmental life-cycle costs of Federal electronic equipment.
- Promote growth of the market and infrastructure for the reuse, donation, transfer, sale, de-manufacturing, and recycling of obsolete electronic equipment.

- Coordinate and cooperate with other public and private sector efforts aimed at achieving similar goals.

**B. Electronics Stewardship Plan**

By May 1, 2007, each agency shall develop and submit to OFEE a plan to implement electronics stewardship practices for all eligible owned or leased electronic equipment in support of the goals in section 2(h) of the E.O.[7]

The plan shall:

(1) Address the three life-cycle phases for electronics assets: acquisition, operations and maintenance, and end-of life.

(2) Be developed and implemented in coordination with the energy, environmental, information technology, acquisition, financial and property officers, and facility managers and maintenance personnel, within each agency.

(3) Address how the agency will:

(i) Acquire 95 percent of its electronic products as Electronic Product Environmental Assessment Tool (EPEAT)-registered (for products for which there are EPEAT standards).[8]

a. Agencies will ensure applicable IT contracts incorporate appropriate language for the procurement of EPEAT-registered equipment, and address any future FAR clauses related to EPEAT.

b. Agencies will strive to purchase to EPEAT Silver rated electronic products or higher if available.

(ii) Ensure that Energy Star® features are enabled on 100 percent of computers and monitors or to the maximum degree based on mission needs.[9]

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[7] Federal agencies could determine that some electronic equipment may not be eligible to comply with some or all the goals in section 2(h) of the E.O. because of security, emergency support or other sensitive/mission critical considerations.

[8] The Electronic Product Environmental Assessment Tool (EPEAT) is an easy-to-use tool to help purchasers rank electronics products based on their environmental attributes. For information, assistance and other support on the EPEAT tool, go to: http://www.epeat.net.

[9] For information, assistance and technical support on purchasing Energy Star Compliant Electronics and implementing power management features in PCs, laptops and monitors, go to http://www.energystar.gov/index.cfm?c=ofc_equip.pr_office_equipment.

(iii) Have policies and programs to extend the useful lifetime of electronic equipment. As part of the policies and programs, agencies will:

a. Strive to extend the useful lifetime of electronic equipment to four (4) or more years.

b. Use EPA's guidance to improve the operation and maintenance of electronics products provided at www.federalelectronicschallenge.net/resources/docs/oandm.pdf.

c. Implement procedures to ensure the timely reuse and donation of equipment.

(iv) Ensure that all non-usable electronic products are reused, donated, sold, or recycled using environmentally sound management practices at end of life.

a. Agencies shall comply with GSA procedures for the transfer, donation, sale and recycling of electronic equipment, provided at www.federalelectronicschallenge.net/resources/docs/gsa_eolfact.pdf, as well as any applicable Federal, State an local laws and regulations.

b. Agencies shall use national standards, best management practices, or a national certification program for recyclers. In the absence of national standards, best management practices, or a national certification program for recyclers, agencies shall use EPA's Guidelines for Materials Management for Plug-In To eCycling partners found at www.epa.gov/epaoswer/osw/conserve/plugin/guide.htm.

c. Agencies shall comply with GSA's Computers for Learning Program (CFL) under E.O. 12999 when transferring their computers and other eligible equipment and shall use GSA's CFL website, www.computers.fed.gov, to affect the transfer.

d. Agencies shall ensure applicable IT contracts for leased equipment incorporate adequate language to require that, at the end of the lease period, the equipment is reused, donated, sold, or recycled using environmentally sound management practices.

(4) Address the reporting procedure to be used in measuring progress toward meeting the goals in section 2(h) of the E.O. The Federal Electronics Stewardship Workgroup may provide additional guidance on options for reporting.

## C. Federal Electronics Challenge

Each agency and its facilities shall choose either to become a partner in the Federal Electronics Challenge (FEC), or to implement an equivalent electronics stewardship

program that addresses purchase, operation and maintenance, and end-of-life management strategies for electronic assets consistent with FEC's recommended practices and guidelines.

Information about the FEC, including instructions for how to become a partner, can be found on the FEC website, www.federalelectronicschallenge.net.

## XIII. Definitions

The definitions in the following statutes apply to these instructions: the Resource Conservation and Recovery Act, National Energy Conservation Policy Act, Energy Policy Act of 1992 (EPAct 1992), Energy Policy Act of 2005 (EPAct 2005), Farm Security and Rural Investment Act of 2002, Emergency Planning and Community Right-to-Know Act, and the Pollution Prevention Act.

"Acquisition" means the acquiring of supplies and services as defined in Part 2 the Federal Acquisition Regulation.

"Alternative fuel" is defined by Section 301 of the Energy Policy Act of 1992, as modified from time to time by the Secretary of Energy by rule. See 10 CFR 490.2.

"Alternative fuel vehicle" means a dedicated, flexible-fuel, bi-fuel, or dual-fuel vehicle powered by alternative fuel as defined in section 301 of EPAct 1992.

"Agency" means an executive agency as defined in section 105 of title 5, United States Code, excluding the Government Accountability Office. For the purpose of the E.O., military departments, as defined in 5 U.S.C. 102, are covered under the auspices of DoD.

"Appropriate facility or organization" means any Federal facility or organization that is subject to compliance with environmental regulation or conducts activities that can have a significant impact on the environment, either directly or indirectly, individually or cumulatively, due to the operations of that facility's or organization's mission, processes, or functions.

"Chairman" means the Chairman of CEQ, including in the Chairman's capacity as Director of the Office of Environmental Quality.

"Energy efficiency" means measures, practices, or programs that reduce the energy used by specific devices and systems, typically without adversely affecting the services provided. Such savings are generally achieved by substituting technically more advanced equipment or by improving operating procedures (e.g., operations and maintenance procedures) to produce the same level of end-use services (e.g., lighting, heating, motor drive) with less energy input.

"Energy Intensity" means energy consumption per gross square foot of building space, including industrial and laboratory facilities.

"Energy Savings Performance Contract (ESPC)" means a contract (such as a task ordered by DOE and awarded to an energy service company) that provides for the performance of services for the design, acquisition, financing, installation, testing, operation, and maintenance and repair, of an identified energy, water conservation or renewable energy measure or series of measures at one or more locations. Such contracts shall provide that the contractor must incur costs of implementing energy savings measures, including at

least the cost (if any) incurred in making energy audits, acquiring and installing equipment, and training personnel in exchange for a predetermined share of the value of the energy savings directly resulting from implementation of such measures during the term of the contract. Payment to the contractor is contingent upon realizing a guaranteed stream of future energy and cost savings, with any savings in excess of that guaranteed by the contractor accruing to the Federal government.

"Environmental Management System" means a set of processes and practices that enable an organization to increase its operating efficiency, continually improve overall environmental performance and better manage and reduce its environmental impacts, including those environmental aspects related to energy and transportation functions. EMS implementation reflects accepted quality management principles based on the "Plan, Do, Check, Act," model found in the ISO 14001:2004(E) International Standard and using a standard process to identify and prioritize current activities, establish goals, implement plans to meet the goals, evaluate progress, and make improvements to ensure continual improvement.

"Environmentally preferable" means products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, product, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

"EPA-designated item" means an item designated by EPA in a Comprehensive Procurement Guideline and for which EPA recommended procurement practices, including recovered materials content levels, in a Recovered Materials Advisory Notice (RMAN).

"Facility" means any building, installation, structure, land, and other property owned or operated by, or constructed or manufactured and leased to, the Federal Government, as well as any fixture. This term includes a group of facilities at a single or multiple location(s) managed as an integrated operation, as well as government-owned contractor-operated facilities. For purposes of energy reporting, "facility" excludes land and sites where the utilities are not paid by the reporting agency (i.e., in cases where no separate periodic invoice for utilities is required to be paid).

"Greenhouse gases" carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

"Life cycle cost" means the sum of the present values of capital costs, installation costs, operating costs, maintenance costs, and disposal costs over the lifetime of the project, product, or measure.

"Life-cycle cost-effective" means that the life-cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product).

"New renewable energy" means renewable sources placed in service after January 1, 1999.

"Non-petroleum based fuels," as used in E.O. 13423, means alternative fuels consistent with the definition presented in section 301 of the EPAct 1992.

"Ozone-depleting substances" means any substance designated as a Class I or Class II substance by the EPA in 40 CFR Part 82.

"Pollution prevention" means "source reduction" as defined in the Pollution Prevention Act of 1990 (42 U.S.C. 13102), and other practices that reduce or eliminate the creation of pollutants through (a) increased efficiency in the use of raw materials, energy, water, or other resources, or (b) the protection of natural resources by conservation.

"Recycling" means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion.

"Renewable energy" means energy produced by solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), hydrokinetic, geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

"Solid waste diversion" means non-hazardous solid waste diverted from entering a disposal facility. Waste prevention, reuse, composting, mulching, recycling, and donation are generally accepted waste diversion methods.

"Steering Committee" means the Steering Committee on Strengthening Federal Environmental, Energy, and Transportation Management established under subsection 4(b) of E.O. 13423.

"Sustainable" means of or pertaining to creating and maintaining conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans.

"United States" when used in a geographical sense, means the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the Northern Mariana Islands, and associated territorial waters and airspace.

"Utility Energy Service Contract (UESC)" is a contract between a Federal agency and a local utility providing energy, water, or sewage services, as well as provision of technical services and/or upfront project financing for energy efficiency, water conservation, and renewable energy investments, allowing Federal agencies to pay for the services over time, either on their utility bill, or through a separate agreement.

"Waste prevention" means any change in the design, manufacturing, purchase, or use of materials or products, including packaging, to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

"Water consumption intensity" means water consumption measured in gallons per gross square foot of building space, including industrial and laboratory facilities, and surrounding land.

# APPENDIX – E.O. AND INSTRUCTIONS REQUIREMENTS

| Requirement | Responsible Agency | Time Frame | Deliverable | Other/Comments |
|---|---|---|---|---|
| Prepare and Issue E.O. Implementing Instructions | Council on Environmental Quality | | E.O. implementing instructions | Consultation with OMB and the Steering Committee |
| | Office of Management and Budget | | Instructions for periodic evaluation of progress (scorecards) | Consultation with CEQ and the Steering Committee |
| | Office of Management and Budget | | Instructions for budget and appropriations related to E.O. implementation | Consultation with CEQ and the Steering Committee |
| Designate Senior Official | Agencies | February 23, 2007 | Report designee to CEQ and OMB; authorize designee to monitor agency implementation of the goals and requirements of the E.O | . |
| Establish Steering Committee | Council on Environmental Quality | | Steering Committee chaired by the FEE | Membership is agency senior officials |
| | | | | |
| **Environmental Management Systems** | | | | |
| EMS Guidance | EPA | As needed | Additional EMS guidance | |
| Implement EMS at all appropriate organizational levels | Agencies | On-going | Identification of additional facilities or organizational levels at which EMS are to be implemented.<br><br>Established EMSs. | Primary management approach for addressing environmental aspects of internal agency operations, including environmental aspects of energy |

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| | | | | and transportation functions. |
| Establish environmental management training | Agencies | On-going | Training for appropriate staff in actions needed to implement E.O. 13423 | |
| Establish environmental compliance review and audit programs | Agencies | As agreed with OFEE | | Can be part of EMSs where EMSs exist at the appropriate organizational level |
| **Energy and Water Management** | | | | |
| Issue renewable energy-related guidance | DOE | Within 90 days of issuance of E.O. implementing instructions | Guidance on achieving the renewable energy goal, use of renewable energy credits, use of alternatively finance projects, use of and investment in renewable energy generation, and retention of funds | |
| Issue water conservation-related guidance | DOE | September 30, 2007 | Guidance on FY 2007 baseline and meeting the water conservation goal. | |
| Implement energy efficiency goals:<br>Reduce energy intensity by 3% annually OR 30% relative to FY 2003 baseline | Agencies | Beginning in FY 2007, 3% annually through FY 2015<br><br>OR<br><br>30% by FY 2015 | Reduced energy intensity at Federal buildings; improved energy efficiency; and reduced greenhouse gas emissions | |
| Implement energy goals:<br>Meet at least half of EPAct 2005 renewable energy | Agencies | | Use of renewable energy from sources placed into service after January 1, 1999 | |

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| goals from new sources | | | | |
| Implement energy goals: Implement on-site renewable energy projects | Agencies | | Develop additional on-site renewable energy projects | Where feasible |
| Implement water reduction goals: Reduce water consumption intensity by 2% annually through end of FY 2015 OR 16% by end of FY 2015 | Agencies | Beginning in FY 2008 | Reduce water consumption intensity | FY 2007 baseline |
| **Green Purchasing** | | | | |
| Prepare and issue E.O. implementing instructions | OMB/OFPP | Within 90 days of issuance of E.O. implementing instructions | Proposed OFPP Policy Letter for implementing the acquisition requirements of the E.O. | Consultation with CEQ and the Steering Committee |
| Prepare and issue E.O. implementing instructions | OMB/OFPP | As soon as possible | Federal Acquisition Regulation revisions, as necessary to implement the E.O. | Consultation with CEQ and the Steering Committee |
| Review CPG | EPA | | Review recycled content product designations and delete ineffective or obsolete designations | |
| Program coordination | EPA, DOE, USDA | On-going | Coordinated product designations and guidance | |
| Model green purchasing programs | EPA, DOE, USDA | On-going | Model programs for implementing the green purchasing program components for | |

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| | | | which each respective agency is the technical lead | |
| Purchase green products and services | Agencies | On-going | Acquisition of products and services requiring the supply or use of green products | Recycled content products,<br>Energy efficient products,<br>Renewable energy,<br>Water efficient products,<br>Biobased products,<br>Environmentally preferable products and services,<br>Non-ozone depleting substances,<br>Products with low or no toxic or hazardous constituents |
| Purchase printing and writing paper containing 30% postconsumer fiber | Agencies | On-going | | |
| Contracts for operation of government facilities or fleet require compliance with E.O. requirements | Agencies | Contracts entered into beginning January 24, 2007 | Contracts requiring contractor to comply with the E.O. requirements to the same extent as the agency | |
| Agreements, permits, leases, licenses, or other legally-binding obligations require tenant or concessionaire to take actions | Agencies | Obligations entered into beginning January 24, 2007 | | Requirements are added to the extent the head of the agency determines appropriate |

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| facilitating agency's compliance with E.O. requirements | | | | |
| **Management of Toxic and Hazardous Chemicals and Materials** | | | | |
| Develop toxics and hazardous chemicals and materials reduction plan | Agencies | By January 24, 2008 | Written plan | Include goals and support actions to reduce the release and use of toxic and hazardous chemicals and materials |
| Reduce the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed | Agencies | On-going | Purchase and use of no or low toxic or hazardous chemicals, including products containing toxic or hazardous constituents | |
| Ozone-depleting substances use, recovery, and recycling | Agencies using ODSs or products containing ODSs | On-going | Use of alternatives to ODSs as approved by the EPA SNAP program; revision of personal property management policies; and implementation of program to transfer ODSs to the DoD reserve | |
| TRI Reporting | Agencies | Annually, per schedule in EPA TRI guidance | Annual report on releases of toxic and hazardous materials | |
| **Waste Diversion/Recycling** | | | | |
| Establish and report to FEE solid waste diversion goals | Agencies | April 24, 2007 | Waste diversion goal to be achieved by December 31, 2010 | Establish goal if one not previously established under E.O. 13101 |
| Designate facility | Agencies | On-going | Facility recycling | |

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| recycling coordinators | | | coordinators | |
| Increase diversion of solid waste | Agencies | On-going | Reduce solid waste sent to landfills or incineration | |
| Maintain waste prevention and recycling programs at agency facilities, including leased facilities, in cost-effective manner | Agencies | On-going | Reduce or eliminate product purchases (waste prevention) and increase recycling, donation, reuse, repair | |
| Justification for use of recycling revenue | Senior officials | On-going | Justification to OFEE, for resolution with OMB, of uses of recycling revenue other than those listed in statute | |
| **Sustainable Design/High Performance Buildings** | | | | |
| Issue guidance for sustainable design/high performance buildings plans | OMB | Within 45 days of issuance of implementing instructions | Identification of required components of the plans | |
| Develop and implement sustainable design/high performance buildings implementation plan | Agencies | August 15, 2007 and annually thereafter | Sustainable design/high performance buildings plan | Submitted to OMB and OFEE |
| Review Guidance Principles and Technical Guidance | Interagency Sustainability Working Group | Periodically | Update, expand, and/or revise guiding principles and technical guidance | |
| Report projects to High Performance Federal Buildings Database | Agencies | Annually | Expanded and updated database | At least one major building project annually unless agency does not have an applicable project for a given |

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| | | | | year |
| Ensure that new construction and major renovation of buildings comply with *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings* | Agencies | On-going | Sustainable design incorporated into new Federal building construction and renovation | Guiding Principles set forth in MOU on Federal Leadership in Higher Performance and Sustainable Buildings |
| Ensure that 15% of existing capital asset building inventory incorporates the sustainable practices in the *Guiding Principles* | Agencies | As of the end of FY 2015 | Sustainable design principles incorporated into existing Federal buildings | |
| **Fleet Management** | | | | |
| Submit fleet compliance data to DOE | Agencies | Starting with FY 2007 data, annually, by December 31 | | |
| Specify reporting format and collection methods | DOE | | In consultation with OMB | |
| Provide fuel use data to agencies | GSA | Monthly | Data for covered GSA-leased vehicles | |
| Issue guidance | DOE | As needed | Guidance on compliance with fleet provisions of E.O. and instructions | |
| Reduce fleet vehicle petroleum consumption by | Agencies | Annually through end of FY 2015 | Reduced petroleum consumption in Federal fleet | Applies to fleets of at least 20 vehicles |

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| 2% annually through end of FY 2015 | | | vehicles | |
| Increase fleet vehicle alternative fuel use by 10% annually | Agencies | Annually | | |
| Purchase and use plug-in hybrid electric vehicles | Agencies | When commercially available at a cost reasonably comparable on a life-cycle basis to non plug-in vehicles | Increased usage of plug-in hybrid electric vehicles | |
| Submit recommendations to DOE for reducing petroleum use in exempt mobility assets | Agencies operating exempt vehicles and other mobility assets | Within 180 days of issuance of E.O. implementing instructions | Recommendations for potential goals, incentives, and methods to reduce petroleum use, including replacement of engines | |
| **Electronics Stewardship** | | | | |
| Develop and submit to OFEE an electronics stewardship plan | Agencies | May 1, 2007 | Electronics stewardship plan to implement E.O. and implementing instructions | |
| Join FEC or implement equivalent program | Agencies | | Improved electronics stewardship | |
| Purchase EPEAT-registered electronic products | Agencies | When EPEAT standards exist for electronic products being purchased | Increase purchase and use of environmentally preferable office electronic products | Meet 95% of electronics needs with EPEAT-registered products |
| Enable Energy Star® feature on | Agencies | On-going | Increased energy efficiency of | |

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| computers and monitors | | | agency computers and monitors | |
| Establish and implement policies to extend the useful life of agency electronic equipment | Agencies | On-going | Extend equipment life and reduce quantity of equipment requiring end-of-life management | |
| Implement environmentally sound management of electronic equipment at end of useful life | Agencies | On-going | Increase donation, recycling, and other alternatives to landfilling of electronics | |
| **Other Requirements** | | | | |
| Administer Presidential Leadership Awards | Council on Environmental Quality | Annually | | Federal Environmental Executive provides advisory role |
| Prepare Biennial Report to the President | Federal Environmental Executive; agencies | Every 2 years | Report on the agencies' activities to implement the E.O. | Agencies provide implementation reports as required by CEQ |
| Maintain Office of the Federal Environmental Executive | Federal Environmental Executive | On-going | OFEE | Maintained in EPA for administrative and funding purposes |
| Implement awards program | Agencies | As per agency program schedule | | |
| Provide information and assistance to OMB, CEQ, and FEE | Agencies | As requested | | |

Federal Register

Thursday,
October 8, 2009

# Part VII

# The President

## Executive Order 13514—Federal Leadership in Environmental, Energy, and Economic Performance

Federal Register
Vol. 74, No. 194
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# Presidential Documents

Title3—

The President

## Executive Order 13514 of October 5, 2009

## Federal Leadership in Environmental, Energy, and Economic Performance

By the authority vested in me as President by the Constitution and the laws of the United States of America, and to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of greenhouse gas emissions a priority for Federal agencies, it is hereby ordered as follows:

**Section 1.** *Policy.* In order to create a clean energy economy that will increase our Nation's prosperity, promote energy security, protect the interests of taxpayers, and safeguard the health of our environment, the Federal Government must lead by example. It is therefore the policy of the United States that Federal agencies shall increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; design, construct, maintain, and operate high performance sustainable buildings in sustainable locations; strengthen the vitality and livability of the communities in which Federal facilities are located; and inform Federal employees about and involve them in the achievement of these goals.

It is further the policy of the United States that to achieve these goals and support their respective missions, agencies shall prioritize actions based on a full accounting of both economic and social benefits and costs and shall drive continuous improvement by annually evaluating performance, extending or expanding projects that have net benefits, and reassessing or discontinuing under-performing projects.

Finally, it is also the policy of the United States that agencies' efforts and outcomes in implementing this order shall be transparent and that agencies shall therefore disclose results associated with the actions taken pursuant to this order on publicly available Federal websites.

**Sec. 2.** *Goals for Agencies.* In implementing the policy set forth in section 1 of this order, and preparing and implementing the Strategic Sustainability Performance Plan called for in section 8 of this order, the head of each agency shall:

(a) within 90 days of the date of this order, establish and report to the Chair of the Council on Environmental Quality (CEQ Chair) and the Director of the Office of Management and Budget (OMB Director) a percentage reduction target for agency-wide reductions of scope 1 and 2 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline of the agency's scope 1 and 2 greenhouse gas emissions. Where appropriate, the target shall exclude direct emissions from excluded vehicles and equipment and from electric power produced and sold commercially to other parties in the course of regular business. This target shall be subject to review and approval by the CEQ Chair in consultation with the OMB Director under section 5 of this order. In establishing the target, the agency head shall consider reductions associated with:

(i) reducing energy intensity in agency buildings;

(ii) increasing agency use of renewable energy and implementing renewable energy generation projects on agency property; and

(iii) reducing the use of fossil fuels by:

(A) using low greenhouse gas emitting vehicles including alternative fuel vehicles;

(B) optimizing the number of vehicles in the agency fleet; and

(C) reducing, if the agency operates a fleet of at least 20 motor vehicles, the agency fleet's total consumption of petroleum products by a minimum of 2 percent annually through the end of fiscal year 2020, relative to a baseline of fiscal year 2005;

(b) within 240 days of the date of this order and concurrent with submission of the Strategic Sustainability Performance Plan as described in section 8 of this order, establish and report to the CEQ Chair and the OMB Director a percentage reduction target for reducing agency-wide scope 3 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline of agency scope 3 emissions. This target shall be subject to review and approval by the CEQ Chair in consultation with the OMB Director under section 5 of this order. In establishing the target, the agency head shall consider reductions associated with:

(i) pursuing opportunities with vendors and contractors to address and incorporate incentives to reduce greenhouse gas emissions (such as changes to manufacturing, utility or delivery services, modes of transportation used, or other changes in supply chain activities);

(ii) implementing strategies and accommodations for transit, travel, training, and conferencing that actively support lower-carbon commuting and travel by agency staff;

(iii) greenhouse gas emission reductions associated with pursuing other relevant goals in this section; and

(iv) developing and implementing innovative policies and practices to address scope 3 greenhouse gas emissions unique to agency operations;

(c) establish and report to the CEQ Chair and OMB Director a comprehensive inventory of absolute greenhouse gas emissions, including scope 1, scope 2, and specified scope 3 emissions (i) within 15 months of the date of this order for fiscal year 2010, and (ii) thereafter, annually at the end of January, for the preceding fiscal year.

(d) improve water use efficiency and management by:

(i) reducing potable water consumption intensity by 2 percent annually through fiscal year 2020, or 26 percent by the end of fiscal year 2020, relative to a baseline of the agency's water consumption in fiscal year 2007, by implementing water management strategies including water-efficient and low-flow fixtures and efficient cooling towers;

(ii) reducing agency industrial, landscaping, and agricultural water consumption by 2 percent annually or 20 percent by the end of fiscal year 2020 relative to a baseline of the agency's industrial, landscaping, and agricultural water consumption in fiscal year 2010;

(iii) consistent with State law, identifying, promoting, and implementing water reuse strategies that reduce potable water consumption; and

(iv) implementing and achieving the objectives identified in the stormwater management guidance referenced in section 14 of this order;

(e) promote pollution prevention and eliminate waste by:

(i) minimizing the generation of waste and pollutants through source reduction;

(ii) diverting at least 50 percent of non-hazardous solid waste, excluding construction and demolition debris, by the end of fiscal year 2015;

(iii) diverting at least 50 percent of construction and demolition materials and debris by the end of fiscal year 2015;

(iv) reducing printing paper use and acquiring uncoated printing and writing paper containing at least 30 percent postconsumer fiber;

(v) reducing and minimizing the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of;

(vi) increasing diversion of compostable and organic material from the waste stream;

(vii) implementing integrated pest management and other appropriate landscape management practices;

(viii) increasing agency use of acceptable alternative chemicals and processes in keeping with the agency's procurement policies;

(ix) decreasing agency use of chemicals where such decrease will assist the agency in achieving greenhouse gas emission reduction targets under section 2(a) and (b) of this order; and

(x) reporting in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001 *et seq.*);

(f) advance regional and local integrated planning by:

(i) participating in regional transportation planning and recognizing existing community transportation infrastructure;

(ii) aligning Federal policies to increase the effectiveness of local planning for energy choices such as locally generated renewable energy;

(iii) ensuring that planning for new Federal facilities or new leases includes consideration of sites that are pedestrian friendly, near existing employment centers, and accessible to public transit, and emphasizes existing central cities and, in rural communities, existing or planned town centers;

(iv) identifying and analyzing impacts from energy usage and alternative energy sources in all Environmental Impact Statements and Environmental Assessments for proposals for new or expanded Federal facilities under the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*); and

(v) coordinating with regional programs for Federal, State, tribal, and local ecosystem, watershed, and environmental management;

(g) implement high performance sustainable Federal building design, construction, operation and management, maintenance, and deconstruction including by:

(i) beginning in 2020 and thereafter, ensuring that all new Federal buildings that enter the planning process are designed to achieve zero-net-energy by 2030;

(ii) ensuring that all new construction, major renovation, or repair and alteration of Federal buildings complies with the *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings*, (Guiding Principles);

(iii) ensuring that at least 15 percent of the agency's existing buildings (above 5,000 gross square feet) and building leases (above 5,000 gross square feet) meet the Guiding Principles by fiscal year 2015 and that the agency makes annual progress toward 100-percent conformance with the Guiding Principles for its building inventory;

(iv) pursuing cost-effective, innovative strategies, such as highly reflective and vegetated roofs, to minimize consumption of energy, water, and materials;

(v) managing existing building systems to reduce the consumption of energy, water, and materials, and identifying alternatives to renovation that reduce existing assets' deferred maintenance costs;

(vi) when adding assets to the agency's real property inventory, identifying opportunities to consolidate and dispose of existing assets, optimize the performance of the agency's real-property portfolio, and reduce associated environmental impacts; and

(vii) ensuring that rehabilitation of federally owned historic buildings utilizes best practices and technologies in retrofitting to promote long-term viability of the buildings;

(h) advance sustainable acquisition to ensure that 95 percent of new contract actions including task and delivery orders, for products and services with the exception of acquisition of weapon systems, are energy-

efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives, where such products and services meet agency performance requirements;

(i) promote electronics stewardship, in particular by:

(i) ensuring procurement preference for EPEAT-registered electronic products;

(ii) establishing and implementing policies to enable power management, duplex printing, and other energy-efficient or environmentally preferable features on all eligible agency electronic products;

(iii) employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products;

(iv) ensuring the procurement of Energy Star and FEMP designated electronic equipment;

(v) implementing best management practices for energy-efficient management of servers and Federal data centers; and

(j) sustain environmental management, including by:

(i) continuing implementation of formal environmental management systems at all appropriate organizational levels; and

(ii) ensuring these formal systems are appropriately implemented and maintained to achieve the performance necessary to meet the goals of this order.

**Sec. 3.** *Steering Committee on Federal Sustainability.* The OMB Director and the CEQ Chair shall:

(a) establish an interagency Steering Committee (Steering Committee) on Federal Sustainability composed of the Federal Environmental Executive, designated under section 6 of Executive Order 13423 of January 24, 2007, and Agency Senior Sustainability Officers, designated under section 7 of this order, and that shall:

(i) serve in the dual capacity of the Steering Committee on Strengthening FederalEnvironmental, Energy, and Transportation Management designated by the CEQ Chair pursuant to section 4 of Executive Order 13423;

(ii) advise the OMB Director and the CEQ Chair on implementation of this order;

(iii) facilitate the implementation of each agency's Strategic Sustainability Performance Plan; and

(iv) share information and promote progress towards the goals of this order;

(b) enlist the support of other organizations within the Federal Government to assist the Steering Committee in addressing the goals of this order;

(c) establish and disband, as appropriate, interagency subcommittees of the Steering Committee, to assist the Steering Committee in carrying out its responsibilities;

(d) determine appropriate Federal actions to achieve the policy of section 1 and the goals of section 2 of this order;

(e) ensure that Federal agencies are held accountable for conformance with the requirements of this order; and

(f) in coordination with the Department of Energy's Federal Energy Management Program and the Office of the Federal Environmental Executive designated under section 6 of Executive Order 13423, provide guidance and assistance to facilitate the development of agency targets for greenhouse gas emission reductions required under subsections 2(a) and (b) of this order.

**Sec. 4.** *Additional Duties of the Director of the Office of Management and Budget.* In addition to the duties of the OMB Director specified elsewhere in this order, the OMB Director shall:

(a) review and approve each agency's multi-year Strategic Sustainability Performance Plan under section 8 of this order and each update of the Plan. The Director shall, where feasible, review each agency's Plan concurrently with OMB's review and evaluation of the agency's budget request;

(b) prepare scorecards providing periodic evaluation of Federal agency performance in implementing this order and publish scorecard results on a publicly available website; and

(c) approve and issue instructions to the heads of agencies concerning budget and appropriations matters relating to implementation of this order.

**Sec. 5.** *Additional Duties of the Chair of the Council on Environmental Quality.* In addition to the duties of the CEQ Chair specified elsewhere in this order, the CEQ Chair shall:

(a) issue guidance for greenhouse gas accounting and reporting required under section 2 of this order;

(b) issue instructions to implement this order, in addition to instructions within the authority of the OMB Director to issue under subsection 4(c) of this order;

(c) review and approve each agency's targets, in consultation with the OMB Director, for agency-wide reductions of greenhouse gas emissions under section 2 of this order;

(d) prepare, in coordination with the OMB Director, streamlined reporting metrics to determine each agency's progress under section 2 of this order;

(e) review and evaluate each agency's multi-year Strategic Sustainability Performance Plan under section 8 of this order and each update of the Plan;

(f) assess agency progress toward achieving the goals and policies of this order, and provide its assessment of the agency's progress to the OMB Director;

(g) within 120 days of the date of this order, provide the President with an aggregate Federal Government-wide target for reducing scope 1 and 2 greenhouse gas emissions in absolute terms by fiscal year 2020 relative to a fiscal year 2008 baseline;

(h) within 270 days of the date of this order, provide the President with an aggregate Federal Government-wide target for reducing scope 3 greenhouse gas emissions in absolute terms by fiscal year 2020 relative to a fiscal year 2008 baseline;

(i) establish and disband, as appropriate, interagency working groups to provide recommendations to the CEQ for areas of Federal agency operational and managerial improvement associated with the goals of this order; and

(j) administer the Presidential leadership awards program, established under subsection 4(c) of Executive Order 13423, to recognize exceptional and outstanding agency performance with respect to achieving the goals of this order and to recognize extraordinary innovation, technologies, and practices employed to achieve the goals of this order.

**Sec. 6.** *Duties of the Federal Environmental Executive.* The Federal Environmental Executive designated by the President to head the Office of the Federal Environmental Executive, pursuant to section 6 of Executive Order 13423, shall:

(a) identify strategies and tools to assist Federal implementation efforts under this order, including through the sharing of best practices from successful Federal sustainability efforts; and

(b) monitor and advise the CEQ Chair and the OMB Director on the agencies' implementation of this order and their progress in achieving the order's policies and goals.

**Sec. 7.** *Agency Senior Sustainability Officers.* (a) Within 30 days of the date of this order, the head of each agency shall designate from among

the agency's senior management officials a Senior Sustainability Officer who shall be accountable for agency conformance with the requirements of this order; and shall report such designation to the OMB Director and the CEQ Chair.

(b) The Senior Sustainability Officer for each agency shall perform the functions of the senior agency official designated by the head of each agency pursuant to section 3(d)(i) of Executive Order 13423 and shall be responsible for:

(i) preparing the targets for agency-wide reductions and the inventory of greenhouse gas emissions required under subsections 2(a), (b), and (c) of this order;

(ii) within 240 days of the date of this order, and annually thereafter, preparing and submitting to the CEQ Chair and the OMB Director, for their review and approval, a multi-year Strategic Sustainability Performance Plan (Sustainability Plan or Plan) as described in section 8 of this order;

(iii) preparing and implementing the approved Plan in coordination with appropriate offices and organizations within the agency including the General Counsel, Chief Information Officer, Chief Acquisition Officer, Chief Financial Officer, and Senior Real Property Officers, and in coordination with other agency plans, policies, and activities;

(iv) monitoring the agency's performance and progress in implementing the Plan, and reporting the performance and progress to the CEQ Chair and the OMB Director, on such schedule and in such format as the Chair and the Director may require; and

(v) reporting annually to the head of the agency on the adequacy and effectiveness of the agency's Plan in implementing this order.

**Sec. 8.** *Agency Strategic Sustainability Performance Plan.* Each agency shall develop, implement, and annually update an integrated Strategic Sustainability Performance Plan that will prioritize agency actions based on lifecycle return on investment. Each agency Plan and update shall be subject to approval by the OMB Director under section 4 of this order. With respect to the period beginning in fiscal year 2011 and continuing through the end of fiscal year 2021, each agency Plan shall:

(a) include a policy statement committing the agency to compliance with environmental and energy statutes, regulations, and Executive Orders;

(b) achieve the sustainability goals and targets, including greenhouse gas reduction targets, established under section 2 of this order;

(c) be integrated into the agency's strategic planning and budget process, including the agency's strategic plan under section 3 of the Government Performance and Results Act of 1993, as amended (5 U.S.C. 306);

(d) identify agency activities, policies, plans, procedures, and practices that are relevant to the agency's implementation of this order, and where necessary, provide for development and implementation of new or revised policies, plans, procedures, and practices;

(e) identify specific agency goals, a schedule, milestones, and approaches for achieving results, and quantifiable metrics for agency implementation of this order;

(f) take into consideration environmental measures as well as economic and social benefits and costs in evaluating projects and activities based on lifecycle return on investment;

(g) outline planned actions to provide information about agency progress and performance with respect to achieving the goals of this order on a publicly available Federal website;

(h) incorporate actions for achieving progress metrics identified by the OMB Director and the CEQ Chair;

(i) evaluate agency climate-change risks and vulnerabilities to manage the effects of climate change on the agency's operations and mission in both the short and long term; and

(j) identify in annual updates opportunities for improvement and evaluation of past performance in order to extend or expand projects that have net lifecycle benefits, and reassess or discontinue under-performing projects.

**Sec. 9.** *Recommendations for Greenhouse Gas Accounting and Reporting.* The Department of Energy, through its Federal Energy Management Program, and in coordination with the Environmental Protection Agency, the Department of Defense, the General Services Administration, the Department of the Interior, the Department of Commerce, and other agencies as appropriate, shall:

(a) within 180 days of the date of this order develop and provide to the CEQ Chair recommended Federal greenhouse gas reporting and accounting procedures for agencies to use in carrying out their obligations under subsections 2(a), (b), and (c) of this order, including procedures that will ensure that agencies:

(i) accurately and consistently quantify and account for greenhouse gas emissions from all scope 1, 2, and 3 sources, using accepted greenhouse gas accounting and reporting principles, and identify appropriate opportunities to revise the fiscal year 2008 baseline to address significant changes in factors affecting agency emissions such as reorganization and improvements in accuracy of data collection and estimation procedures or other major changes that would otherwise render the initial baseline information unsuitable;

(ii) consider past Federal agency efforts to reduce greenhouse gas emissions; and

(iii) consider and account for sequestration and emissions of greenhouse gases resulting from Federal land management practices;

(b) within 1 year of the date of this order, to ensure consistent and accurate reporting under this section, provide electronic accounting and reporting capability for the Federal greenhouse gas reporting procedures developed under subsection (a) of this section, and to the extent practicable, ensure compatibility between this capability and existing Federal agency reporting systems; and

(c) every 3 years from the date of the CEQ Chair's issuance of the initial version of the reporting guidance, and as otherwise necessary, develop and provide recommendations to the CEQ Chair for revised Federal greenhouse gas reporting procedures for agencies to use in implementing subsections 2(a), (b), and (c) of this order.

**Sec. 10.** *Recommendations for Sustainable Locations for Federal Facilities.* Within 180 days of the date of this order, the Department of Transportation, in accordance with its Sustainable Partnership Agreement with the Department of Housing and Urban Development and the Environmental Protection Agency, and in coordination with the General Services Administration, the Department of Homeland Security, the Department of Defense, and other agencies as appropriate, shall:

(a) review existing policies and practices associated with site selection for Federal facilities; and

(b) provide recommendations to the CEQ Chair regarding sustainable location strategies for consideration in Sustainability Plans. The recommendations shall be consistent with principles of sustainable development including prioritizing central business district and rural town center locations, prioritizing sites well served by transit, including site design elements that ensure safe and convenient pedestrian access, consideration of transit access and proximity to housing affordable to a wide range of Federal employees, adaptive reuse or renovation of buildings, avoidance of development of sensitive land resources, and evaluation of parking management strategies.

**Sec. 11.** *Recommendations for Federal Local Transportation Logistics.* Within 180 days of the date of this order, the General Services Administration, in coordination with the Department of Transportation, the Department of

the Treasury, the Department of Energy, the Office of Personnel Management, and other agencies as appropriate, shall review current policies and practices associated with use of public transportation by Federal personnel, Federal shuttle bus and vehicle transportation routes supported by multiple Federal agencies, and use of alternative fuel vehicles in Federal shuttle bus fleets, and shall provide recommendations to the CEQ Chair on how these policies and practices could be revised to support the implementation of this order and the achievement of its policies and goals.

**Sec. 12.** *Guidance for Federal Fleet Management.* Within 180 days of the date of this order, the Department of Energy, in coordination with the General Services Administration, shall issue guidance on Federal fleet management that addresses the acquisition of alternative fuel vehicles and use of alternative fuels; the use of biodiesel blends in diesel vehicles; the acquisition of electric vehicles for appropriate functions; improvement of fleet fuel economy; the optimizing of fleets to the agency mission; petroleum reduction strategies, such as the acquisition of low greenhouse gas emitting vehicles and the reduction of vehicle miles traveled; and the installation of renewable fuel pumps at Federal fleet fueling centers.

**Sec. 13.** *Recommendations for Vendor and Contractor Emissions.* Within 180 days of the date of this order, the General Services Administration, in coordination with the Department of Defense, the Environmental Protection Agency, and other agencies as appropriate, shall review and provide recommendations to the CEQ Chair and the Administrator of OMB's Office of Federal Procurement Policy regarding the feasibility of working with the Federal vendor and contractor community to provide information that will assist Federal agencies in tracking and reducing scope 3 greenhouse gas emissions related to the supply of products and services to the Government. These recommendations should consider the potential impacts on the procurement process, and the Federal vendor and contractor community including small businesses and other socioeconomic procurement programs. Recommendations should also explore the feasibility of:

(a) requiring vendors and contractors to register with a voluntary registry or organization for reporting greenhouse gas emissions;

(b) requiring contractors, as part of a new or revised registration under the Central Contractor Registration or other tracking system, to develop and make available its greenhouse gas inventory and description of efforts to mitigate greenhouse gas emissions;

(c) using Federal Government purchasing preferences or other incentives for products manufactured using processes that minimize greenhouse gas emissions; and

(d) other options for encouraging sustainable practices and reducing greenhouse gas emissions.

**Sec. 14.** *Stormwater Guidance for Federal Facilities.* Within 60 days of the date of this order, the Environmental Protection Agency, in coordination with other Federal agencies as appropriate, shall issue guidance on the implementation of section 438 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17094).

**Sec. 15.** *Regional Coordination.* Within 180 days of the date of this order, the Federal Environmental Executive shall develop and implement a regional implementation plan to support the goals of this order taking into account energy and environmental priorities of particular regions of the United States.

**Sec. 16.** *Agency Roles in Support of Federal Adaptation Strategy.* In addition to other roles and responsibilities of agencies with respect to environmental leadership as specified in this order, the agencies shall participate actively in the interagency Climate Change Adaptation Task Force, which is already engaged in developing the domestic and international dimensions of a U.S. strategy for adaptation to climate change, and shall develop approaches through which the policies and practices of the agencies can be made compatible with and reinforce that strategy. Within 1 year of the date of

this order the CEQ Chair shall provide to the President, following consultation with the agencies and the Climate Change Adaptation Task Force, as appropriate, a progress report on agency actions in support of the national adaptation strategy and recommendations for any further such measures as the CEQ Chair may deem necessary.

**Sec. 17.** *Limitations.* (a) This order shall apply to an agency with respect to the activities, personnel, resources, and facilities of the agency that are located within the United States. The head of an agency may provide that this order shall apply in whole or in part with respect to the activities, personnel, resources, and facilities of the agency that are not located within the United States, if the head of the agency determines that such application is in the interest of the United States.

(b) The head of an agency shall manage activities, personnel, resources, and facilities of the agency that are not located within the United States, and with respect to which the head of the agency has not made a determination under subsection (a) of this section, in a manner consistent with the policy set forth in section 1 of this order to the extent the head of the agency determines practicable.

**Sec. 18.** *Exemption Authority.*

(a) The Director of National Intelligence may exempt an intelligence activity of the United States, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 20, to the extent the Director determines necessary to protect intelligence sources and methods from unauthorized disclosure.

(b) The head of an agency may exempt law enforcement activities of that agency, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 20, to the extent the head of an agency determines necessary to protect undercover operations from unauthorized disclosure.

(c) (i) The head of an agency may exempt law enforcement, protective, emergency response, or military tactical vehicle fleets of that agency from the provisions of this order, other than this subsection and section 20.

(ii) Heads of agencies shall manage fleets to which paragraph (i) of this subsection refers in a manner consistent with the policy set forth in section 1 of this order to the extent they determine practicable.

(d) The head of an agency may exempt particular agency activities and facilities from the provisions of this order, other than this subsection and section 20, where it is in the interest of national security. If the head of an agency issues an exemption under this section, the agency must notify the CEQ Chair in writing within 30 days of issuance of the exemption under this subsection. To the maximum extent practicable, and without compromising national security, each agency shall strive to comply with the purposes, goals, and implementation steps in this order.

(e) The head of an agency may submit to the President, through the CEQ Chair, a request for an exemption of an agency activity, and related personnel, resources, and facilities, from this order.

**Sec. 19.** *Definitions.* As used in this order:

(a) ''absolute greenhouse gas emissions'' means total greenhouse gas emissions without normalization for activity levels and includes any allowable consideration of sequestration;

(b) ''agency'' means an executive agency as defined in section 105 of title 5, United States Code, excluding the Government Accountability Office;

(c) ''alternative fuel vehicle'' means vehicles defined by section 301 of the Energy Policy Act of 1992, as amended (42 U.S.C. 13211), and otherwise includes electric fueled vehicles, hybrid electric vehicles, plug-in hybrid electric vehicles, dedicated alternative fuel vehicles, dual fueled alternative

fuel vehicles, qualified fuel cell motor vehicles, advanced lean burn technology motor vehicles, self-propelled vehicles such as bicycles and any other alternative fuel vehicles that are defined by statute;

(d) ''construction and demolition materials and debris'' means materials and debris generated during construction, renovation, demolition, or dismantling of all structures and buildings and associated infrastructure;

(e) ''divert'' and ''diverting'' means redirecting materials that might otherwise be placed in the waste stream to recycling or recovery, excluding diversion to waste-to-energy facilities;

(f) ''energy intensity'' means energy consumption per square foot of building space, including industrial or laboratory facilities;

(g) ''environmental'' means environmental aspects of internal agency operations and activities, including those aspects related to energy and transportation functions;

(h) ''excluded vehicles and equipment'' means any vehicle, vessel, aircraft, or non-road equipment owned or operated by an agency of the Federal Government that is used in:

(i) combat support, combat service support, tactical or relief operations, or training for such operations;
(ii) Federal law enforcement (including protective service and investigation);
(iii) emergency response (including fire and rescue); or
(iv) spaceflight vehicles (including associated ground-support equipment);

(i) ''greenhouse gases'' means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride;

(j) ''renewable energy'' means energy produced by solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project;

(k) ''scope 1, 2, and 3'' mean;

(i) scope 1: direct greenhouse gas emissions from sources that are owned or controlled by the Federal agency;
(ii) scope 2: direct greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency; and
(iii) scope 3: greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities such as vendor supply chains, delivery services, and employee travel and commuting;

(l) ''sustainability'' and ''sustainable'' mean to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations;

(m) ''United States'' means the fifty States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Northern Mariana Islands, and associated territorial waters and airspace;

(n) ''water consumption intensity'' means water consumption per square foot of building space; and

(o) ''zero-net-energy building'' means a building that is designed, constructed, and operated to require a greatly reduced quantity of energy to operate, meet the balance of energy needs from sources of energy that do not produce greenhouse gases, and therefore result in no net emissions of greenhouse gases and be economically viable.

**Sec. 20.** *General Provisions.*

(a) This order shall be implemented in a manner consistent with applicable law and subject to the availability of appropriations.

(b) Nothing in this order shall be construed to impair or otherwise affect the functions of the OMB Director relating to budgetary, administrative, or legislative proposals.

(c) This order is intended only to improve the internal management of the Federal Government and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

THE WHITE HOUSE,
*Washington, October 5, 2009.*

[FR Doc. E9–24518
Filed 10–7–09; 12:30 pm]
Billing Code 3195–W9–P

# Public Law 101508 Nov. 5, 1990
# Omnibus Budget Reconciliation Act of 1990
# (Pollution Prevention Act of 1990)

(References in brackets [ ] are to title 42, United States Code)

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SEC. 6601. [13101] SHORT TITLE.

This subtitle may be cited as the "Pollution Prevention Act of 1990."

SEC. 6602. [13101] FINDINGS AND POLICY.

(a) FINDINGS. The Congress finds that:

(1) The United States of America annually produces millions of tons of pollution and spends tens of billions of dollars per year controlling this pollution.

(2) There are significant opportunities for industry to reduce or prevent pollution at the source through costeffective changes in production, operation, and raw materials use. Such changes offer industry substantial savings in reduced raw material, pollution control, and liability costs as well as help protect the environment and reduce risks to worker health and safety.

(3) The opportunities for source reduction are often not realized because existing egulations, and the industrial resources they require for compliance, focus upon

treatment and disposal, rather than source reduction; existing regulations do not emphasize, multimedia management of pollution; and businesses need information and technical assistance to overcome institutional barriers to the adoption of source reduction practices.

(4) Source reduction is fundamentally different and more desirable than waste management and pollution control. The Environmental Protection Agency needs to address the historical lack of attention to source reduction.

(5) As a first step in preventing pollution through source reduction, the Environmental Protection Agency must establish a source reduction program which collects and disseminates information, provides financial assistance to States, and implements the other activities provided for in this subtitle.

(b) POLICY. The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

SEC. 6603. [13102] DEFINITIONS.

For purposes of this subtitle

(1) The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) The term "Agency" means the Environmental Protection Agency.

(3) The term "toxic chemical" means any substance on the list described in section 313(c) of the Superfund Amendments and Reauthorization Act of 1986.

(4) The term "release" has the same meaning as provided by section 329(8) of the Superfund Amendments and Reauthorization Act of 1986.

(5)(A) The term "source reduction" means any practice which

(i) reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and (ii) reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

(B) The term "source reduction" does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service.

(6) The term "multimedia" means water, air, and land. (7) The term "SIC codes" refers to the 2digit code numbers used for classification of economic activity in the Standard Industrial Classification Manual.

SEC. 6604. [13103] EPA ACTIVITIES. (a) AUTHORITIES. The Administrator shall establish in the Agency an office to carry out the functions of the Administrator under this subtitle. The office shall be independent of the Agency's singlemedium program offices but shall have the authority to review and advise such offices on their activities to promote a multimedia approach to source reduction. The office shall be under the direction of such officer of the Agency as the Administrator shall designate. (b) FUNCTIONS. The Administrator shall develop and implement a strategy to promote source reduction. As part of the strategy, the Administrator shall

(1) establish standard methods of measurement of source reduction;

(2) ensure that the Agency considers the effect of its existing and proposed programs on source reduction efforts and shall review regulations of the Agency prior and subsequent to their proposal to determine their effect on source reduction;

(3) coordinate source reduction activities in each Agency Office and coordinate with appropriate offices to promote source reduction practices in other Federal agencies, and generic research and development on techniques and processes which have broad applicability;

(4) develop improved methods of coordinating, streamlining and assuring public access to data collected under Federal environmental statutes;

(5) facilitate the adoption of source reduction techniques by businesses. This strategy shall include the use of the Source Reduction Clearinghouse and State matching grants provided in this subtitle to foster the exchange of information regarding source reduction techniques, the dissemination of such information to businesses, and the provision of technical assistance to businesses. The strategy shall also consider the capabilities of various businesses to make use of source reduction techniques;

(6) identify, where appropriate, measurable goals which reflect the policy of this subtitle, the tasks necessary to achieve the goals, dates at which the principal tasks are to be accomplished, required resources, organizational responsibilities, and the means by which progress in meeting the goals will be measured;

ENFLEX INFO Note: Pub.L. 101508, Title VI, 6604, Nov. 5, 1990, 104 Stat. 1388322, was enacted without subsec. (b)(7).

(8) establish an advisory panel of technical experts comprised of representatives from industry, the States, and public interest groups, to advise the Administrator on ways to improve collection and dissemination of data; (9) establish a training program on source reduction opportunities, including workshops and guidance documents, for State and Federal permit issuance, enforcement, and inspection officials working within all agency program offices. (10) identify and make recommendations to Congress to eliminate barriers to source reduction including the use of incentives and disincentives; (11) identify opportunities to use Federal procurement to encourage source reduction; (12) develop, test and disseminate model source reduction auditing procedures designed to highlight source reduction opportunities; and (13) establish an annual award program to recognize a company or companies which operate outstanding or innovative source reduction programs.

SEC. 6605. [13104] GRANTS TO STATES FOR STATE TECHNICAL ASSISTANCE PROGRAMS.

(a) GENERAL AUTHORITY. The Administrator shall make matching grants to States for programs to promote the use of source reduction techniques by businesses.

(b) CRITERIA. When evaluating the requests for grants under this section, the Administrator shall consider, among other things, whether the proposed State program would accomplish the following:

(1) Make specific technical assistance available to businesses seeking information about source reduction opportunities, including funding for experts to provide onsite technical advice to business seeking assistance and to assist in the development of source reduction plans. (2) Target assistance to businesses for whom lack of information is an impediment to source reduction. (3) Provide training in source reduction techniques. Such training may be provided through local engineering schools or any other appropriate means.

(c) MATCHING FUNDS. Federal funds used in any State program under this section shall provide no more than 50 per centum of the funds made available to a State in each year of that State's participation in the program.

(d) EFFECTIVENESS. The Administrator shall establish appropriate means for measuring the effectiveness of the State grants made under this section in promoting the use of source reduction techniques by businesses.

(e) INFORMATION. States receiving grants under this section shall make information generated under the grants available to the Administrator.

SEC. 6606. [13105] SOURCE REDUCTION CLEARINGHOUSE.

(a) AUTHORITY. The Administrator shall establish a Source Reduction Clearinghouse to compile information including a computer data base which contains information on management, technical, and operational approaches to source reduction. The Administrator shall use the clearinghouse to -

(1) serve as a center for source reduction technology transfer;

(2) mount active outreach and education programs by the States to further the adoption of source reduction technologies; and

(3) collect and compile information reported by States receiving grants under section 6605 in the operation and success of State source reduction programs.

(b) PUBLIC AVAILABILITY. The Administrator shall make available to the public such information on source reduction as is gathered pursuant to this subtitle and such other pertinent information and analysis regarding source reduction as may be available to the Administrator. The data base shall permit entry and retrieval of information to any person.

SEC. 6607. [13106] SOURCE REDUCTION AND RECYCLING DATA COLLECTION.

(a) REPORTING REQUIREMENTS. Each owner or operator of a facility required to file an annual toxic chemical release form under section 313 of the Superfund Amendments and Reauthorization Act of 1986 ("SARA") for any toxic chemical shall include with each such annual filing a toxic chemical source reduction and recycling report for the preceding [70] calendar year. The toxic chemical source reduction and recycling report shall cover each toxic chemical required to be reported in the annual toxic chemical release form filed by the owner or operator under section 313(c) of that Act. This section shall take effect with the annual report filed under section 313 for the first full calendar year beginning after the enactment of this subtitle.

(b) ITEMS INCLUDED IN REPORT. The toxic chemical source reduction and recycling report required under subsection (a) shall set forth each of the following on a facilitybyfacility basis for each toxic chemical:

(1) The quantity of the chemical entering any waste stream (or otherwise released into the environment) prior to recycling, treatment, or disposal during the calendar year for which the report is filed and the percentage change from the previous year. The quantity reported shall not include any amount reported under paragraph (7). When actual measurements of the quantity of a toxic chemical

entering the waste streams are not readily available, reasonable estimates should be made based on best engineering judgment.

(2) The amount of the chemical from the facility which is recycled (at the facility or elsewhere) during such calendar year, the percentage change from the previous year, and the process of recycling used.

(3) The source reduction practices used with respect to that chemical during such year at he facility. Such practices shall be reported in accordance with the following categories nless the Administrator finds other categories to be more appropriate:

(A) Equipment, technology, process, or procedure modifications.
(B) Reformulation or redesign of products.
(C) Substitution of raw materials.
(D) Improvement in management, training, inventory control, materials handling, or other general operational phases of industrial facilities.

(4) The amount expected to be reported under paragraph (1) and (2) for the two calendar years immediately following the calendar year for which the report is filed. Such amount shall be expressed as a percentage change from the amount reported in paragraphs (1) and (2).

(5) A ratio of production in the reporting year to production in the previous year. The ratio should be calculated to most closely reflect all activities involving the toxic chemical. In specific industrial classifications subject to this section, where a feedstock or some variable other than production is the primary influence on waste characteristics or volumes, the report may provide an index based on that primary variable for each toxic chemical. The Administrator is encouraged to develop production indexes to accommodate individual industries for use on a voluntary basis.

(6) The techniques which were used to identify source reduction opportunities. Techniques listed should include, but are not limited to, employee recommendations, external and internal audits, participative team management, and material balance audits. Each type of source reduction listed under paragraph (3) should be associated with the techniques or multiples of techniques used to identify the source reduction technique.

(7) The amount of any toxic chemical released into the environment which resulted from a catastrophic event, remedial action, or other onetime event, and is not associated with production processes during the reporting year.

(8) The amount of the chemical from the facility which is treated (at the facility or elsewhere) during such calendar year and the percentage change from the

previous year. For the first year of reporting under this subsection, comparison with the previous year is required only to the extent such information is available.

(c) SARA PROVISIONS. The provisions of sections 322, 325(c), and 326 of the Superfund Amendments and Reauthorization Act of 1986 shall apply to the reporting requirements of this section in the same manner as to the reports required under section 313 of that Act. The Administrator may modify the form required for purposes of reporting information under section 313 of that Act to the extent he deems necessary to include the additional information required under this section.

(d) ADDITIONAL OPTIONAL INFORMATION. Any person filing a report under this section for any year may include with the report additional information regarding source reduction, recycling, and other pollution control techniques in earlier years.

(e) AVAILABILITY OF DATA. Subject to section 322 of the Superfund Amendments and Reauthorization Act of 1986, the Administrator shall make data collected under this section publicly available in the same manner as the data collected under section 313 of the Superfund Amendments and Reauthorization Act of 1986.

SEC. 6608. [13107] EPA REPORT.

(a) BIENNIAL REPORTS. The Administrator shall provide Congress with a report within eighteen months after enactment of this subtitle and biennially thereafter, containing a detailed description of the actions taken to implement the strategy to promote source reduction developed under section 4(b) and of the results of such actions. The report shall include an assessment of the effectiveness of the clearinghouse and grant program established under this subtitle in promoting the goals of the strategy, and shall evaluate data gaps and data duplication with respect to data collected under Federal environmental statutes.

(b) SUBSEQUENT REPORTS. Each biennial report submitted under subsection (a) after the first report shall contain each of the following:

(1) An analysis of the data collected under section 6607 on an industrybyindustry basis for not less than five SIC codes or other categories as the Administrator deems appropriate. The analysis shall begin with those SIC codes or other categories of facilities which generate the largest quantities of toxic chemical waste. The analysis shall include an evaluation of trends in source reduction by industry, firm size, production, or other useful means. Each such subsequent report shall cover five SIC codes or other categories which were not covered in a prior report until all SIC codes or other categories have been covered. (2) An analysis of the usefulness and validity of the data collected under section 6607 for measuring trends in source reduction and the adoption of source reduction by business. (3) Identification of regulatory and nonregulatory barriers to source reduction, and of opportunities for using existing regulatory programs, and incentives and disincentives to promote and assist source reduction. (4)

Identification of industries and pollutants that require priority assistance in multi-media source reduction [71] (5) Recommendations as to incentives needed to encourage investment and research and development in source reduction. (6) Identification of opportunities and development of priorities for research and development in source reduction methods and techniques. (7) An evaluation of the cost and technical feasibility, by industry and processes, of source reduction opportunities and current activities and an identification of any industries for which there are significant barriers to source reduction with an analysis of the basis of this identification. (8) An evaluation of methods of coordinating, streamlining, and improving public access to data collected under Federal environmental statutes. (9) An evaluation of data gaps and data duplication with respect to data collected under Federal environmental statutes. In the report following the first biennial report provided for under this subsection, paragraphs (3) through (9) may be included at the discretion of the Administrator.

SEC. 6609. [13108] SAVINGS PROVISIONS.

(a) Nothing in this subtitle shall be construed to modify or interfere with the implementation of title III of the Superfund Amendments and Reauthorization Act of 1986. (b) Nothing contained in this subtitle shall be construed, interpreted or applied to supplant, displace, preempt or otherwise diminish the responsibilities and liabilities under other State or Federal law, whether statutory or common.

SEC. 6610. [13109] AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Administrator $8,000,000 for each of the fiscal years 1991, 1992 and 1993 for functions carried out under this subtitle (other than State Grants), and $8,000,000 for each of the fiscal years 1991, 1992 and 1993, for grant programs to States issued pursuant to section 6605.

paramount interest of the United States to do so. No such exemption shall be granted due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriation. Any exemption shall be for a period not in excess of one year, but additional exemptions may be granted for periods not to exceed one year upon the President's making a new determination. The President shall report each January to the Congress all exemptions from the requirements of this section granted during the preceding calendar year, together with his reason for granting each such exemption. [1]

(b) ADMINISTRATIVE ENFORCEMENT ACTIONS.—(1) The Administrator may commence an administrative enforcement action against any department, agency, or instrumentality of the executive, legislative, or judicial branch of the Federal Government pursuant to the enforcement authorities contained in this Act. The Administrator shall initiate an administrative enforcement action against such a department, agency, or instrumentality in the same manner and under the same circumstances as an action would be initiated against another person. Any voluntary resolution or settlement of such an action shall be set forth in a consent order.

(2) No administrative order issued to such a department, agency, or instrumentality shall become final until such department, agency, or instrumentality has had the opportunity to confer with the Administrator.

(c) LIMITATION ON STATE USE OF FUNDS COLLECTED FROM FEDERAL GOVERNMENT.—Unless a State law in effect on the date of the enactment of the Federal Facility Compliance Act of 1992 or a State constitution requires the funds to be used in a different manner, all funds collected by a State from the Federal Government from penalties and fines imposed for violation of any substantive or procedural requirement referred to in subsection (a) shall be used by the State only for projects designed to improve or protect the environment or to defray the costs of environmental protection or enforcement.

[42 U.S.C. 6961]

FEDERAL PROCUREMENT

SEC. 6002. (a) APPLICATION OF SECTION.—Except as provided in subsection (b), a procuring agency shall comply with the requirements set forth in this section and any regulations issued under this section, with respect to any purchase or acquisition of a procurement item where the purchase price of the item exceeds $10,000 or where the quantity of such items or of functionally equivalent items purchased or acquired in the course of the preceding fiscal year was $10,000 or more.

(b) PROCUREMENT SUBJECT TO OTHER LAW.—Any procurement, by any procuring agency, which is subject to regulations of the Ad-

[1] Section 110 of the Federal Facility Compliance Act (Public Law 102–386) provides:

**SEC. 110. [42 U.S.C. 6965] CHIEF FINANCIAL OFFICER REPORT.**

The Chief Financial Officer of each affected agency shall submit to Congress an annual report containing, to the extent practicable, a detailed description of the compliance activities undertaken by the agency for mixed waste streams, and an accounting of the fines and penalties imposed on the agency for violations involving mixed waste.

ministrator under section 6004 (as promulgated before the date of enactment of this section under comparable provisions of prior law) shall not be subject to the requirements of this section to the extent that such requirements are inconsistent with such regulations.

(c) REQUIREMENTS.—(1) After the date specified in applicable guidelines prepared pursuant to subsection (e) of this section, each procuring agency which procures any items designated in such guidelines shall procure such items composed of the highest percentage of recovered materials practicable (and in the case of paper, the highest percentage of the postconsumer recovered materials referred to in subsection (h)(1) practicable), consistent with maintaining a satisfactory level of competition, considering such guidelines. The decision not to procure such items shall be based on a determination that such procurement items—

(A) are not reasonably available within a reasonable period of time;

(B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies; or

(C) are only available at an unreasonable price. Any determination under subparagraph (B) shall be made on the basis of the guidelines of the Bureau of Standards in any case in which such material is covered by such guidelines.

(2) Agencies that generate heat, mechanical, or electrical energy from fossil fuel in systems that have the technical capability of using energy or fuels derived from solid waste as a primary or supplementary fuel shall use such capability to the maximum extent practicable.

(3)(A) After the date specified in any applicable guidelines prepared pursuant to subsection (e) of this section, contracting offices shall require that vendors—

(i) certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by applicable specifications or other contractual requirements and

(ii) estimate the percentage of the total material utilized for the performance of the contract which is recovered materials.

(B) Clause (ii) of subparagraph (A) applies only to a contract in an amount greater than $100,000.

(d) SPECIFICATIONS.—All Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies shall—

(1) as expeditiously as possible but in any event no later than eighteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, eliminate from such specifications—

(A) any exclusion of recovered materials and

(B) any requirement that items be manufactured from virgin materials; and

(2) within one year after the date of publication of applicable guidelines under subsection (e), or as otherwise specified in such guidelines, assure that such specifications require the use

of recovered materials to the maximum extent possible without jeopardizing the intended end use of the item.

(e) GUIDELINES.—The Administrator, after consultation with the Administrator of General Services, the Secretary of Commerce (acting through the Bureau of Standards), and the Public Printer, shall prepare, and from time to time, revise, guidelines for the use of procuring agencies in complying with the requirements of this section. Such guidelines shall—

(1) designate those items which are or can be produced with recovered materials and whose procurement by procuring agencies will carry out the objectives of this section, and in the case of paper, provide for maximizing the use of postconsumer recovered materials referred to in subsection (h)(1); and

(2) set forth recommended practices with respect to the procurement of recovered materials and items containing such materials and with respect to certification by vendors of the percentage of recovered materials used,

and shall provide information as to the availability, relative price, and performance of such materials and items and where appropriate shall recommend the level of recovered material to be contained in the procured product. The Administrator shall prepare final guidelines for paper within one hundred and eighty days after the enactment of the Hazardous and Solid Waste Amendments of 1984, and for three additional product categories (including tires) by October 1, 1985. In making the designation under paragraph (1), the Administrator shall consider, but is not limited in his considerations, to—

(A) the availability of such items;

(B) the impact of the procurement of such items by procuring agencies on the volume of solid waste which must be treated, stored or disposed of;

(C) the economic and technological feasibility of producing and using such items; and

(D) other uses for such recovered materials.

(f) PROCUREMENT OF SERVICES.—A procuring agency shall, to the maximum extent practicable, manage or arrange for the procurement of solid waste management services in a manner which maximizes energy and resource recovery.

(g) EXECUTIVE OFFICE.—The Office of Procurement Policy in the Executive Office of the President, in cooperation with the Administrator, shall implement the requirements of this section. It shall be the responsibility of the Office of Procurement Policy to coordinate this policy with other policies for Federal procurement, in such a way as to maximize the use of recovered resources, and to, every two years beginning in 1984, report to the Congress on actions taken by Federal agencies and the progress made in the implementation of this section, including agency compliance with subsection (d).

(h) DEFINITION.—As used in this section, in the case of paper products, the term "recovered materials" includes—

(1) postconsumer materials such as—

(A) paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item,

including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; and

(B) all paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste, and

(2) manufacturing, forest residues, and other wastes such as—

(A) dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(B) finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others;

(C) fibrous byproducts of harvesting, manufacturing, extractive, or wood-cutting processes, flax, straw, linters, bagasse, slash, and other forest residues;

(D) wastes generated by the conversion of goods made from fibrous material (that is, waste rope from cordage manufacture, textile mill waste, and cuttings); and

(E) fibers recovered from waste water which otherwise would enter the waste stream.

(i) PROCUREMENT PROGRAM.—(1) Within one year after the date of publication of applicable guidelines under subsection (e), each procuring agency shall develop an affirmative procurement program which will assure that items composed of recovered materials will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement law.

(2) Each affirmative procurement program required under this subsection shall, at a minimum, contain—

(A) a recovered materials preference program;

(B) an agency promotion program to promote the preference program adopted under subparagraph (A);

(C) a program for requiring estimates of the total percentage of recovered material utilized in the performance of a contract; certification of minimum recovered material content actually utilized, where appropriate; and reasonable verification procedures for estimates and certifications; and

(D) annual review and monitoring of the effectiveness of an agency's affirmative procurement program.

In the case of paper, the recovered materials preference program required under subparagraph (A) shall provide for the maximum use of the post consumer recovered materials referred to in subsection (h)(1).

(3) In developing the preference program, the following options shall be considered for adoption:

(A) Case-by-Case Policy Development: Subject to the limitations of subsection (c)(1) (A) through (C), a policy of awarding contracts to the vendor offering an item composed of the highest percentage of recovered materials practicable (and in the case of paper, the highest percentage of the post consumer recovered materials referred to in subsection (h)(1)). Subject to such limitations, agencies may make an award to a vendor offering items with less than the maximum recovered materials content.

(B) Minimum Content Standards: Minimum recovered materials content specifications which are set in such a way as to assure that the recovered materials content (and in the case of paper, the content of post consumer materials referred to in subsection (h)(1)) required is the maximum available without jeopardizing the intended end use of the item, or violating the limitations of subsection (c)(1) (A) through (C).

Procuring agencies shall adopt one of the options set forth in subparagraphs (A) and (B) or a substantially equivalent alternative, for inclusion in the affirmative procurement program.

[42 U.S.C. 6962]

COOPERATION WITH THE ENVIRONMENTAL PROTECTION AGENCY

SEC. 6003. (a) GENERAL RULE.—All Federal agencies shall assist the Administrator in carrying out his functions under this Act and shall promptly make available all requested information concerning past or present Agency waste management practices and past or present Agency owned, leased, or operated solid or hazardous waste facilities. This information shall be provided in such format as may be determined by the Administrator.

(b) INFORMATION RELATING TO ENERGY AND MATERIALS CONSERVATION AND RECOVERY.—The Administrator shall collect, maintain, and disseminate information concerning the market potential of energy and materials recovered from solid waste, including materials obtained through source separation, and information concerning the savings potential of conserving resources contributing to the waste stream. The Administrator shall identify the regions in which the increased substitution of such energy for energy derived from fossil fuels and other sources is most likely to be feasible, and provide information on the technical and economic aspects of developing integrated resource conservation or recovery systems which provide for the recovery of source-separated materials to be recycled or the conservation of resources. The Administrator shall utilize the authorities of subsection (a) in carrying out this subsection.

[42 U.S.C. 6963]

APPLICABILITY OF SOLID WASTE DISPOSAL GUIDELINES TO EXECUTIVE AGENCIES

SEC. 6004. (a) COMPLIANCE.—(1) If—

(A) an executive agency (as defined in section 105 of title 5, United States Code) or any unit of the legislative branch of the Federal Government has jurisdiction over any real prop-

energy savings due to utility contract aggregation; and

"(III) the measurement and verification protocols of the Department of Energy;

"(ii) include recommendations concerning the amount of funds and the number of trained personnel necessary to gather and use the metering information to track and reduce energy use;

"(iii) establish priorities for types and locations of buildings to be metered based on cost-effectiveness and a schedule of one or more dates, not later than 1 year after the date of issuance of the guidelines, on which the requirements specified in paragraph (1) shall take effect; and

"(iv) establish exclusions from the requirements specified in paragraph (1) based on the de minimis quantity of energy use of a Federal building, industrial process, or structure.

"(3) PLAN.—Not later than 6 months after the date guidelines are established under paragraph (2), in a report submitted by the agency under section 548(a), each agency shall submit to the Secretary a plan describing how the agency will implement the requirements of paragraph (1), including (A) how the agency will designate personnel primarily responsible for achieving the requirements and (B) demonstration by the agency, complete with documentation, of any finding that advanced meters or advanced metering devices, as defined in paragraph (1), are not practicable.". Deadline.

**SEC. 104. PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.**

(a) REQUIREMENTS.—Part 3 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8251 et seq.), as amended by section 101, is amended by adding at the end the following:

**"SEC. 553. FEDERAL PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.** 42 USC 8259b.

"(a) DEFINITIONS.—In this section:

"(1) AGENCY.—The term 'agency' has the meaning given that term in section 7902(a) of title 5, United States Code.

"(2) ENERGY STAR PRODUCT.—The term 'Energy Star product' means a product that is rated for energy efficiency under an Energy Star program.

"(3) ENERGY STAR PROGRAM.—The term 'Energy Star program' means the program established by section 324A of the Energy Policy and Conservation Act.

"(4) FEMP DESIGNATED PRODUCT.—The term 'FEMP designated product' means a product that is designated under the Federal Energy Management Program of the Department of Energy as being among the highest 25 percent of equivalent products for energy efficiency.

"(5) PRODUCT.—The term 'product' does not include any energy consuming product or system designed or procured for combat or combat-related missions.

"(b) PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.—

"(1) REQUIREMENT.—To meet the requirements of an agency for an energy consuming product, the head of the agency shall, except as provided in paragraph (2), procure—

"(A) an Energy Star product; or

"(B) a FEMP designated product.

"(2) EXCEPTIONS.—The head of an agency is not required to procure an Energy Star product or FEMP designated product under paragraph (1) if the head of the agency finds in writing that—

"(A) an Energy Star product or FEMP designated product is not cost-effective over the life of the product taking energy cost savings into account; or

"(B) no Energy Star product or FEMP designated product is reasonably available that meets the functional requirements of the agency.

"(3) PROCUREMENT PLANNING.—The head of an agency shall incorporate into the specifications for all procurements involving energy consuming products and systems, including guide specifications, project specifications, and construction, renovation, and services contracts that include provision of energy consuming products and systems, and into the factors for the evaluation of offers received for the procurement, criteria for energy efficiency that are consistent with the criteria used for rating Energy Star products and for rating FEMP designated products.

"(c) LISTING OF ENERGY EFFICIENT PRODUCTS IN FEDERAL CATALOGS.—Energy Star products and FEMP designated products shall be clearly identified and prominently displayed in any inventory or listing of products by the General Services Administration or the Defense Logistics Agency. The General Services Administration or the Defense Logistics Agency shall supply only Energy Star products or FEMP designated products for all product categories covered by the Energy Star program or the Federal Energy Management Program, except in cases where the agency ordering a product specifies in writing that no Energy Star product or FEMP designated product is available to meet the buyer's functional requirements, or that no Energy Star product or FEMP designated product is cost-effective for the intended application over the life of the product, taking energy cost savings into account.

Standards.

Deadline.

"(d) SPECIFIC PRODUCTS.—(1) In the case of electric motors of 1 to 500 horsepower, agencies shall select only premium efficient motors that meet a standard designated by the Secretary. The Secretary shall designate such a standard not later than 120 days after the date of the enactment of this section, after considering the recommendations of associated electric motor manufacturers and energy efficiency groups.

"(2) All Federal agencies are encouraged to take actions to maximize the efficiency of air conditioning and refrigeration equipment, including appropriate cleaning and maintenance, including the use of any system treatment or additive that will reduce the electricity consumed by air conditioning and refrigeration equipment. Any such treatment or additive must be—

"(A) determined by the Secretary to be effective in increasing the efficiency of air conditioning and refrigeration equipment without having an adverse impact on air conditioning performance (including cooling capacity) or equipment useful life;

"(B) determined by the Administrator of the Environmental Protection Agency to be environmentally safe; and

"(C) shown to increase seasonal energy efficiency ratio (SEER) or energy efficiency ratio (EER) when tested by the

National Institute of Standards and Technology according to Department of Energy test procedures without causing any adverse impact on the system, system components, the refrigerant or lubricant, or other materials in the system.

Results of testing described in subparagraph (C) shall be published in the Federal Register for public review and comment. For purposes of this section, a hardware device or primary refrigerant shall not be considered an additive.

Federal Register, publication.

"(e) REGULATIONS.—Not later than 180 days after the date of the enactment of this section, the Secretary shall issue guidelines to carry out this section.".

(b) CONFORMING AMENDMENT.—The table of contents of the National Energy Conservation Policy Act is further amended by inserting after the item relating to section 552 the following new item:

"Sec. 553. Federal procurement of energy efficient products.".

**SEC. 105. ENERGY SAVINGS PERFORMANCE CONTRACTS.**

(a) EXTENSION.—Section 801(c) of the National Energy Conservation Policy Act (42 U.S.C. 8287(c)) is amended by striking "2006" and inserting "2016".

(b) EXTENSION OF AUTHORITY.—Any energy savings performance contract entered into under section 801 of the National Energy Conservation Policy Act (42 U.S.C. 8287) after October 1, 2003, and before the date of enactment of this Act, shall be considered to have been entered into under that section.

42 USC 8257 note.

**SEC. 106. VOLUNTARY COMMITMENTS TO REDUCE INDUSTRIAL ENERGY INTENSITY.**

42 USC 15811.

(a) DEFINITION OF ENERGY INTENSITY.—In this section, the term "energy intensity" means the primary energy consumed for each unit of physical output in an industrial process.

(b) VOLUNTARY AGREEMENTS.—The Secretary may enter into voluntary agreements with one or more persons in industrial sectors that consume significant quantities of primary energy for each unit of physical output to reduce the energy intensity of the production activities of the persons.

(c) GOAL.—Voluntary agreements under this section shall have as a goal the reduction of energy intensity by not less than 2.5 percent each year during the period of calendar years 2007 through 2016.

(d) RECOGNITION.—The Secretary, in cooperation with other appropriate Federal agencies, shall develop mechanisms to recognize and publicize the achievements of participants in voluntary agreements under this section.

(e) TECHNICAL ASSISTANCE.—A person that enters into an agreement under this section and continues to make a good faith effort to achieve the energy efficiency goals specified in the agreement shall be eligible to receive from the Secretary a grant or technical assistance, as appropriate, to assist in the achievement of those goals.

(f) REPORT.—Not later than each of June 30, 2012, and June 30, 2017, the Secretary shall submit to Congress a report that—

(1) evaluates the success of the voluntary agreements under this section; and

(2) provides independent verification of a sample of the energy savings estimates provided by participating firms.

(B) hydrogen derived from biomass or water using an energy source described in subparagraph (A).

(5) RURAL SMALL BUSINESS.—The term "rural small business" has the meaning that the Secretary shall prescribe by regulation.

(6) SECRETARY.—The term "Secretary" means the Secretary of Agriculture.

7 USC 8102.

**SEC. 9002. FEDERAL PROCUREMENT OF BIOBASED PRODUCTS.**

(a) APPLICATION OF SECTION.—Except as provided in subsection (c), each Federal agency shall comply with the requirements set forth in this section and any regulations issued under this section, with respect to any purchase or acquisition of a procurement item where the purchase price of the item exceeds $10,000 or where the quantity of such items or of functionally equivalent items purchased or acquired in the course of the preceding fiscal year was $10,000 or more.

(b) PROCUREMENT SUBJECT TO OTHER LAW.—Any procurement, by any Federal agency, which is subject to regulations of the Administrator under section 6002 of the Solid Waste Disposal Act (42 U.S.C. 6962), shall not be subject to the requirements of this section to the extent that such requirements are inconsistent with such regulations.

(c) PROCUREMENT PREFERENCE.—(1) Except as provided in paragraph (2), after the date specified in applicable guidelines prepared pursuant to subsection (e) of this section, each Federal agency which procures any items designated in such guidelines shall, in making procurement decisions, give preference to such items composed of the highest percentage of biobased products practicable, consistent with maintaining a satisfactory level of competition, considering such guidelines.

(2) AGENCY FLEXIBILITY.—Notwithstanding paragraph (1), an agency may decide not to procure such items if the agency determines that the items—

(A) are not reasonably available within a reasonable period of time;

(B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies; or

(C) are available only at an unreasonable price.

(3) After the date specified in any applicable guidelines prepared pursuant to subsection (e) of this section, contracting offices shall require that, with respect to biobased products, vendors certify that the biobased products to be used in the performance of the contract will comply with the applicable specifications or other contractual requirements.

(d) SPECIFICATIONS.—All Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies shall, within one year after the date of publication of applicable guidelines under subsection (e), or as otherwise specified in such guidelines, assure that such specifications require the use of biobased products consistent with the requirements of this section.

(e) GUIDELINES.—

(1) IN GENERAL.—The Secretary, after consultation with the Administrator, the Administrator of General Services, and the Secretary of Commerce (acting through the Director of

the National Institute of Standards and Technology), shall prepare, and from time to time revise, guidelines for the use of procuring agencies in complying with the requirements of this section. Such guidelines shall—

(A) designate those items which are or can be produced with biobased products and whose procurement by procuring agencies will carry out the objectives of this section;

(B) set forth recommended practices with respect to the procurement of biobased products and items containing such materials and with respect to certification by vendors of the percentage of biobased products used; and

(C) provide information as to the availability, relative price, performance, and environmental and public health benefits, of such materials and items and where appropriate shall recommend the level of biobased material to be contained in the procured product.

(2) CONSIDERATIONS.—In making the designation under paragraph (1)(A), the Secretary shall, at a minimum, consider—

(A) the availability of such items; and

(B) the economic and technological feasibility of using such items, including life cycle costs.

(3) FINAL GUIDELINES.—The Secretary shall prepare final guidelines under this section within 180 days after the date of enactment of this Act. Deadline.

(f) OFFICE OF FEDERAL PROCUREMENT POLICY.—The Office of Federal Procurement Policy, in cooperation with the Secretary, shall implement the requirements of this section. It shall be the responsibility of the Office of Federal Procurement Policy to coordinate this policy with other policies for Federal procurement to implement the requirements of this section, and, every two years beginning in 2003, to report to the Congress on actions taken by Federal agencies and the progress made in the implementation of this section, including agency compliance with subsection (d). Reports.

(g) PROCUREMENT PROGRAM.—(1) Within one year after the date of publication of applicable guidelines under subsection (e), each Federal agency shall develop a procurement program which will assure that items composed of biobased products will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement law. Deadline.

(2) Each procurement program required under this subsection shall, at a minimum, contain—

(A) a biobased products preference program;

(B) an agency promotion program to promote the preference program adopted under subparagraph (A); and

(C) annual review and monitoring of the effectiveness of an agency's procurement program.

(3) In developing the preference program, the following options shall be considered for adoption:

(A) CASE-BY-CASE POLICY DEVELOPMENT.—Subject to the limitations of subsection (c)(2) (A) through (C), a policy of awarding contracts to the vendor offering an item composed of the highest percentage of biobased products practicable. Subject to such limitations, agencies may make an award to a vendor offering items with less than the maximum biobased products content.

(B) MINIMUM CONTENT STANDARDS.—Minimum biobased products content specifications which are set in such a way

as to assure that the biobased products content required is consistent with the requirements of this section, without violating the limitations of subsection (c)(2) (A) through (C).

Federal agencies shall adopt one of the options set forth in subparagraphs (A) and (B) or a substantially equivalent alternative, for inclusion in the procurement program.

(h) LABELING.—

(1) IN GENERAL.—The Secretary, in consultation with the Administrator, shall establish a voluntary program under which the Secretary authorizes producers of biobased products to use the label "U.S.D.A. Certified Biobased Product".

Deadline.

(2) ELIGIBILITY CRITERIA.—Within one year after the date of enactment of this Act, the Secretary, in consultation with the Administrator, shall issue criteria for determining which products may qualify to receive the label under paragraph (1). The criteria shall encourage the purchase of products with the maximum biobased content, and should, to the maximum extent possible, be consistent with the guidelines issued under subsection (e).

(3) USE OF THE LABEL.—The Secretary shall ensure that the label referred to in paragraph (1) is used only on products that meet the criteria issued pursuant to paragraph (2).

(4) RECOGNITION.—The Secretary shall establish a voluntary program to recognize Federal agencies and private entities that use a substantial amount of biobased products.

(i) LIMITATION.—Nothing in this section shall apply to the procurement of motor vehicle fuels or electricity.

(j) FUNDING.—

(1) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out this section.

(2) FUNDING FOR TESTING OF BIOBASED PRODUCTS.—

(A) IN GENERAL.—Of the funds of the Commodity Credit Corporation, the Secretary shall use $1,000,000 for each of fiscal years 2002 through 2007 to support testing of biobased products to carry out this section.

(B) USE OF FUNDS.—Amounts made available under subparagraph (A) may be used to support contracts or cooperative agreements with entities that have experience and special skills to conduct such testing.

(C) PRIORITY.—At the discretion of the Secretary, the Secretary may give priority to the testing of products for which private sector firms provide cost sharing for the testing.

7 USC 8103.

**SEC. 9003. BIOREFINERY DEVELOPMENT GRANTS.**

(a) PURPOSE.—The purpose of this section is to assist in the development of new and emerging technologies for the use of biomass, including lignocellulosic biomass, so as to—

(1) develop transportation and other fuels, chemicals, and energy from renewable sources;

(2) increase the energy independence of the United States;

(3) provide beneficial effects on conservation, public health, and the environment;

(4) diversify markets for raw agricultural and forestry products; and

# CONSOLIDATED RECOVERED MATERIALS ADVISORY NOTICE (RMAN) FOR THE COMPREHENSIVE PROCUREMENT GUIDELINE (CPG)

**Compiled December 1997**
**(Revised March 1998, June 1998, January 2000, April 2004, September 2007)**

**U.S. Environmental Protection Agency**
**Office of Resource Conservation and Recovery**
**(Formerly Office of Solid Waste)**
**Office of Solid Waste and Emergency Response**

## CONSOLIDATED RECOVERED MATERIALS ADVISORY NOTICE (RMAN)

EPA's Comprehensive Procurement Guideline (CPG) designates recycled content products that government agencies should buy. EPA publishes purchasing guidance and recommendations for recycled content levels in Recovered Material Advisory Notices (RMANs) that accompany each CPG, and updates its guidance annually. For the convenience of procurement officials, this document represents a compilation of the five RMANs published by EPA to date. The *Federal Register* citations are as follows:

| | |
|---|---|
| RMAN I: | 60 FR 21386, May 1, 1995 |
| Paper Products RMAN: | 61 FR 26986, May 29, 1996 |
| RMAN II: | 62 FR 60995, November 13, 1997 |
| Paper Products RMAN II: | 63 FR 31214, June 8, 1998 |
| RMAN III: | 65 FR 3082, January 19, 2000 |
| RMAN IV: | 69 FR 24039, April 30, 2004 |
| RMAN V: | 72 FR 52475, September 14, 2007 |

EPA has designated the following items in eight categories:

Paper and Paper Products
- Printing and Writing Papers
- Newsprint
- Sanitary Tissue Products
- Paperboard and Packaging
- Miscellaneous Paper Products

Vehicular Products
- Re-refined Lubricating Oil
- Retread Tires
- Engine Coolants
- Rebuilt Vehicular Parts

Construction Products
- Building Insulation
- Structural Fiberboard
- Laminated Paperboard
- Cement and Concrete with Coal Fly Ash
- Cement and Concrete with Ground Granulated Blast Furnace Slag
- Cement and Concrete with Cenospheres
- Cement and Concrete with Silica Fume
- Polyester Carpet
- Floor Tiles and Patio Blocks
- Shower and Restroom Dividers/Partitions
- Consolidated and Reprocessed Latex Paint
- Carpet Cushion
- Flowable Fill
- Railroad Grade Crossing Surfaces
- Modular Threshold Ramps
- Nonpressure Pipe

Transportation Products
- Temporary Traffic Control Devices
- Parking Stops
- Channelizers
- Delineators
- Flexible Delineators

Park and Recreation Products
- Playground Surfaces and Running Tracks
- Plastic Fencing
- Park Benches and Picnic Tables
- Playground Equipment

Landscaping Products
- Hydraulic Mulch
- Garden and Soaker Hoses
- Lawn and Garden Edging
- Plastic Lumber Landscaping Timbers and Posts
- Compost Made from Recovered Organic Materials
- Fertilizer Made from Recovered Organic Materials

Non-Paper Office Products
- Office Recycling Containers
- Office Waste Receptacles
- Plastic Desktop Accessories
- Toner Cartridges
- Binders
- Plastic Trash Bags
- Printer Ribbons
- Plastic Envelopes
- Solid Plastic Binders
- Plastic Clipboards
- Plastic File Folders
- Plastic Clip Portfolios
- Plastic Presentation Folders
- Office Furniture

Miscellaneous Products
- Pallets
- Sorbents
- Industrial Drums
- Awards and Plaques
- Mats
- Manual-grade Strapping
- Signage
- Bike Racks
- Blasting Grit

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# I. General Recommendations

## Part A -- Definitions

As used in this Recovered Materials Advisory Notice:

Act or RCRA means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C 6901 *et seq*;

Federal agency means any department, agency, or other instrumentality of the federal government; any independent agency or establishment of the federal government including any government corporation; and the Government Printing Office;

Person means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, federal agency, State, municipality, commission, political subdivision of a State, or any interstate body;

Postconsumer material means a material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item. Postconsumer material is a part of the broader category of recovered materials;

Postconsumer recovered materials, for purposes of purchasing paper and paper products, is a subset of the broader term recovered materials, as defined in RCRA section 6002(h), and means:
(1) Paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards and used cordage; and
(2) All paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste;

Procuring agency means any federal agency, or any State agency or agency of a political subdivision of a State, which is using appropriated federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract;

Recovered materials means waste materials and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process.

## Part B -- Specifications

EPA recommends that federal agencies review and revise their product specifications with a view to eliminating unnecessary stringency as well as requirements which bear no relation to function in order to allow for the use of recovered materials. Specifications that bear no relation to function should be revised according to the agency's established specifications review procedures. EPA further recommends that, in reviewing an existing specification's provisions pertaining to function, federal agencies refer to existing voluntary standards and research by organizations such as the American

Society for Testing and Materials (ASTM), the American Association of State Highway and Transportation Officials (AASHTO), the Technical Association of the Pulp and Paper Industry (TAPPI), and the American Institute of Paper Chemistry.

Federal agencies that reference Commercial Item Descriptions (CIDs) or appropriate industry standards should continue to reference them when purchasing designated items. However, agencies should review or modify CIDs and industry standards, as appropriate, to be certain that the use of recovered materials is allowed.

Under RCRA section 6002, federal agencies need not revise specifications to allow or require the use of recovered materials if it can be determined that for technical reasons, for a particular end use, a product containing such materials will not meet reasonable performance standards. EPA recommends that federal agencies document such determinations and that the determination be based on technical performance information (including any product testing) pertaining to a specific item or application. EPA further recommends that federal agencies reference such documentation in the contract files for subsequent procurement of the specific item.

In most cases, for the items designated in the CPG, EPA has recovered materials content levels for specific types or grades of items or for certain applications. EPA notes, however, that the intent is not to preclude federal agencies from procuring other types or grades of items, or from using recovered materials content items for other applications. On the contrary, if a new type or grade of a designated item becomes available containing recovered materials or if a federal agency discovers a new application for which recovered materials content is appropriate, EPA encourages the agency to revise its specifications or develop new specifications to allow the use of recovered materials in that type or grade of item or that specific application.

## Part C -- Affirmative Procurement Programs

EPA recommends that the Environmental Executive within each major procuring agency take the lead in developing the agency's affirmative procurement program and in implementing the recommendations set forth in this RMAN. Executive Order 13101, *Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*, was revoked and replaced by Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (72 FR 3919) on January 24, 2007. The basic responsibilities of an Agency Environmental Executive are described in Executive Order 13423. In the absence of such an individual, EPA recommends that the head of the implementing agency appoint an individual who will be responsible for ensuring the agency's compliance with RCRA section 6002 and Executive Order 13423.

RCRA section 6002 requires procuring agencies to establish affirmative procurement programs for each EPA-designated item. EPA recommends that each agency develop a single, comprehensive affirmative procurement program with a structure that allows for the integration of new items as they are designated. Consistent with Executive Order 13423, EPA encourages agencies to implement preference programs for nonguideline items as well, in order to maximize their purchases of recycled-content products and foster markets for recovered materials.

Preference Program: In Section II of this RMAN, EPA provides specific recommendations for procuring agencies to use when purchasing the EPA-designated items. For most of these items, EPA recommends that procuring agencies establish minimum-content standards based on EPA's recommended recovered materials content levels and the procuring agencies' own research. For other items, the use of minimum content standards is inappropriate, and procuring agencies should establish an alternative program, as recommended by EPA.

In addition, EPA recommends that procuring agencies review their procurement practices and eliminate those that would inhibit or preclude the use of an item containing recovered materials. Specific examples of such procurement practices are provided in the item-specific recommendations, where appropriate.

Promotion Program: EPA recommends that procuring agencies include both internal and external promotion in their affirmative procurement programs.

There are several methods that procuring agencies can use to educate their employees about their affirmative procurement programs. These methods include preparing and distributing agency affirmative procurement policies, publishing articles in agency newsletters and publications, including affirmative procurement program requirements in agency staff manuals, and conducting workshops and training sessions to educate employees about their responsibilities under agency affirmative procurement programs.

Methods for educating existing contractors and potential bidders regarding an agency's preference for purchasing products containing recovered materials include publishing articles in appropriate trade publications, participating in vendor shows and trade fairs, placing statements in solicitations, and discussing an agency's affirmative procurement program at bidders' conferences.

Monitoring: EPA recommends that procuring agencies monitor their affirmative procurement programs, in accordance with RCRA section 6002(I)(2)(D), and implement monitoring strategies for the acquisition of goods and services, in accordance with Executive Order 13423, to ensure that they are fulfilling their requirements to purchase items composed of recovered materials to the maximum extent practicable. EPA anticipates that the Federal Environmental Executive and the Office of Federal Procurement Policy will request information from Federal agencies on their affirmative procurement practices. Therefore, EPA recommends that Federal procuring agencies maintain adequate records of procurement that may be affected by the Executive Order and RCRA requirements.

EPA recommends that procuring agencies track their purchases of products containing recovered materials to establish benchmarks from which progress can be assessed. To maintain adequate records on procurement of products containing recovered materials, EPA recommends that procuring agencies choose to collect data on the following:

- The minimum percentages of recovered materials content in the items procured or offered;
- Comparative price information on competitive procurement;
- The quantity of each item procured over a fiscal year;
- The availability of each item with recovered materials content; and
- Performance information related to recovered materials content of an item.

EPA recognizes that a procuring agency may be unable to obtain accurate data for all designated items. However, the Agency believes that in many cases, estimated data will suffice in determining the effectiveness of the agency's affirmative procurement program.

Certification: Certification of the recovered materials content in products is an important mechanism for encouraging the use of recovered materials in finished products. Because each product will be different, EPA recommends that procuring agencies discuss certification with product vendors to ascertain the appropriate period for certifying recovered materials content. EPA recommends that, whenever feasible, the recovered materials content of a product be certified on a batch-by-batch basis or as an average over a calendar quarter or some other appropriate averaging period as determined by the procuring agencies.

# II. Specific Recommendations for Procurement of Designated Items

## Part A -- Paper and Paper Products

### Section A-1 -- Printing and Writing Papers

Preference Program: EPA recommends that procuring agencies establish minimum content standards expressed as a percentage of recovered fiber, including a percentage of postconsumer fiber. EPA recommends that procuring agencies base their minimum content standards for uncoated and coated printing and writing papers on the content levels shown in Tables A-1a, A-1b, and A-1c, respectively. EPA further recommends that if a paper product containing 30% postconsumer fiber is not reasonably available, then procuring agencies establish the highest postconsumer fiber content levels available.

Percentages are based on the fiber weight of the product. The content levels in the tables should be read as X% recovered fiber, including Y% postconsumer fiber and not as X% recovered fiber plus Y% postconsumer fiber. Where the content level is the same in both columns (e.g., 30% in both the recovered fiber and postconsumer fiber columns), this means that EPA is recommending that agencies establish identical content levels for both postconsumer and recovered fiber.

Table A-1a. -- Recommended Recovered Fiber Content Levels for Uncoated Printing and Writing Papers

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| Reprographic Paper (e.g., mimeo and duplicator paper, high-speed copier paper, and bond paper*) | 30 | 30 |
| Offset Paper (e.g., offset printing paper*, book paper*, bond paper*) | 30 | 30 |
| Tablet Paper (e.g., office paper such as note pads, stationery* and other writing* papers) | 30 | 30 |
| Forms Bond (e.g., forms, computer printout paper, ledger*) | 30 | 30 |
| Envelope Paper | | |
| Wove | 30 | 30 |
| Kraft | | |
| White and colored (including manila) | 10 - 20 | 10 - 20 |
| Unbleached | 10 | 10 |
| Cotton Fiber Paper (e.g., cotton fiber papers, ledger*, stationery* and matching envelopes, and other writing* papers) | 30 | 30 |
| Text & Cover Paper (e.g., cover stock, book paper*, stationery* and matching envelopes, | 30 | 30 |

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| and other writing* paper) | | |
| Supercalendered | 10 | 10 |
| Machine finish groundwood | 10 | 10 |
| Papeteries | 30 | 30 |
| Check Safety Paper | 10 | 10 |

* These items can be made from a variety of printing and writing papers, depending on the performance characteristics of the item. Some of the papers are a commodity-type and some are specialty papers. EPA recommends that procuring agencies determine the performance characteristics required of the paper prior to establishing minimum content standards. For example, bond, ledger, or stationery made from cotton fiber paper or a text & cover paper have different characteristics than similar items made from commodity papers.

Table A-1b. -- Recommended Recovered Fiber Content Levels for Coated Printing and Writing Papers

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| Coated Printing Paper | 10 | 10 |
| Carbonless | 30 | 30 |

Table A-1c. -- Recommended Recovered Fiber Content Levels for Bristols

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| File Folders (manila and colored) | 30 | 30 |
| Dyed Filing Products | 20 - 50 | 20 |
| Cards (index, postal, and other, including index sheets) | 50 | 20 |
| Pressboard Report Covers and Binders | 50 | 20 |
| Tags and Tickets | 20 - 50 | 20 |

**Section A-2 -- Newsprint**

Preference Program: EPA recommends that procuring agencies establish minimum content standards expressed as a percentage of recovered fiber, including a percentage of postconsumer fiber. EPA

recommends that procuring agencies base their minimum content standards for newsprint on the content levels shown in Table A-2. Percentages are based on the fiber weight of the product. The content levels in the table should be read as X% recovered fiber, including Y% postconsumer fiber and not as X% recovered fiber plus Y% postconsumer fiber.

Table A-2. -- Recommended Recovered Fiber Content Levels for Newsprint

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| Newsprint | 20 - 100 | 20 - 85 |

**Section A-3 -- Commercial/Industrial Sanitary Tissue Products**

Preference Program: EPA recommends that procuring agencies establish minimum content standards expressed as a percentage of recovered fiber, including a percentage of postconsumer fiber. EPA recommends that procuring agencies base their minimum content standards for commercial/industrial tissue products on the content levels shown in Table A-3. Percentages are based on the fiber weight of the product. The content levels in the table should be read as X% recovered fiber, including Y% postconsumer fiber and not as X% recovered fiber plus Y% postconsumer fiber.

Table A-3. -- Recommended Recovered Fiber Content Levels for Commercial/Industrial Sanitary Tissue Products

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| Bathroom tissue | 20 - 100 | 20 - 60 |
| Paper towels | 40 - 100 | 40 - 60 |
| Paper napkins | 30 - 100 | 30 - 60 |
| Facial tissue | 10 - 100 | 10 - 15 |
| General purpose industrial wipers | 40 - 100 | 40 |

**Section A-4 -- Paperboard and Packaging Products**

Preference Program: EPA recommends that procuring agencies establish minimum content standards expressed as a percentage of recovered fiber, including a percentage of postconsumer fiber. EPA recommends that procuring agencies base their minimum content standards for paperboard and packaging products on the content levels shown in Table A-4. Percentages are based on the fiber weight of the product. The content levels in the table should be read as X% recovered fiber, including Y% postconsumer fiber and not as X% recovered fiber plus Y% postconsumer fiber. Where the content level is the same in both columns (e.g., 40% in both the recovered fiber and postconsumer fiber columns), this means that EPA is recommending that agencies establish identical content levels for postconsumer and recovered fiber.

Table A-4. -- Recommended Recovered Fiber Content Levels for Paperboard and Packaging Products

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| Corrugated containers*<br>(‹300 psi)<br>(300 psi) | <br>25 - 50<br>25 - 30 | <br>25 - 50<br>25 - 30 |
| Solid Fiber Boxes | 40 | 40 |
| Folding cartons** | 100 | 40 - 80 |
| Industrial paperboard (e.g., tubes, cores, drums, and cans) | 100 | 45 - 100 |
| Miscellaneous (e.g., pad backs, covered binders, book covers, mailing tubes, protective packaging) | 90 - 100 | 75 - 100 |
| Padded mailers | 5 - 15 | 5 - 15 |
| Carrierboard*** | 10 - 100 | 10 - 15 |
| Brown papers (e.g., wrapping paper and bags) | 5 - 40 | 5 - 20 |

* The recovered fiber and postconsumer fiber content is calculated from the content of each component relative to the weight each contributes to the total weight of the box. See Appendix I for an example.

** The recommended content ranges are not applicable to all types of paperboard used in folding cartons. Cartons made from solid bleached sulfate or solid unbleached sulfate contain no or small percentages of postconsumer fiber, depending on the paperboard source.

***Carrierboard made from unbleached kraft contains up to 25% recovered fiber, while carrierboard made from recycled paperboard contains up to 100% recovered fiber.

**Section A-5 -- Miscellaneous Paper Products**

Preference Program: EPA recommends that procuring agencies establish minimum content standards expressed as a percentage of recovered fiber, including a percentage of postconsumer fiber. EPA recommends that procuring agencies base their minimum content standards for the listed paper products on the content levels shown in Table A-5. Percentages are based on the fiber weight of the product. The content levels in the table should be read as 100% recovered fiber, including X% postconsumer fiber and not as 100% recovered fiber plus Y% postconsumer fiber.

Table A-5. -- Recommended Recovered Fiber Content Levels for Miscellaneous Paper Products

| Item | Recovered Fiber (%) | Postconsumer Fiber (%) |
|---|---|---|
| Tray liners | 100 | 50 - 75 |

**Section A-6 -- Other Recommendations for Paper and Paper Products**

Measurement: EPA recommends that procuring agencies express their minimum content standards as a percentage of the fiber weight of the paper or paper product. EPA further recommends that procuring agencies specify that mill broke cannot be counted toward postconsumer or recovered fiber content, except that procuring agencies should permit mills to count mill broke generated in a papermaking process using postconsumer and/or recovered fiber as feedstock toward "postconsumer fiber" or "recovered fiber" content, to the extent that the feedstock contained these materials. In other words, if a mill uses less than 100% postconsumer or recovered fiber, only a proportional amount of broke can be counted towards postconsumer or recovered fiber content.

Specifications: EPA recommends that procuring agencies review specifications provisions pertaining to performance and aesthetics and revise provisions that can impede use of postconsumer and recovered fiber, unless such provisions are related to reasonable performance standards. Agencies should determine whether performance provisions are unnecessarily stringent for a particular end use. Agencies also should revise aesthetics provisions -- such as brightness, dirt count, or shade matching -- if appropriate, consistent with the agencies' performance requirements, in order to allow for a higher use of postconsumer and recovered fiber.

EPA recommends that procuring agencies document determinations that paper products containing postconsumer and recovered fiber will not meet the agencies' reasonable performance standards. Any determination should be based on technical performance information related to a specific item, not a grade of paper or type of product.

EPA recommends that procuring agencies watch for changes in the use of postconsumer and recovered fiber in paper and paper products. When a paper or a paper product containing postconsumer and recovered fiber is produced in types and grades not previously available, at a competitive price, procuring agencies should either revise specifications to allow the use of such type or grade, or develop new specifications for such type or grade, consistent with the agencies' performance requirements.

Recyclability: EPA recommends that procuring agencies consider the effect of a procurement of a paper product containing recovered and postconsumer fiber on their paper collection programs by assessing the impact of their decision on their overall contribution to the solid waste stream.

**Section A-7 -- Definitions**

For purposes of the recommendations contained in this Part, terms shall have the following meanings:

"Postconsumer fiber" means:

(1) Paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; and

(2) All paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste.

Postconsumer fiber does not include fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

"Recovered fiber" means the following materials:

(1) Postconsumer fiber such as:

> (A) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; and
>
> (B) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste, and

(2) Manufacturing wastes such as:

> (A) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and
>
> (B) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

"Mill broke" means any paper waste generated in a paper mill prior to completion of the papermaking process. It is usually returned directly to the pulping process. Mill broke is excluded from the definition of "recovered fiber."

**Appendix A-1. -- Example Calculation of Postconsumer Fiber Content of a Corrugated Container**

C-flute has a take-up factor of approximately 1.44, which means that for each one foot of combined corrugated board there is 1.44 feet of fluted medium. This factor is used to calculate the weight of paperboard in a given area of combined corrugated board, from which the basis weight of the board is derived. Each linerboard contributes 35% of the basis weight (42/121.4). The medium contributes 30% of the total basis weight (37.4/121.4).

| | | | Board Basis Weight (lbs/MSF) |
|---|---|---|---|
| Linerboard #1 | 42 x 1.00 | = | 42.0 |
| Medium | 26 x 1.44 | = | 37.4 |
| Linerboard #2 | 42 x 1.00 | = | 42.0 |
| Combined Board Weight | | | 121.4 lbs/MSF |

If the linerboard used has 20% postconsumer fiber and the medium has 80% postconsumer fiber, the resulting total postconsumer fiber content of the containerboard is as follows:

Linerboard: .35 x .20 = .07 x 2 = .14 (or 14%)
Medium: .30 x .80 = .24 (or 24%)

Total postconsumer fiber: .14 + .24 = .38 (or 38%)

# Part B -- Vehicular Products

## Section B-1 -- Lubricating Oil

Preference Program: EPA recommends that procuring agencies set their minimum re-refined oil content standard at the highest level of re-refined oil that they determine meets the statutory requirements of RCRA section 6002(c)(1), but no lower than 25 percent re-refined oil.

EPA recommends that procuring agencies review their procurement practices and eliminate those which would inhibit or preclude procurement of lubricating oils containing re-refined oil. For example, procuring agencies should review the practices of inviting bids and issuing contracts to do the following:

(1) Supply a broad range of lubricating oil products on an “all or none” basis.
(2) Supply lubricating oils for an excessively long period of time.
(3) Deliver lubricating oils to geographic locations throughout the United States or to an excessively broad geographic area.
(4) Supply excessively large contract quantities.

Specifications: EPA recommends that procuring agencies use the following specifications when procuring lubricating oils containing re-refined oil:

(1) Engine lubricating oils.

(I) A-A-52039 -- Commercial Item Description, Lubricating Oil, Automotive Engine, API Service SG (replaced MIL-L-46152, Lubricating Oil, Internal Combustion Engine, Administrative Service).

(ii) API Engine Service Category SF -- 1980 Gasoline Engine Warranty Maintenance Service (or current category)

(iii) A-A-52306 -- Commercial Item Description, Lubricating Oil, Heavy-Duty Diesel Engine (for wheeled vehicles only)

(iv) API Engine Service Category CC -- Diesel Engine Service (or current category)

(v) MIL-L-2104, Lubricating Oil, Internal Combustion Engine, Combat/Tactical Service

(vi) API Engine Service Category CD -- Diesel Engine Service (or current category)

(vii) MIL-L-21260D (or current version) -- Lubricating Oil, Internal Combustion Engine, Preservative and Break-in

(viii) MIL-L-46167B (or current version) -- Lubricating Oil, Internal Combustion Engine, Arctic

(2) Hydraulic fluids.

(I) MIL-H-5606E (or current version) -- Hydraulic Fluid, Petroleum Base, Aircraft, Missile, and Ordnance

(ii) MIL-H-6083E (or current version) -- Hydraulic Fluid, Petroleum Base, For Preservation and Operation

(3) Gear oils.

(I) MIL-L-2105D (or current version) Lubricating Oil, Gear, Multipurpose

(b) Copies of the military specifications can be obtained from: Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, Pennsylvania 19120.

**Section B-2 -- Retread Tires**

Preference Program: The following are EPA's recommendations for procuring retreading services and retread tires.

Procurement of tire retreading services for the agencies' used tire casings:
EPA recommends that procuring agencies specify that tire repair and retread services must conform to Federal Specification ZZ-T-441H (or current version).

Procurement of tires through competition between vendors of new tires and vendors of retread tires:
EPA recommends that procuring agencies specify that retread tires must meet the requirements of Federal Specification ZZ-T-381, "Tires, Pneumatic, Vehicular (Highway) (New and Retreaded).

**Section B-3 -- Engine Coolants**

Preference Program: EPA recommends that procuring agencies whose vehicles are serviced by a motor pool or vehicle maintenance facility establish a program for engine coolant reclamation and reuse, consisting of either reclaiming the spent engine coolants on-site for use in the agencies' vehicles, or establishing a service contract for reclamation of the agencies' spent engine coolant for use in the agencies' vehicles.

EPA also recommends that procuring agencies request reclaimed engine coolant when having their vehicles serviced at commercial service centers. Additionally, EPA recommends that agencies purchase reclaimed engine coolant when making direct purchases of this item such as when necessary to make up for losses due to leakage or spillage.

EPA does not recommend one type of engine coolant over another. However, EPA recommends that procuring agencies purchase engine coolant containing only one base chemical, typically ethylene glycol or propylene glycol, to prevent the commingling of incompatible types of engine coolant.

**Section B-4 -- Rebuilt Vehicular Parts**

Note: Based on EPA's research, rebuilt vehicular parts generally contain between 60 and 95% postconsumer material. However, this level of detail might not be readily available from distributors to procurement officials. Therefore, EPA is not recommending a range of recovered content.

Preference Program: EPA recommends that procuring agencies whose vehicles (passenger vehicles as well as medium- and heavy-duty equipment, including trucks, cranes, off-road vehicles, and military vehicles) are serviced by a motor pool or vehicle maintenance facility establish a service contract to require the use of rebuilt vehicular parts in the agencies' vehicles or establish a program for vehicular parts rebuilding and reuse consisting of either recovering a used vehicular part and rebuilding it, replacing it with a rebuilt part, or contracting to have the part replaced with a rebuilt part. This designation applies to vehicles served by both on-site and commercial facilities.

Specifications: To be labeled "rebuilt" or "remanufactured," a part must be processed in accordance with the FTC's "Guides for the Rebuilt, Reconditioned and Other Used Automotive Parts Industry," 16 CFR

Part 20. Rebuilders must test each part for compliance with FTC specifications and correct defects as necessary.

## Part C -- Construction Products

Note: Refer to Part F - Landscaping Products for additional items that can be used in construction.

**Section C-1 - Building Insulation**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-1, procuring agencies establish minimum content standards for use in purchasing building insulation products.

Table C-1. -- Recommended Recovered Materials Content Levels for Building Insulation

| Insulation Material | Recovered Materials (Materials and %) |
|---|---|
| Rock Wool | Slag 75 |
| Fiberglass | Glass cullet 20 - 25 |
| Cellulose loose-fill and spray-on | Postconsumer paper 75 |
| Perlite composite board | Postconsumer paper 23 |
| Plastic, non-woven batt | Recovered and/or postconsumer plastics 100 |
| Plastic Rigid Foam, Polyisocyanurate/polyurethane: | |
| Rigid foam | Recovered material 9 |
| Foam-in-place | Recovered material 5 |
| Glass fiber reinforced | Recovered material 6 |
| Phenolic rigid foam | Recovered material 5 |

Note: The recommended recovered materials content levels are based on the weight (not volume) of materials in the insulating core only.

Specifications: EPA recommends that procuring agencies reference ASTM standard specification D 5359, "Glass Cullet Recovered from Waste for Use in Manufacture of Glass Fiber," in Invitations for Bid and Requests for Proposal.

**Section C-2 -- Structural Fiberboard and Laminated Paperboard**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-2, procuring agencies establish minimum content standards for use in purchasing structural fiberboard or laminated paperboard products for use in either insulating or structural applications.

Table C-2.--Recommended Recovered Materials Content Levels for Structural Fiberboard and Laminated Paperboard

| Product | Postconsumer Recovered Paper (%) | Total Recovered Materials Content (%) |
|---|---|---|
| Structural fiberboards | -- | 80 - 100 |
| Laminated paperboards | 100 | 100 |

Note: The recovered materials content levels are based on the weight (not volume) of materials in the insulating core only.

Specifications: EPA recommends that procuring agencies use ASTM Standard Specification C 208 and ANSI/AHA specification A194.1. EPA further recommends that, when purchasing structural fiberboard products containing recovered paper, procuring agencies (1) reference the technical requirements of ASTM C 208, "Insulating Board (Cellulosic Fiber), Structural and Decorative," (2) permit structural fiberboard products made from recovered paper where appropriate, and (3) permit products such as floor underlayment and roof overlay containing recovered paper.

EPA further recommends that procuring agencies review their specifications for insulating products and revise them as necessary to obtain the appropriate "R"-value without unnecessarily precluding the purchase of products containing recovered materials.

**Section C-3-- Cement and Concrete**

Preference Program: EPA recommends that procuring agencies prepare or revise their procurement programs for cement and concrete or for construction projects involving cement and concrete to allow the use of coal fly ash, ground granulated blast furnace slag (GGBF slag), cenospheres, or silica fume, as appropriate. EPA does not recommend that procuring agencies favor one recovered material over the other. Rather, EPA recommends that procuring agencies consider the use of all of these recovered materials and choose the one (or the mixture of them) that meets their performance requirements, consistent with availability and price considerations. EPA also recommends that procuring agencies specifically include provisions in all construction contracts to allow for the use, as optional or alternate materials, of cement or concrete which contains coal fly ash, GGBF slag, cenospheres, or silica fume, where appropriate. Due to variations in cement, strength requirements, costs, and construction practices, EPA is not recommending recovered materials content levels for cement or concrete containing coal fly

ash, GGBF slag, cenospheres, or silica fume. However, EPA is providing the following information about recovered materials content.

- Replacement rates of coal fly ash for cement in the production of blended cement generally do not exceed 20-30 percent, although coal fly ash blended cements may range from 0-40 percent coal fly ash by weight, according to ASTM C 595, for cement Types IP and I(PM). Fifteen percent is a more accepted rate when coal fly ash is used as a partial cement replacement as an admixture in concrete.

- According to ASTM C 595, GGBF slag may replace up to 70 percent of the Portland cement in some concrete mixtures. Most GGBF slag concrete mixtures contain between 25 and 50 percent GGBF slag by weight. EPA recommends that procuring agencies refer, at a minimum, to ASTM C 595 for the GGBF slag content appropriate for the intended use of the cement and concrete.

- According to industry sources, cement and concrete containing cenospheres typically contains a minimum of 10 percent cenospheres (by volume).

- According to industry sources, cement and concrete containing silica fume typically contains silica fume that constitutes 5 to 10 percent of cementitious material on a dry weight basis.

<u>Specifications for Cement and Concrete containing Fly Ash and Ground Granulated Blast Furnace Slag:</u> For cement and concrete containing coal fly ash and ground granulated blast furnace slag, the following recommendations address guide specifications, materials specifications, contract specifications, performance standards, mix design, and quality control.

- Guide specifications. EPA recommends that procuring agencies ensure that their guide specifications do not inappropriately or unfairly discriminate against the use of coal fly ash or GGBF slag in cement and concrete. EPA further recommends that procuring agencies revise their guide specifications to require that contract specifications for individual construction projects or products allow for the use of coal fly ash or GGBF slag, unless the use of these materials is technically inappropriate for a particular construction application.

- Materials specifications. EPA recommends that procuring agencies use the existing voluntary consensus specifications referenced in Table C-3 for cement and concrete containing fly ash and/or GGBF slag.

Table C-3. -- Recommended Specifications for Cement and Concrete Containing Recovered Coal Fly Ash and/or Ground Granulated Blast Furnace Slag

| Cement specifications | Concrete specifications |
|---|---|
| ASTM C 595, "Standard Specification for Blended Hydraulic Cements." | ASTM C 618, "Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete." |
| ASTM C 150, "Standard Specification for Portland Cement." | ASTM C 311, "Standard Methods of Sampling and Testing Fly Ash and Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete." |
| AASHTO M 240, "Blended Hydraulic Cements." | ASTM C 989, "Ground Granulated Blast-Furnace Slag for Use in Concrete Mortars." |
| | AASHTO M 302, "Ground Granulated Blast Furnace Slag for Use in Concrete and Mortars." |
| | American Concrete Institute Standard Practice ACI 226.R1, "Ground Granulated Blast-Furnace Slag as a Cementitious Constituent in Concrete." |

- State specifications. EPA recommends that procuring agencies consult other agencies with established specifications for coal fly ash or GGBF slag to benefit from their experience. Procuring agencies can consult the Federal Highway Administration, which maintains a data base of state highway agency material specifications. The States of Alabama, Connecticut, District of Columbia, Florida, Georgia, Illinois, Indiana, Maryland, Michigan, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Virginia, and West Virginia have adopted specifications which allow the use of GGBF slag in one or more applications. If needed, procuring agencies can obtain these specifications from the respective state transportation departments and adapt them for use in their programs for cement and concrete, as appropriate.

- Contract specifications. EPA recommends that procuring agencies which prepare or review "contract" specifications for individual construction projects revise those specifications to allow the use of cement and concrete containing coal fly ash or GGBF slag as optional or alternate materials for the project, where appropriate, consistent with the agencies' performance and price objectives.

- Performance standards. EPA recommends that procuring agencies review and, if necessary, revise performance standards relating to cement or concrete construction projects to insure that they do not arbitrarily restrict the use of coal fly ash or GGBF slag, either intentionally or inadvertently, unless the restriction is justified on a job-by-job basis: (1) to meet reasonable performance requirements for the cement or concrete or (2) because the use of coal fly ash or GGBF slag would be inappropriate for technical reasons. EPA recommends that this justification be documented based on specific technical performance information. Legitimate documentation of technical infeasibility for coal fly ash or GGBF slag can be for certain classes of applications,

rather than on a job-by-job basis. Procuring agencies should reference such documentation in individual contract specifications to avoid extensive repetition of previously documented points. However, procuring agencies should be prepared to submit such documentation to analysis by interested persons, and should have a review process available in the event of disagreements.

- Mix design. In concrete mix design specifications which specify minimum cement content or maximum water, the cement ratios could potentially unfairly discriminate against the use of coal fly ash or GGBF slag. Such specifications should be changed in order to allow the partial substitution of coal fly ash or GGBF slag for cement in the concrete mixture, unless technically inappropriate. Cement ratios may be retained, as long as they reflect the cementitious characteristics which coal fly ash or GGBF slag can impart to a concrete mixture, e.g., by considering Portland cement plus coal fly ash or Portland cement plus GGBF slag as the total cementitious component.

- Quality control. Nothing in this RMAN should be construed to relieve the contractor of responsibility for providing a satisfactory product. Cement and concrete suppliers are already responsible both for the quality of the ingredients of their product and for meeting appropriate performance requirements, and will continue to be under this RMAN. Nothing in EPA's recommendations should be construed as a shift in normal industry procedures for assigning responsibility and liability for product quality.

· Additional Considerations:

  - Procuring agencies should expect suppliers of blended cement, coal fly ash or GGBF slag, and concrete to demonstrate (through reasonable testing programs or previous experience) the performance and reliability of their product and the adequacy of their quality control programs. However, procuring agencies should not subject cement and concrete containing coal fly ash or GGBF slag to any unreasonable testing requirements.
  - In accordance with standard industry practice, coal fly ash and GGBF slag suppliers should be required to provide to users a statement of the key characteristics of the product supplied. These characteristics may be stated in appropriate ranges. Other characteristics should be requested as needed by the procuring agency.
  - Agencies desiring a testing or quality assurance program for cements, blended cements, or coal fly ash should contact the U.S. Army Engineer Waterways Experiment Station, P.O. Box 631, Vicksburg, Mississippi 39180.

<u>Specifications for Cement and Concrete containing Cenospheres and Silica Fume:</u> For cement and concrete containing cenospheres, EPA recommends that procuring agencies contact cenosphere suppliers to obtain specifications, such as material safety data sheets for assisting with use of cenospheres in cement and concrete.

For cement and concrete containing silica fume, EPA recommends that procuring agencies refer to the following national specifications and guidelines, which enable procuring agencies to buy high-performance concrete containing silica fume of a standard quality, when purchasing cement and concrete with silica fume: ASTM C1240, AASHTO M840, and ACI 234R-96. ACI 234R-96 describes the properties of silica fume; how silica fume interacts with cement; the effects of silica fume on the properties of fresh and cured concrete; typical applications of silica fume concrete; recommendations on proportions, specifications, and handling of silica fume in the field.

**Section C-4 -- Carpet**

Preference Program: EPA recommends that, based on the recovered materials content levels recommended below, procuring agencies establish minimum content standards for use in purchasing polyester carpet for moderate-wear applications such as those found in single-family housing units and other similar applications as identified by the Carpet and Rug Institute (CRI). This recommendation does not include polyester carpet for heavy- or severe-wear or commercial-type applications.

Table C-4.-- Recommended Recovered Materials Content Levels for Carpet

| Product | Resin | Postconsumer Materials (%) |
|---|---|---|
| Polyester Carpet Face Fiber | PET | 25 - 100 |

Specifications: Procuring agencies should refer to CRI's table entitled "Use Classification by End-Use Application" for a complete listing of CRI's recommended carpet applications. A copy of this table has been placed in the public docket for this RMAN.

Procuring agencies should also refer to GSA's minimum density recommendations, as follows:

- Cut pile constructions: 5,000 ounces/yard$^3$ minimum density
- Loop pile constructions: 4,500 ounces/yard$^3$ minimum density

While numerous carpet specifications exist, the members of the carpet industry do not utilize any universal standards. Specifications vary and are determined based on the particular factors of the installation. The project's designer, architect, general contractor, and/or facility manager typically decide the specifications. Some procuring agencies, such as the Department of the Army and the Department of Housing and Urban Development, have developed their own specifications for end-use carpet applications. These specifications should be readily available to procurement officials in those agencies.

**Section C-5 -- Floor Tiles[1] and Patio Blocks**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-5, procuring agencies establish minimum content standards for use in purchasing heavy-duty/commercial type floor tiles and patio blocks made with rubber or plastic.

Table C-5.-- Recommended Recovered Materials Levels for Floor Tiles and Patio Blocks

[1]EPA clarified in 62 *FR* 60995, November 13, 1997 (RMAN II), that the use of floor tiles with recovered materials content may be appropriate only for specialty purpose uses (e.g., raised, open-web tiles for drainage on school kitchen flooring). Such specialty purpose uses involve limited flooring areas where grease, tar, snow, ice, wetness or similar substances or conditions are likely to be present. Thus, EPA has no recovered materials content level recommendations for floor tiles made with recovered materials for standard office or more general purpose uses.

| Product | Material | Postconsumer Materials (%) | Total Recovered Materials (%) |
|---|---|---|---|
| Patio Blocks | Rubber or Rubber Blends | 90 - 100 | -- |
| | Plastic or Plastic Blends | -- | 90 - 100 |
| Floor Tiles (heavy duty/commercial use) | Rubber | 90 - 100 | -- |
| | Plastic | -- | 90-100 |

Notes: EPA's recommendation does not preclude procuring agencies from purchasing floor tiles or patio blocks manufactured from another material. It simply recommends that procuring agencies, when purchasing floor tiles or patio blocks made from rubber or plastic, purchase these items made from recovered materials. Recommendations for floor tiles are limited to heavy-duty/commercial-type applications only.

The recommended recovered materials content levels are based on the dry weight of the raw materials, exclusive of any additives such as adhesives, binders, or coloring agents.

Recommendations for floor tiles are limited to heavy-duty/commercial-type applications only.

## Section C-6 -- Shower and Restroom Dividers/Partitions Containing Recovered Plastic or Steel

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-6, procuring agencies establish minimum content standards for use in purchasing shower and restroom dividers/partitions.

Table C-6.-- Recommended Recovered Materials Content Levels for Shower and Restroom Dividers/Partitions Containing Recovered Plastic or Steel

| Material | Postconsumer materials (%) | Total recovered materials content (%) |
|---|---|---|
| Steel | 16 | 25-30 |
| | 67 | 100 |
| Plastic | 20-100 | 20-100 |

Notes: EPA's recommendation does not preclude agencies from purchasing shower and restroom dividers/partitions manufactured from another material, such as wood. It simply recommends that procuring agencies, when purchasing shower and restroom dividers/partitions made from plastic or steel, purchase these items made from recovered materials when these items meet applicable specifications and performance requirements.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

Specifications: EPA recommends that procuring agencies use the following specifications when procuring shower and restroom dividers/partitions:

(1) The American Institute of Architects (AIA) has issued guidance for specifying construction materials, including plastic and steel dividers/partitions. The AIA guidance is known throughout the construction industry as the "Masterspec" and is available through the U.S. General Services Administration (GSA).
(2) U.S. Army Corps of Engineers' Guide Specification CEGS-10160, Toilet Partitions.

**Section C-7 -- Reprocessed and Consolidated Latex Paints for Specified Uses**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-7, procuring agencies establish minimum content standards for use in purchasing reprocessed and consolidated latex paints.

Table C-7. -- Recommended Recovered Materials Content Levels for Reprocessed and Consolidated Latex Paints

| Product | Postconsumer latex paint (%) |
|---|---|
| Reprocessed latex paint | |
| White, off-white, and pastel colors | 20 |
| Grey, brown, earthtones, and other dark colors | 50-99 |
| Consolidated latex paint | 100 |

Notes: EPA's recommendations apply to reprocessed latex paints used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutter boards; and concrete, stucco, masonry, wood, and metal surfaces, and to consolidated latex paints used for covering graffiti, where color and consistency of performance are not primary concerns.

EPA's recommendation does not preclude agencies from purchasing paints manufactured from other, non-latex materials, such as oil-based paints. It simply recommends that procuring agencies, when purchasing latex paints, purchase these items made from postconsumer recovered materials when these items meet applicable specifications and performance requirements.

Reprocessed and consolidated latex paints are available to Federal agencies through the GSA Federal Supply Service by ordering the following stock numbers:

| National Stock Numbers | Colors |
|---|---|
| Semi-gloss | FEDSTD 595B Color No. |
| 8010-01-380-2400 | Beige #27769 |
| 8010-01-380-2447 | Red brown #20100 |
| 8010-01-433-4808 | Blue, #35526 |
| 8010-01-433-4809 | Sand #33690 |
| 8010-01-433-4810 | Green #24491 |
| 8010-01-433-4812 | Gray #26134 |
| 8010-01-433-4816 | Drk Gray #26081 |
| 8010-01-433-4818 | Beige #37769 |
| 8010-01-433-4826 | Tan #20372 |
| 8010-01-433-4828 | Dark Brown #20140 |

| Flat | FEDSTD 595B Color No. |
|---|---|
| 8010-01-380-3293 | White #37886 |
| 8010-01-380-2421 | Sand #33690 |
| 8010-01-433-4813 | Dark Gray #36081 |
| 8010-01-433-4819 | Beige #37769 |
| 8010-01-433-4820 | White #37886 |
| 8010-01-433-4823 | Sand #23690 |

The GSA Federal Supply Service has a free paint brochure available by calling 1-800-241-RAIN or FAX requests to (206) 931-7544.

Specifications: EPA has deleted reference to federal specification TT-P-2846, which was cancelled by GSA, and recommends that procuring agencies refer to commercial item description (CID) A-A-3185 instead when purchasing recycled paint.

**Section C-8. – Carpet Cushion Made from Bonded Polyurethane, Jute, Synthetic Fiber, or Rubber Containing Recovered Materials**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-8, procuring agencies establish minimum content standards for use in purchasing bonded polyurethane, jute, synthetic fiber, or rubber carpet cushion containing recovered materials.

Table C-8. -- Recommended Recovered Materials Content Levels for Bonded Polyurethane, Jute, Synthetic Fiber, and Rubber Carpet Cushion

| Product | Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|---|
| Bonded polyurethane | Old carpet cushion | 15-50 | 15-50 |
| Jute | Burlap | 40 | 40 |
| Synthetic fibers | Carpet fabrication scrap | -- | 100 |
| Rubber | Tire rubber | 60-90 | 60-90 |

Note: EPA's recommendations do not preclude a procuring agency from purchasing another type of carpet cushion. They simply require that procuring agencies, when purchasing bonded polyurethane, jute, synthetic fiber, or rubber carpet cushions, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements. Refer to Section C-4 in RMAN I for EPA's recommendations for purchasing polyester carpet containing recovered materials.

Specifications: EPA is not aware of carpet cushion specifications unique to carpet cushions containing recovered materials. Therefore, EPA recommends that procuring agencies use any appropriate standards set by the Carpet and Rug Institute and the Carpet Cushion Council when purchasing bonded polyurethane, jute, synthetic fiber, or rubber carpet cushion containing recovered materials.

## Section C-9. Flowable Fill Containing Coal Fly Ash and/or Ferrous Foundry Sands

Preference Program: EPA recommends that procuring agencies use flowable fill containing coal fly ash and/or ferrous foundry sands for backfill and other fill applications. EPA further recommends that procuring agencies include provisions in all construction contracts involving backfill or other fill applications to allow for the use of flowable fill containing coal fly ash and/or ferrous foundry sands, where appropriate.

The specific percentage of coal fly ash or ferrous foundry sands used in flowable fill depends on the specifics of the job, including the type of coal fly ash used (Class C or Class F); the strength, set time, and flowability needed; and bleeding and shrinkage. Therefore, EPA is not recommending specific coal fly ash or ferrous foundry sands content levels for procuring agencies to use in establishing minimum content standards for flowable fill. EPA recommends that procuring agencies refer to the mix proportions in Tables C-9a and C-9b for typical proportions for high and low coal fly ash content mixes. EPA further recommends that procuring agencies refer to American Concrete Institute (ACI) report ACI 229R-94 for guidance on the percentages of coal fly ash that can be used in flowable fill mixtures.

Table C-9a. --Typical Proportions for High Fly Ash Content Flowable Fills

| Component | Range kg/m$^3$ (lb/yd$^3$) | Mix Design kg/m$^3$ (lb/yd$^3$) |
|---|---|---|
| Fly ash (95%) | 949 to 1542 (1600 to 2600) | 1234 (2080) |
| Cement (5%) | 47 to 74 (80 to 125) | 62 (104) |
| Added water | 222 to 371 (375 to 625) | 247 (416)* |
| | Total: | 1543 (2600) |

* Equal to 189 liters (50 gallons)
Source: "Fly Ash Facts for Highway Engineers," FHWA-SA-94-081, U.S. Department of Transportation, Federal Highway Administration, August 1995.

Table C-9b. --Typical Proportions for Low Fly Ash Content Flowable Fills

| Component | Range kg/m$^3$ (lb/yd$^3$) | Mix Design kg/m$^3$ (lb/yd$^3$) |
|---|---|---|
| Fly ash (6% to 14%)† | 119 to 297 (200 to 500) | 178 (300) |
| Cement | 30 to 119 (50 to 200) | 59 (100) |
| Sand | 1483 to 1780 (2500 to 3000) | 1542 (2600) |
| Added water | 198 to 494 (333 to 833) | 297 (500)* |
| | Total: | 2076 (3500) |

†High calcium fly ash is used in lower amounts than low calcium fly ash.
* Equal to 227 liters (60 gallons)
Source: "Fly Ash Facts for Highway Engineers," FHWA-SA-94-081, U.S. Department of Transportation, Federal Highway Administration, August 1995.

Specifications: The following recommendations address mix designs, test methods, and performance standards.

- Mix designs. EPA recommends that procuring agencies use ACI report ACI229R-94, "Controlled Low Strength Materials (CLSM)" and "Fly Ash Facts for Highway Engineers," (FHWA-SA-94-081, U.S. Department of Transportation, Federal Highway Administration, August 1995) in developing mix designs. Among other things, ACI229R-94 addresses materials, including coal fly ash and foundry sands, mix design, and mixing, transporting, and placing. It also provides examples of mixture designs containing coal fly used by the states of Iowa, Florida, Illinois, Indiana, Oklahoma, Michigan, Ohio, and South Carolina. "Fly Ash Facts for Highway Engineers" addresses materials, strength, flowability, time of set, bleeding and shrinkage.

  A mix design for the use of foundry sand and coal fly ash in flowable fill was developed for Ford Motor Company. Procuring agencies can obtain a copy of this design by contacting the RCRA

Hotline at 1-800-424-9346. Table C-9c provides the recommended trial mixture from this specification.

Table C-9c. -- Materials Quantities for Flowable Fill Mixture Containing Foundry Sands and Coal Fly Ash

| Component | Quantity per Cubic Yard |
|---|---|
| Cement | 50 lbs. |
| Coal fly ash | 250 lbs. |
| Foundry sand | 2850 lbs. |
| Water | 500 lbs. |

· Materials specifications and test methods. EPA recommends that procuring agencies use ACI229R-94 and the ASTM standards listed in Table C-9d when purchasing flowable fill or contracting for construction that involves backfilling or other fill applications.

EPA recommends that procuring agencies refer to ASTM C 33-93, "Standard Specification for Concrete Aggregates," to assure the quality and uniformity of the ferrous foundry sands used as aggregates in flowable fills.

Table C-9d. -- Recommended Test Methods for Flowable Fills (Controlled Low Strength Materials)

| ASTM Specification Number | Title |
|---|---|
| D 4832-95e1 | Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders |
| D 5239-92 | Standard Practice for Characterizing Fly Ash for Use in Soil Stabilization |
| D 5971-96 | Standard Practice for Sampling Freshly Mixed Controlled Low Strength Material |
| D 6103-07 | Standard Test Method for Flow Consistency of Controlled Low Strength Material |
| D 6023-96 | Standard Test Method for Unit Weight, Yield, Cement Content and Air Content (Gravimetric) of Controlled Low Strength Material (CLSM) |
| D 5971-96 | Standard Practice for Sampling Freshly Mixed Controlled Low Strength Material |
| D 6024-96 | Standard Test Method for Ball Drop on Controlled Low Strength Material (CLSM) to Determine Suitability for Load Application |

- State specifications. The following states have specifications for flowable fill containing coal fly ash: California, Colorado, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New Mexico, North Carolina, Ohio, Texas, Washington, West Virginia, and Wisconsin.

  The state of Ohio has a specification entitled "Flowable Fill Made with Spent Foundry Sand," and the states of Pennsylvania, Wisconsin, and Indiana are developing specifications for using foundry sands in flowable fill.

  If needed, procuring agencies can obtain state specifications from the respective state transportation departments and adapt them for use in their programs. ACI229R-94 includes mix designs from several of these states.

- Contract specifications. EPA recommends that procuring agencies which prepare or review "contract" specifications for individual construction projects revise those specifications to allow the use of flowable fills containing coal fly ash and/or ferrous foundry sands.

Performance standards. EPA recommends that procuring agencies review and, if necessary, revise performance standards relating to fill materials to insure that they do not arbitrarily restrict or preclude the use of flowable fills containing coal fly ash and/or ferrous foundry sands, either intentionally or inadvertently, unless the restriction is justified on a job-by-job basis: (1) to meet reasonable performance requirements for fill materials or (2) because the use of coal fly ash or ferrous foundry sands would be inappropriate for technical reasons. EPA recommends that this justification be documented based on specific performance information. Legitimate documentation of technical infeasibility can be for certain classes of applications, rather than on a job-by-job basis. Agencies should reference such documentation in individual contract specifications to avoid extensive repetition of previously documented points. However, procuring agencies should be prepared to submit such documentation to scrutiny by interested parties and should have a review process available in the event of disagreements.

Promotion program: EPA recommends that, as part of the promotion programs required by section 6002(I) of the Resource Conservation and Recovery Act, procuring agencies conduct demonstration programs for using flowable fills containing coal fly ash and/or ferrous foundry sands. EPA further recommends that procuring agencies educate construction contractors about the design, use, and performance of flowable fills containing coal fly ash and/or ferrous foundry sands.

## Section C-10. Railroad Grade Crossing Surfaces Made From Recovered Content Concrete, Rubber, Steel, Wood, and Plastic

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-10a, procuring agencies revise their procurement programs for railroad grade crossing surfaces to allow the use of recovered content concrete, rubber, steel, wood, and plastic railroad grade crossing surfaces.

Table C-10a. -- Recommended Recovered Materials Content Levels for Railroad Grade Crossing Surfaces Made From Recovered Content Concrete, Rubber, Steel, Wood, and Plastic

| Surface Material | Recovered Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|---|
| Concrete | Coal Fly Ash | – | 15-20 |
| Rubber | Tire Rubber | – | 85-95 |
| Steel | Steel | 16<br>67 | 25-30<br>100 |
| Wood | Wood or wood composite | 90 - 97 | 90 - 97 |
| Plastic | Plastic or plastic composite | 85 - 95 | 100 |

Notes: The recommended recovered materials content levels for rubber railroad grade crossing surfaces are based on the weight of the raw materials, exclusive of any additives such as binders or other additives.

Coal fly ash can be used as an ingredient of concrete slabs, pavements, or controlled density fill product, depending on the type of concrete crossing system installed. Higher percentages of coal fly ash can be used in the concrete mixture; the higher percentages help to produce a more workable and durable product but can prolong the curing process.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

Railroad grade crossing surfaces made from recovered wood may also contain other recovered materials such as plastics. The percentages of these materials contained in the product would also count toward the recovered materials content level of the item.

Railroad grade crossing surfaces made from recovered plastics may also contain other recovered materials such as auto shredder residue, which contains a mix of materials. The percentages of these materials contained in the product would also count toward the recovered materials content level of the item.

Specifications: EPA recommends that procuring agencies use the ASTM standards listed in Table C-10b when purchasing rubber railroad grade crossing surfaces. EPA recommends that procuring agencies use the ASTM and AASHTO standards listed in Table C-10c when purchasing concrete railroad grade crossing surfaces.

Table C-10b. -- Recommended Specifications for Rubber Railroad Grade Crossings

| ASTM Specification Number | Title |
|---|---|
| D 2000-96 | Rubber Products in Automotive Applications |
| D 2240-97 | Rubber Property -- Durometer Hardness |
| D 412-97 | Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers -- Tension |
| D 297-93 | Rubber Products -- Chemical Analysis |
| E 303-93 | Measuring Surface Frictional Properties Using the British Pendulum Tester |
| D 1171-94 | Rubber Deterioration -- Surface Ozone Cracking Outdoors or Chamber (Triangular Specimens) |
| D 573-88 | Deterioration in an Air Oven |
| D 395-89 | Rubber Property -- Compression Set |
| D 257-93 | DC Resistance or Conductance of Insulating Materials |
| D 2137-94 | Rubber Property -- Brittleness Point of Flexible Polymers and Coated Fabrics |

Table C-10c. -- Recommended Specifications for Cement and Concrete Containing Recovered Materials

| Specification number | Title |
|---|---|
| ASTM C 595 | Standard Specification for Blended Hydraulic Cements |
| ASTM C 150 | Standard Specification for Portland Cement |
| AASHTO M 240 | Blended Hydraulic Cements |
| ASTM C 618 | Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete |
| ASTM C 311 | Standard Methods of Sampling and Testing Fly Ash and Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete |

EPA has not identified any industry specifications or standards for wood or plastic railroad grade crossing surfaces.

**Section C-11 --Modular Threshold Ramps Containing Recovered Steel, Aluminum, or Rubber**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-11, procuring agencies establish minimum content standards for use in purchasing modular threshold ramps containing recovered materials.

Table C-11. -- Recommended Recovered Materials Content Levels for Modular Threshold Ramps Containing Recovered Steel, Aluminum, or Rubber

| Material | Postconsumer Content (%) | Total Recovered Material Content (%) |
|---|---|---|
| Steel | 16 - 67 | 25 - 100 |
| Aluminum | – | 10 |
| Rubber | 100 | 100 |

Notes: The recommended recovered materials content levels for steel in this table reflect the fact that the designated item may contain steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF), or a combination of both. Steel from the BOF process contains 25% - 30% total recovered steel, of which 16% is postconsumer. Steel from the EAF process contains 100% total recovered steel, of which 67% is postconsumer. According to industry sources, modular threshold ramps containing a combination of BOF and EAF steel would contain 25% - 85% total recovered steel, of which 16% - 67% would be postconsumer. Since there is no way of knowing which type of steel was used in the manufacture of the item, the postconsumer and total recovered material content ranges in this table encompass the whole range of possibilities, i.e., the use of EAF steel only, BOF steel only, or a combination of the two.

These recommendations are for modular threshold ramps. EPA understands that ramps may also be constructed of cement and concrete. For these ramps, procuring agencies should follow the procurement guidelines for cement and concrete containing recovered materials.

Specifications: Although the federal government is not governed by ADA, the Access Board's ADA standards are more current than the UFAS and are therefore generally used by federal facilities. According to the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities" (28 CFR Part 36), published in the Federal Register, July 26, 1991, ground and floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curbramps, must be stable, firm, and slip-resistant. The guidelines do not define what is meant by "stable, firm, and slip-resistant," but the Access Board recommends static coefficient of friction values of 0.8 for ramps and 0.6 for accessible routes.

**Section C-12 --Nonpressure Pipe Containing Recovered Steel, Plastic, or Cement**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-12a, procuring agencies establish minimum content standards for use in purchasing nonpressure pipe containing recovered materials.

Table C-12a. -- Recommended Recovered Materials Content Levels for Nonpressure Pipe Containing Recovered Steel, Plastic, or Cement

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Steel | 16<br>67 | 25 - 30<br>100 |
| HDPE | 100 | 100 |
| PVC | 5 - 15 | 25 - 100 |
| Cement | Refer to cement and concrete recommendations in C-3 of the RMAN | |

Note: The recommended recovered materials content levels for steel in this table reflect the fact that the designated item can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered steel, of which, 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which, 67% is postconsumer steel.

Specifications: EPA recommends that procuring agencies refer to the following tables C-12b, C-12c, C-12d, and C-12e when purchasing nonpressure pipe containing recovered materials.

Table C-12b. -- ASTM Plastic Pipe Specifications

| |
|---|
| F1960, Standard Specification for Co-extruded Poly(Vinyl Chloride) (PVC) Non-Pressure Plastic Pipe Having Reprocessed Recycled Content |
| F1732, Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer and Drain Pipe Containing Recycled PVC Material |
| D1248, Standard Specification for Polyethylene Plastics Molding and Extrusion Materials<br>F810, Smooth wall Polyethylene (PE) Pipe for Use in Drainage and Waste Absorption Fields |
| F405, Standard Specification for Corrugated Polyethylene (PE) Tubing and Fittings |
| F512, Standard Specification for Poly(vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation |
| F667, Standard Specification for Large Diameter Corrugated Polyethylene Tubing and Fittings |
| F949, Standard Specification for Poly (Vinyl Chloride (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings |
| D2665, Standard Specification for Poly(vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings |
| D3034, Standard Specification for Type PSM (Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings |
| D2239, Standard Specifications for Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter |
| D2447, Standard Specification for Polyethylene (PE) Plastic Pipe Schedules 40 and 80, Based on Controlled Outside Diameters |
| D2729-96a, Standard Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings |
| D3035, Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter |
| D4976, Standard Specification for Polyethylene Plastic Molding and Extrusion Materials<br>D3350, Standard Specification for Polyethylene Plastic Pipe and Fitting Materials |
| D4396, Standard Specification for Rigid Poly(Vinyl) (PVC) and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds for Plastic Pipe and Fittings Used in Nonpressure Applications |
| F810, Standard Specification for Smooth wall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields |
| F405, Standard Specification for Corrugated Polyethylene (PE) Tubing and Fittings |
| F1970, Standard Specification for Special Engineered Fittings or Appurtenances for Use in Poly Vinyl (Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems |

Note: ASTM Committee C13 on Concrete Pipe is responsible for the formulation and review of specifications, test methods and definitions for concrete pipe and develops and reviews practices and guides covering design, installation, testing, economic evaluation, and performance of concrete pipe systems. While the previous ceiling on fly ash content had been set at 25 percent, in 1999, ASTM Committee C13 removed all limitations on fly ash content in pipe.

Table C-12c. -- ASTM Concrete Pipe Specifications

| |
|---|
| C14-99, Standard Specification for Concrete Sewer, Storm Drain, and Culvert Pipe |
| C118-99, Standard Specification for Concrete Pipe for Irrigation or Drainage |
| C412-99, Standard Specification for Concrete Drain Tile |
| C444-95, Standard Specification for Perforated Concrete Pipe |
| C505-99a, Standard Specification for Nonreinforced Concrete Irrigation Pipe With Rubber Gasket Joints |
| C654-99, Standard Specification for Porous Concrete Pipe |
| C76-99, Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe |
| C506-99, Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe |
| C507-99, Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe |
| C478-97, Standard Specification for Precast Reinforced Concrete Manhole Sections |

Table C-12d. -- ASTM and AASHTO Specifications for Steel Pipe

| Material | Description | AASHTO Specifications | ASTM Specifications |
|---|---|---|---|
| Zinc Coated Sheets and Coils | Steel base metal* with 610 g/m2 (2 oz/ft2) zinc coating | M-218 | A929M |
| Polymer Coated Sheets and Coils | Polymer coatings applied to sheets* and coils* 9.25 mm (0.010 in.) thickness each side | M-246 | A742M |
| Fiber Bonded Coated Coils | Steel base metal with zinc coating and fibers pressed into the zinc while molten to form fiber bonded coating | -- | A885 |
| Aluminum Coated | Steel base metal* coated with 305 g/m2 (1 oz/ft2) of pure aluminum | M-274 | A929M |
| Sewer and Drainage Pipe | Corrugated pipe fabricated from any of the above sheets or coils. Pipe is fabricated by corrugating continuous | | |

| Material | Description | AASHTO Specifications | ASTM Specifications |
|---|---|---|---|
| | coils into helical “from with lockseam or welded seam, or by” rolling annular corrugated mill sheets and riveting seams: | | |
| | Galvanized corrugated steel pipe | M-36 | A760M |
| | Polymeric pre-coated sewer and drainage pipe | M-245 | A762M |
| | Fiber bonded impregnated corrugated steel pipe | -- | A760M |
| | Aluminized corrugated steel pipe | M-36 | A760M |
| | Structural plate pipe | M-167 | A761M |
| Asphalt Coated Steel Sewer Pipe | Corrugated steel pipe of any of the types shown above with a 1.3 mm (0.0050 in.) high purity asphalt cover | M-190 | A849<br>A862 |
| Invert Paved Steel Sewer Pipe | Corrugated steel pipe of any one for the types shown above with an asphalt pavement poured in the invert to cover the corrugation by 3.2 mm (l/8 in.) | M-190 | A849<br>A862 |
| Fully Lined Steel | With an internal asphalt lining centrifugally spun in place | M-190 | A849<br>A862 |
| | Corrugated steel pipe with a single thickness of smooth sheet fabricated with helical ribs projected outward | M-36 | A760M |
| | With an internal concrete lining in place | M-36 | A760M |
| | Corrugated steel pipe with a smooth steel linter integrally formed with the corrugated shell. | M-36 | A760M |
| Cold Applied Bituminous Coatings | Fibrated mastic or coat tar base coatings of various viscosities for field or shop coating of corrugated pipe or structural plate | M-243 | A849 |
| Gaskets and Sealants | Standard O-ring gasket | -- | D1056 |
| | | | |

| Material | Description | AASHTO Specifications | ASTM Specifications |
|---|---|---|---|
| | Gasket strips, butyl or neoprene | -- | C361 |

Notes: * Yield point 0230Mpa (33ksi) min,; tensile strength -310Mpa (45 ksi) min.; Elongation (50 mm/2 in.) - 20% min.

AASHTO pipe specifications restrict the use of recycled plastic through the reference to "rework" material. Specifications referenced by those who commented in 1994 are listed in Table C-12e. AASHTO's specifications are updated annually.

Table C-12e. -- American Association of State Highway and Transportation Officials Pipe Specifications (1994)

| |
|---|
| M 252-93, Corrugated Polyethylene Drainage Tubing |
| M 294-93, Corrugated Polyethylene Pipe |
| M278, Class PS 46 Polyvinyl Chloride (PVC) Pipe |
| Section 18, Standard Specifications for Highway Bridges |

**Section C-14. Roofing Materials Containing Recovered Steel, Aluminum, Fiber, Rubber, Plastic or Plastic Composites, or Cement**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table C-14, procuring agencies establish minimum content standards for use in purchasing or procuring roofing materials or services. EPA's research indicates that wood shakes and shingles as well as asphalt/plastic composite roofing materials can be made from recovered materials, but we were unable to identify recycled-content percentages in these products. In the case of asphalt/plastic composite roofing materials, EPA found that the plastic was the recovered material in the items, not the asphalt.

Table C-14. -- Recommended Recovered Materials Content Levels for Roofing Materials Containing Recovered Steel, Aluminum, Fiber, Rubber, Plastic or Plastic Composites, or Cement

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Steel | 16<br>67 | 25 - 30<br>100 |
| Aluminum | 20 - 95 | 20 - 95 |
| Fiber (Felt) or Fiber Composite | 50 - 100 | 50-100 |
| Rubber | 12 - 100 | 100 |
| Plastic or Plastic/Rubber Composite | 100 | 100 |
| Wood/Plastic Composite | – | 100 |
| | | |

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Cement | Refer to cement and concrete recommendations in C-3 of the RMAN | |

Note: The recommended recovered materials content levels for steel in this table reflect the fact that the designated item can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered steel, of which, 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which, 67% is postconsumer steel.

Specifications: EPA recommends that procuring agencies refer to the 186 standards for roofing products maintained by ASTM's Committee D08 on Roofing, Waterproofing, and Bituminous Materials. The specifications, however, do not discuss use of recovered materials, nor do they preclude the use of recovered materials.

## Part D --Transportation Products

### Section D-1 -- Temporary Traffic Control Devices

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table D-1, procuring agencies establish minimum content standards for use in purchasing traffic cones and traffic barricades.

Table D-1.-- Recommended Recovered Materials Content Levels for Traffic Cones and Traffic Barricades

| Product | Material | Postconsumer Materials (%) | Total Recovered Materials (%) |
|---|---|---|---|
| Traffic Cones | PVC, LDPE, Crumb Rubber | -- | 50 - 100 |
| Traffic Barricades | HDPE, LDPE, PET<br>Steel<br><br>Fiberglass | 80 - 100<br>16<br>67<br>-- | 100<br>25-30<br>100<br>100 |

Notes: The recommended recovered materials content levels are based on the dry weight of the raw materials, exclusive of any additives such as adhesives, binders, or coloring agents.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

**Section D-2 -- Parking Stops Made from Concrete or Containing Recovered Plastic or Rubber**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table D-2, procuring agencies establish minimum content standards for use in purchasing parking stops.

Table D-2. -- Recommended Recovered Materials Content Levels for Parking Stops Made from Concrete or Containing Recovered Plastic or Rubber

| Material | Postconsumer content (%) | Recovered materials content (%) |
|---|---|---|
| Plastic and/or rubber | 100 | ----- |
| Concrete containing coal fly ash | ----- | 20-40 |
| Concrete containing GGBF slag | ----- | 25-70 |

Notes: EPA's recommendation does not preclude a procuring agency from purchasing parking stops manufactured from another material. It simply requires that a procuring agency, when purchasing concrete parking stops or parking stops made with plastic or rubber, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements.

Parking stops made with recovered plastics may also include other recovered materials such as sawdust, wood, or fiberglass. The percentage of these materials contained in the product would also count toward the recovered materials content level of the parking stops.

ASTM specification C595M-95 Standard Specification for Blended Hydraulic Cements specifies the appropriate mix design, including recovered materials content, for concrete containing coal fly ash and GGBF slag.

**Section D-3 -- Channelizers, Delineators, and Flexible Delineators Containing Recovered Plastic, Rubber, or Steel**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table D-3, procuring agencies establish minimum content standards for use in purchasing channelizers, delineators, and flexible delineators.

Table D-3. -- Recommended Recovered Materials Content Levels for Channelizers, Delineators, and Flexible Delineators Containing Recovered Plastic, Rubber, or Steel

| Product | Material | Postconsumer content (%) |
|---|---|---|
| Channelizers | Plastic<br>Rubber (base only) | 25-95<br>100 |
| Delineators | Plastics<br>Rubber (base only)<br>Steel (base only) | 25-90<br>100<br>16% postconsumer and 25-30% total recovered materials<br>or |

| Product | Material | Postconsumer content (%) |
|---|---|---|
| | | 67% postconsumer and 100% total recovered materials |
| Flexible delineators | Plastic | 25-85 |

Notes: EPA's recommendation does not preclude a procuring agency from purchasing channelizers, delineators, or flexible delineators manufactured from another material. It simply requires that a procuring agency, when purchasing these items made from rubber, plastic, or steel, purchase them made with recovered materials when these items meet applicable specifications and performance requirements.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

Specifications: EPA recommends that procuring agencies use the following specifications when procuring channelizers, delineators, and flexible delineators:

(1) The Federal Highway Administration's Manual on Uniform Traffic Control Devices contains specifications for the size, shape, mounting, and placement of temporary traffic control devices.

(2) The States of Florida and North Carolina have specifications that require the use of recovered materials in their flexible delineators. The California Department of Transportation (CALTRANS) has specifications for "Drivable Flexible Plastic Guide Marker and Clearance Marker Posts." A copy of these specifications are available from the RCRA Hotline at 1-800-424-9346.

## Part E -- Park and Recreation Products

### Section E-1 -- Playground Surfaces and Running Tracks

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table E-1, procuring agencies establish minimum content standards for use in purchasing playground surfaces and running tracks made of rubber or plastic.

Table E-1.-- Recommended Recovered Materials Content Levels for Playground Surfaces and Running Tracks

| Product | Material | Postconsumer Recovered Materials (%) |
|---|---|---|
| Playground Surfaces | Rubber or Plastic | 90 - 100 |
| Running Tracks | Rubber or Plastic | 90 - 100 |

Notes: EPA's recommendation does not preclude procuring agencies from purchasing playground surfaces or running tracks manufactured from another material. It simply recommends that procuring agencies, when purchasing playground surfaces or running tracks made from rubber or plastic, purchase these items made from recovered materials.

The recommended recovered materials content levels are based on the dry weight of the raw materials, exclusive of any additives such as adhesives, binders, or coloring agents.

### Section E-2 --Plastic Fencing Containing Recovered Plastic for Specified Uses

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table E-2, procuring agencies establish minimum content standards for use in purchasing plastic fencing for use in controlling snow or sand drifting and as a warning/safety barrier in construction or other applications.

Table E-2. -- Recommended Recovered Materials Content Levels for Fencing Containing Recovered Plastic

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Plastic | 60-100 | 90-100 |

Note: EPA's recommendation does not preclude a procuring agency from purchasing fencing manufactured from another material, such as wood. It simply requires that a procuring agency, when purchasing plastic fencing, purchase this item made with recovered materials when this item meets applicable specifications and performance requirements.

Specifications: The State of New York developed a specification for orange-colored plastic fencing used for snow barriers, warning barriers, and safety barriers, but discontinued its use because the state did not purchase enough fencing to warrant maintaining the specification. Height varied, depending on application, from four to six feet. Weight varied from 17 pounds per 100 foot section for warning barriers to 48 pounds per 100 foot section for snow fencing to 66 pounds per 100 foot section for six-foot safety barrier fencing. The New York specification also addressed mesh size, porosity, service temperature range, and strength for each application. A copy of this specification is available from the RCRA Hotline by calling 1-800-424-9346.

### Section E-3. Picnic Tables and Park Benches Containing Recovered Steel, Aluminum, or Plastic

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table E-3a, procuring agencies establish minimum content standards for use in purchasing aluminum, steel, or plastic park benches and picnic tables containing recovered materials.

Table E-3a. -- Recommended Recovered Materials Content Levels for Park Benches and Picnic Tables Containing Recovered Aluminum, Steel, Concrete or Plastic

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Plastics | 90-100 | 100 |
| Plastic composites | 50 - 100 | 100 |
| Aluminum | 25 | 25 |
| Concrete | -- | 15-40 |
| Steel | 16<br>67 | 25-30<br>100 |

Notes: "Plastics" includes both single and mixed plastic resins. Picnic tables and park benches made with recovered plastics may also contain other recovered materials such as sawdust, wood, or fiberglass. The percentage of these materials contained in the product would also count toward the recovered materials content level of the item.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

EPA's recommendations do not preclude a procuring agency from purchasing park benches or picnic tables made from other materials. They simply require that procuring agencies, when purchasing park benches or picnic tables made from plastic, aluminum, concrete, or steel purchase these items made with recovered materials when these items meet applicable specifications and performance requirements.

Specifications: EPA did not identify any specifications for park benches or picnic tables made from steel, concrete, or aluminum. EPA recommends that procuring agencies ensure that there is no language in their specifications for park benches or picnic tables that would preclude or discourage the use of products containing recovered materials.

EPA recommends that procuring agencies use the ASTM specifications referenced in Table E-3b for park benches and picnic tables made from plastic lumber.

Table E-3b. -- Recommended Specifications for Plastic Lumber Used In Park Benches and Picnic Tables

| ASTM Specification Number | Title |
|---|---|
| D 6108-97 | Standard Test Method for Compressive Properties of Plastic Lumber |
| D 6109-97 | Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastic Lumber |
| D 6111-97 | Standard Test Method for Bulk Density and Specific Gravity of Plastic Lumber and Shapes by Displacement |
| D 6112-97 | Standard Test Method for Compressive and Flexural Creep and Creep Rupture of Plastic Lumber and Shapes |
| D 6117-97 | Standard Test Method for Mechanical Fasteners in Plastic Lumber and Shapes |

**Section E-4. Playground Equipment**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table E-4a, procuring agencies establish minimum content standards for use in purchasing playground equipment made from plastic lumber, steel, or aluminum containing recovered materials.

Table E-4a. -- Recommended Recovered Materials Content Levels for Playground Equipment Containing Recovered Plastic, Steel, or Aluminum

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Plastics | 90 - 100 | 100 |
| Plastic Composites | 50 - 75 | 95 - 100 |
| Steel | 16<br>67 | 25-30<br>100 |
| Aluminum | 25 | 25 |

Notes: "Plastics" includes both single and mixed plastic resins. Playground equipment made with recovered plastics may also contain other recovered materials such as wood or fiberglass. The percentage of these materials contained in the product would also count toward the recovered materials content level of the item.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

EPA's recommendations do not preclude a procuring agency from purchasing playground equipment made from other materials. They simply require that procuring agencies, when purchasing playground equipment made from plastic, aluminum, or steel purchase these items made with recovered materials when the item meets applicable specifications and performance requirements.

Specifications: EPA recommends that procuring agencies use the specifications in Table E-4b when procuring playground equipment. Playground equipment may also be subject to state and local codes and standards as well as Federal child safety laws. EPA also recommends that procuring agencies use the ASTM specifications referenced in Table E-4c for playground equipment made from plastic lumber.

Table E-4b. -- Recommended Safety Specifications for Playground Equipment

| Specification | Title |
|---|---|
| Consumer Product Safety Commission (CPSC) Publication No. 325 | Handbook for Public Playground Safety |
| ASTM F-1487-95 | Safety Performance Specification for Playground Equipment for Public Use |

Table E-4c. -- Recommended Specifications for Plastic Lumber Used In Playground Equipment

| ASTM Specification Number | Title |
|---|---|
| D 6108-97 | Standard Test Method for Compressive Properties of Plastic Lumber |
| D 6109-97 | Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastic Lumber |
| D 6111-97 | Standard Test Method for Bulk Density and Specific Gravity of Plastic Lumber and Shapes by Displacement |
| D 6112-97 | Standard Test Method for Compressive and Flexural Creep and Creep Rupture of Plastic Lumber and Shapes |
| D 6117-97 | Standard Test Method for Mechanical Fasteners in Plastic Lumber and Shapes |

## Part F -- Landscaping Products

### Section F-1 -- Hydraulic Mulch

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table F-1, procuring agencies establish minimum content standards for paper-based and wood-based hydraulic mulch products.

Table F-1.-- Recommended Recovered Materials Content Levels for Hydraulic Mulch Products

| Hydraulic Mulch Products | Recovered Materials (Materials and %) |
|---|---|
| Paper-Based Hydraulic Mulch | Postconsumer recovered paper 100 |
| Wood-Based Hydraulic Mulch | Recovered wood and/or paper 100 |

Note: The recommended recovered materials content levels are based on the dry weight of the fiber, exclusive of any dyes, wetting agents, seeds, fertilizer, or other non-cellulose additives.

### Section F-2 -- Compost Made from Recovered Organic Materials

**Note:** EPA previously designated yard trimmings compost in CPG I and food waste compost in CPG III. CPG V revises the designation by amending the definition of "compost" and changing the description of the designation to "compost made from recovered organic materials." These materials can include yard trimmings, food waste, manure, biosolids, or other recovered organic materials that can be composted. The effect of those changes is to add compost made from manure or biosolids or both to the compost designation. Following are EPA's revised recommendations for purchasing compost. EPA's final recommendations for purchasing composts made from recovered organic materials should be substituted for the recommendations found in Section F-2 of RMAN III.

Preference Program: EPA recommends that procuring agencies purchase or use mature compost made from recovered organic materials in such applications as landscaping, seeding of grass or other plants on roadsides and embankments, as nutritious mulch under trees and shrubs, and in erosion control and soil reclamation. Mature compost is defined as a thermophilic converted product with high humus content, which can be used as a soil amendment and can also be used to prevent or remediate pollutants in soil, air, and storm water run-off.

EPA further recommends that those procuring agencies that have an adequate volume of organic materials, as well as sufficient space for composting, should implement a composting system to produce compost from these materials to meet their landscaping and other needs.

Specifications: EPA recommends that procuring agencies refer to the following specifications when purchasing compost made from recovered organic materials. The U.S. Composting Council's (USCC's) Test Methods for the Examination of Composting and Compost (TMECC) and Seal of Testing Assurance (STA) program, which are found at www.compostingcouncil.org. The TMECC are standardized methods

for the composting industry to test and evaluate compost and verify the physical, chemical, and biological characteristics of composting source materials and compost products. The TMECC also includes material testing guidelines to ensure product safety and market claims. The STA program is a compost testing and information disclosure program that uses the TMECC. Participating compost producers regularly sample and test their products using STA Program approved labs, all of which must use the same standardized testing methodologies. Participants must make test results available to customers and certify that they are in compliance with all applicable local, state, and federal regulations with respect to their compost products. The USCC then certifies the participants' compost as "STA certified compost" and allows the use of the STA logo on product packaging and literature. Procuring agencies can consider specifying STA certified compost, especially for applications that require consistent quality.

Section 713.05(f) of the U.S. Department of Transportation's 1996 "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects FP-96" specifies compost as one of the materials suitable for use in roadside revegetation projects associated with road construction. (See p.719 in http://www.efl.fhwa.dot.gov/design/manual/Fp96.pdf.)

EPA's "Standards for the Use or Disposal of Sewage Sludge," at 40 CFR part 503, limit the pollutants and pathogens in biosolids. If biosolids are included as part of the compost, the processing and product are subject to Part 503. (http://www.epa.gov/owm/mtb/biosolids/) Procuring agencies should also look at other applicable federal, state, and local government regulations on the use of compost made from recovered organic materials.

The U.S. Department of Agriculture (USDA) National Organic Program (NOP) regulations established national standards for organically produced agricultural products to assure consumers that agricultural products marketed as organic meet consistent, uniform standards. The NOP regulations require that agricultural products labeled as organic originate from farms or handling operations certified by a State or private entity that has been accredited by USDA. Among other things, the regulations prohibit the use of sewage sludge (biosolids) in organic production. (http://www.ams.usda.gov/nop/NOP/NOPhome.html)

Example language for solicitations and contracts can be found in the Federal Green Construction Guide for Specifiers, which is available on the Whole Building Design Guide web site, at http://www.wbdg.org/design/greenspec_msl.php?s=329000.

The Organic Materials Review Institute (OMRI), at www.omri.org, has developed guidelines and lists of materials allowed and prohibited for use in the production, processing, and handling of organically grown products.

Finally, EPA recommends that procuring agencies ensure that there is no language in their specifications relating to landscaping, soil amendments, erosion control, or soil reclamation that would preclude or discourage the use of compost made from recovered organic materials.

**Section F-3 -- Garden and Soaker Hoses Containing Recovered Plastic or Rubber**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table F-3, procuring agencies establish minimum content standards for use in purchasing garden and soaker hoses.

Table F-3. -- Recommended Recovered Materials Content Levels for Garden and Soaker Hoses Containing Recovered Plastic or Rubber

| Product | Material | Postconsumer content (%) |
|---|---|---|
| Garden hose | Rubber and/or plastic | 60-65 |
| Soaker hose | Rubber and/or plastic | 60-70 |

Note: EPA's recommendation does not preclude a procuring agency from purchasing garden and soaker hoses manufactured from another material. It simply requires that a procuring agency, when purchasing garden and soaker hoses made from plastic or rubber, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements.

The Green Seal specification for watering hoses includes a 50 percent postconsumer content level. However, all companies from which EPA obtained information manufacture garden and/or soaker hoses with at least 60 percent postconsumer content.

Specifications: EPA recommends that procuring agencies use the following specifications when procuring garden and soaker hoses:

(1) ASTM D3901 Consumer Specification for Garden Hose. The specification addresses physical and performance characteristics (pressure, tensile, and ripping strength tests) and states that the material components are to be agreed upon by the purchaser and seller.

(2) Green Seal GC-2: Watering Hoses. The standard calls for the use of 50 percent postconsumer rubber material in garden hoses and 65 percent postconsumer rubber material in soaker hoses. EPA recommends that, when purchasing garden hoses, procuring agencies reference the technical requirements of this specification but set a higher content standard.

**Section F-4 -- Lawn and Garden Edging Containing Recovered Plastic or Rubber**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table F-4, procuring agencies establish minimum content standards for use in purchasing lawn and garden edging.

Table F-4. -- Recommended Recovered Materials Content Levels for Lawn and Garden Edging Containing Recovered Plastic or Rubber

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Plastic and/or rubber | 30-100 | 30-100 |

Note: EPA's recommendation does not preclude a procuring agency from purchasing lawn and garden edging manufactured from another material, such as wood. It simply requires that a procuring agency, when purchasing lawn and garden edging made from plastic and/or rubber, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements.

**Section F-5. Plastic Lumber Landscaping Timbers and Posts Containing Recovered Materials**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table F-5a, procuring agencies establish minimum content standards for use in purchasing plastic lumber landscaping timbers and posts containing recovered materials.

Table F-5a. -- Recommended Recovered Materials Content Levels for Plastic Lumber Landscaping Timbers and Posts

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| HDPE | 25-100 | 75-100 |
| Mixed Plastics/Sawdust | 50 | 100 |
| HDPE/Fiberglass | 75 | 95 |
| Other mixed resins | 50-100 | 95-100 |

Note: EPA's recommendations do not preclude a procuring agency from purchasing wooden landscaping timbers and posts. They simply require that procuring agencies, when purchasing plastic landscaping timbers and posts purchase these items made with recovered materials when the items meet applicable specifications and performance requirements.

Specifications: EPA recommends that procuring agencies use the ASTM specifications referenced in Table F-5b for plastic lumber landscaping timbers and posts.

Table F-5b. -- Recommended Specifications for Plastic Lumber Landscaping Timbers and Posts

| ASTM Specification Number | Title |
|---|---|
| D 6108-97 | Standard Test Method for Compressive Properties of Plastic Lumber |
| D 6109-97 | Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastic Lumber |
| D 6111-97 | Standard Test Method for Bulk Density and Specific Gravity of Plastic Lumber and Shapes by Displacement |
| D 6112-97 | Standard Test Method for Compressive and Flexural Creep and Creep Rupture of Plastic Lumber and Shapes |
| D 6117-97 | Standard Test Method for Mechanical Fasteners in Plastic Lumber and Shapes |

**Section F-6 – Fertilizer Made from Recovered Organic Materials**

**Note:** Although fertilizer has some qualities similar to compost, for the purposes of the CPG, compost is a separate designation.

Preference Program: EPA recommends that procuring agencies purchase or use fertilizer made from recovered organic materials in such applications as agriculture and crop production, landscaping, horticulture, parks and other recreational facilities, on school campuses, and for golf course and turf maintenance.

Specifications: EPA recommends that procuring agencies refer to the following specifications when purchasing fertilizers made from recovered organic materials. Biosolids can be used in the production of fertilizers made from recovered organic materials and must meet the requirements specified in 40 CFR part 503 before they may be beneficially used. The Part 503 land application requirements ensure that any biosolids that are land applied contain pathogens and metals that are below specified levels and are protective of public health and the environment. (http://www.epa.gov/owm/mtb/biosolids/) Procuring agencies should also check for other applicable federal, state, and local government regulations on the use of fertilizers made from recovered organic materials.

The U.S. Department of Agriculture (USDA) National Organic Program (NOP) regulations established national standards for organically produced agricultural products to assure consumers that agricultural products marketed as organic meet consistent, uniform standards. The NOP regulations require that agricultural products labeled as organic originate from farms or handling operations certified by a State or private entity that has been accredited by USDA. Among other things, the regulations prohibit the use of sewage sludge (biosolids) in organic production (http://www.ams.usda.gov/nop/NOP/NOPhome.html).

The Organic Materials Review Institute (OMRI), at www.omri.org, has developed guidelines and lists of materials allowed and prohibited for use in the production, processing, and handling of organically grown products.

Finally, EPA recommends that procuring agencies ensure that there is no language in their specifications relating to landscaping or soil treatment that would preclude or discourage the use of fertilizers made from recovered organic materials.

## Part G -- Non-Paper Office Products

### Section G-1 -- Office Recycling Containers and Office Waste Receptacles

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table G-1, procuring agencies establish minimum content standards for use in purchasing office recycling containers and office waste receptacles.

Table G-1.-- Recommended Recovered Materials Content Levels for Office Recycling Containers and Office Waste Receptacles

| Product | Recovered Materials (materials and percent) |
|---|---|
| Office Recycling Containers and Office Waste Receptacles | Plastic: 20 - 100 Postconsumer Recovered Materials<br>Paper: Refer to the Paper Products Recommendations in Part A of RMAN<br>Steel: 16% postconsumer and 25% - 30% total recovered materials |

Note: EPA's recommendations for office recycling containers and office waste receptacles containing recovered plastic, paper, or steel do not preclude a procuring agency from purchasing containers or receptacles manufactured from another material, such as wood. They simply require that procuring agencies, when purchasing office recycling containers or office waste receptacles manufactured from plastic, paper, or steel, purchase these items made with recovered materials when the items meet applicable specifications and performance requirements.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items are made from steel manufactured in a Basic Oxygen Furnace (BOF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel.

**Section G-2 -- Plastic Desktop Accessories**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table G-2, procuring agencies establish minimum content standards for use in purchasing plastic desktop accessories. If items are not available within the recommended range, procuring agencies should seek the items with the highest percentage of recovered materials practicable.

Table G-2. -- Recommended Recovered Materials Content Levels for Plastic Desktop Accessories

| Product | Postconsumer Recovered Materials (Material and %) |
|---|---|
| Plastic Desktop Accessories | Polystyrene<br>25 - 80 |

Note: EPA's recommendation does not preclude procuring agencies from purchasing a desktop accessory manufactured from another material, such as paper, wood, or steel. It simply recommends that, when purchasing plastic desktop accessories, procuring agencies purchase these items made from recovered materials.

**Section G-3 -- Toner Cartridges**

Preference Program: EPA recommends that procuring agencies establish procedures and policies that give priority to remanufacturing the agencies' expended toner cartridges. EPA recommends that, under such policies and procedures, procuring agencies procure remanufacturing services for expended cartridges and, when such services are unavailable or not practicable, obtain remanufactured toner cartridges or new toner cartridges made with recovered materials from product vendors.

**Section G-4 -- Binders**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table G-3, procuring agencies establish minimum content standards for use in purchasing binders.

Table G-3. -- Recommended Recovered Materials Content Levels for Binders

| Product | Recovered Materials (Materials and %) |
|---|---|
| Plastic-Covered Binders (Plastic Covering) | Plastic 25 - 50 |
| Chipboard, Paperboard, or Pressboard Binders or Binder Components | Paper Refer to Paper Products Recommendations in Part A of RMAN |

Notes: The chipboard, paperboard, or pressboard binders or components of plastic-covered binders or binders covered with another material, such as cloth, are covered under the recommendation for paper and paper products (see Part A of the RMAN).

EPA's recommendations do not preclude procuring agencies from purchasing binders covered with or manufactured using another material, such as cloth. It simply recommends that procuring agencies, when purchasing binder types designated in the procurement guidelines, purchase these binders containing recovered materials.

Specifications: GSA's specification for binders, A-A-2549A, covers four types of binders, including cloth bound, flexible cover; cloth bound, stiff cover; plastic bound, flexible cover; and plastic bound, stiff cover. In the specification, GSA requires its binders to contain "a minimum of 100% waste paper, including a minimum of 30% postconsumer recovered materials."

**Section G-5 -- Plastic Trash Bags**

Preference Program: EPA recommends that, based on the content levels shown in Table G-4, procuring agencies establish minimum content standards for use in purchasing plastic trash bags.

Table G-4 .-- Recommended Recovered Materials Content Levels for Plastic Trash Bags

| Product | Postconsumer Recovered Materials (Material and %) |
|---|---|
| Plastic Trash Bags | Plastic<br>10 - 100 |

Note: EPA's recommendation does not preclude procuring agencies from purchasing a trash bag manufactured using another material, such as paper. It merely recommends that procuring agencies, when purchasing plastic trash bags, purchase these items made from recovered materials.

**Section G-6 -- Printer Ribbons**

Preference Program: Minimum content standards are not appropriate for remanufactured items, such as printer ribbons, because a core part of the item is reused in the new product, even though certain components of a printer ribbon may contain recovered materials. In lieu of content standards, EPA recommends that procuring agencies adopt one or both of the following approaches: (1) procure printer ribbon reinking or reloading services or (2) procure reinked or reloaded printer ribbons. EPA further recommends that procuring agencies establish policies that give priority to reinking or reloading their expended printer ribbons. If reinking and reloading services are unavailable, procuring agencies should attempt to purchase reinked or reloaded printer ribbons. GSA offers remanufactured printer ribbons on the New Item Introductory Schedule (NIIS).

Specifications: The State of Alabama has a specification for reinked ribbons which requires the ribbons to be vacuum cleaned, reinked, and rewound to proper tension. A copy of this specification is available from the RCRA Hotline at 1-800-424-9346.

**Section G-7 -- Plastic Envelopes**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table G-7, procuring agencies establish minimum content standards for use in purchasing plastic envelopes.

Table G-7. -- Recommended Recovered Materials Content Levels for Plastic Envelopes

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Plastic | 25 | 25-35 |

Note: EPA's recommendation does not preclude a procuring agency from purchasing envelopes manufactured from another material, such as paper. It simply requires that a procuring agency, when purchasing envelopes made from plastic, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements. Procuring agencies should note, however, that paper envelopes fall within the scope of EPA's previous designation of paper and paper products. EPA issued postconsumer and recovered materials content recommendations for paper products, including envelopes, in the Paper Products RMAN, which was issued in the FEDERAL REGISTER on May 29, 1996 at 61 FR 26985. A copy of the Paper Products RMAN is available from the RCRA Hotline at 1-800-424-9346 and electronically via EPA's Public Access Server at http://www.epa.gov/fedrgstr/search.htm.

Specifications:

(1) GSA, the Government Printing Office (GPO), and the U.S. Postal Service (USPS) all currently purchase plastic envelopes made from Tyvek® containing recovered HDPE. GSA specifies "DuPont Tyvek® or equal." USPS requires "DuPont Tyvek®." GPO requires "white spunbonded polyethylene with the characteristics of DuPont's product no. 1073;" the title of the solicitation, however, states "Tyvek® envelopes or similar."

(2) The Navy requests that plastic envelopes not be sent to ships in order to minimize onboard disposal of plastic.

**Section G-8. Solid Plastic Binders, Plastic Clipboards, Plastic File Folders, Plastic Clip Portfolios, and Plastic Presentation Folders Containing Recovered Plastic**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table G-8, procuring agencies establish minimum content standards for use in purchasing solid plastic binders, plastic clipboards, plastic file folders, plastic clip portfolios, and plastic presentation folders containing recovered materials.

Table G-8. -- Recommended Recovered Materials Content Levels for Solid Plastic Binders, Clipboards, File Folders, Clip Portfolios, and Presentation Folders

| Product | Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|---|
| Solid plastic binders | HDPE<br>PE<br>PET<br>Misc. Plastics | 90<br>30-50<br>100<br>80 | 90<br>30-50<br>100<br>80 |
| Plastic clipboards | HDPE<br>PS<br>Misc. Plastics | 90<br>50<br>15 | 90<br>50<br>15-80 |
| Plastic file folders | HDPE | 90 | 90 |
| Plastic clip portfolios | HDPE | 90 | 90 |
| Plastic presentation folders | HDPE | 90 | 90 |

Notes: EPA's recommendations do not preclude a procuring agency from purchasing binders, clipboards, file folders, clip portfolios, or presentation folders made from another material, such as paper. They simply require that procuring agencies, when purchasing these items made from solid plastic, purchase them made with recovered plastics when these items meet applicable specifications and performance requirements.

For EPA's recommendations for purchasing pressboard binders and paper file folders containing recovered materials, see table A-1c in the Paper Products RMAN (61 FR 26986, May 29, 1996). See Table G-3 in RMAN I for EPA's recommendations for purchasing plastic-covered binders containing recovered materials.

Specifications: EPA did not identify any specifications for solid plastic binders, clipboards, file folders, clip portfolios, and presentation folders. EPA recommends that procuring agencies ensure that there is no language in their specifications for these items that would preclude or discourage the use of products containing recovered materials.

**Section G-9. Office Furniture Containing Recovered Steel, Aluminum, Wood, Agricultural Fiber, and Plastic**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table G-9, procuring agencies establish minimum content standards for use in purchasing office furniture with recovered materials, including remanufactured or refurbished office furniture.

Table G-9. -- Recommended Recovered Materials Content Levels for Office Furniture

| Product | Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|---|
| Furniture structure | Steel | 16 | 25 - 30 |
| Furniture structure | Aluminum | – | 75 - 100 |
| Particleboard/ Fiberboard component | Wood or wood composite<br><br>Agricultural fiber | Greater than 0<br><br>– | 80 - 100<br><br>100 |
| Fabric | PET | 100 | 100 |
| Plastic furniture component | HDPE | 70 - 75 | 95 |
| Remanufactured or Refurbished Furniture | Various | 25 - 75 | 25 - 75 |

Notes: The recommended recovered materials content levels for steel in this table reflect the fact that the designated item is generally made from steel manufactured in a Basic Oxygen Furnace (BOF). Steel from the BOF process contains 25% - 30% total recovered steel, of which, 16% is postconsumer steel.

Particleboard and fiberboard used in the wood components of office furniture may also contain other recovered cellulosic materials, including, but not limited to, paper, wheat straw, and bagasse. The percentages of these materials contained in the product would also count toward the recovered materials content level of the item. In addition, while EPA has no evidence or indication that wood treated with chromated copper arsenate (CCA) is currently used in office furniture, EPA is not recommending the use of CCA-treated wood as a recovered material in office furniture. The arsenic in CCA is a known human carcinogen and EPA is currently conducting a thorough and comprehensive risk assessment of CCA as a part of the pesticide reregistration process for CCA. In addition, EPA is conducting a risk assessment for children who contact CCA-treated wood playsets and decks.

Specifications: EPA did not identify any standards or specifications that would preclude government agencies from purchasing office furniture with recovered materials content or remanufactured or refurbished office furniture. GSA requires that remanufactured furniture meet the same Underwriters Laboratories, ASTM, and

Business and Institutional Furniture Manufacturer's Association standards and fire codes (Boston and California) as new furniture.

## Part H - Miscellaneous Products

### Part H-1 -- Pallets Containing Recovered Wood, Plastic, or Paperboard

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-1, procuring agencies establish minimum content standards for use in purchasing pallets.

Table H-1. -- Recommended Recovered Materials Content Levels for Pallets Containing Recovered Wood, Plastic, or Paperboard

| Product | Material | Postconsumer content (%) |
|---|---|---|
| Wooden pallets | Wood | 95-100 |
| Plastic pallets | | |
| Plastic lumber | Plastic | 100 |
| Thermoformed | Plastic | 25-50 |
| Paperboard pallets | Paperboard | 50 |

Note: EPA's recommendation does not preclude a procuring agency from purchasing pallets manufactured from another material. It simply requires that a procuring agency, when purchasing pallets made from wood, plastic, or paperboard, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements.

Specifications: EPA recommends that procuring agencies use the following specifications when procuring pallets:

(1) The Grocery Manufacturers of America issued a widely used standard for 48 by 40-inch stringer pallets known as the "GMA spec." A copy of this specification is available from the RCRA Hotline at 1-800-424-9346.

(2) The National Wooden Pallet and Container Association is developing a standard through the American National Standards Institute (ANSI) for repairable 48 by 40-inch lumber-deck pallets. Contact NWPCA at (703) 527-7667 for current information about the availability of this standard.

(3) U.S. Postal Service specification USPS-P-1108, "Pallet, Nestable, Plastic, Thermoformed (Item No. 3919B)" is for thermoformed HDPE pallets. A copy of the current version, USPS-P-1108E, is available from the RCRA Hotline at 1-800-424-9346.

**Section H-2. -- Sorbents**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-2a, procuring agencies establish minimum content standards for use in purchasing sorbent materials for use in oil and solvent clean-ups and for use as animal bedding.

Table H-2a. -- Recommended Recovered Materials Content Levels for Sorbents Used in Oil and Solvents Clean-ups and for Use as Animal Bedding

| Material | Postconsumer Content (%) | Total Recovered Materials Content (%) |
|---|---|---|
| Paper | 90 - 100 | 100 |
| Textiles | 95 - 100 | 95 - 100 |
| Plastics | -- | 25 - 100 |
| Wood | -- | 100 |
| Other Organics/Multi-Materials | -- | 100 |

Notes: "Wood" includes materials such as sawdust and lumber mill trimmings. Examples of "other organics" include, but are not limited to, peanut hulls and corn stover. An example of "multi-material" sorbents would include, but not be limited to, a polymer and cellulose fiber combination.

EPA's recommendations do not preclude a procuring agency from purchasing sorbents made from other materials. They simply require that procuring agencies, when purchasing sorbents made from paper, wood, textiles, plastics, or other organic materials, purchase them made with recovered materials when these items meet applicable specifications and performance requirements.

Specifications: EPA recommends that procuring agencies ensure that there is no language in their specifications for sorbents that would preclude or discourage the use of products containing recovered materials.

EPA recommends that procuring agencies use the ASTM specifications in Table H-2b when procuring sorbents for use on oil and solvent clean-ups.

Table H-2b. -- ASTM Specifications for Absorbents and Adsorbents

| ASTM Specification Number | Title |
|---|---|
| F 716-81 | Standard Method of Testing Sorbent Performance of Adsorbents |
| F 716-82 | Standard Method of Testing Sorbent Performance of Absorbents |

**Section H-3. Industrial Drums Containing Recovered Steel, Plastic, and Paper**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-3, procuring agencies establish minimum content standards for use in purchasing steel, plastic, or fiber industrial drums containing recovered materials. EPA further recommends that procuring agencies reuse drums, purchase or use reconditioned drums, or procure drum reconditioning services, whenever feasible.

Table H-3. -- Recommended Recovered Materials Content Levels for Steel, Plastic, and Fiber Industrial Drums

| Product | Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|---|
| Steel drums | Steel | 16 | 25-30 |
| Plastic drums | HDPE | 30-100 | 30-100 |
| Fiber drums | Paper | 100 | 100 |

Notes: EPA's recommendation does not preclude a procuring agency from purchasing another type of industrial drum. It simply requires that procuring agencies, when purchasing steel, plastic, or fiber industrial drums, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items are made from steel manufactured in a Basic Oxygen Furnace (BOF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel.

Specifications: EPA is not aware of specifications unique to industrial drums containing recovered materials. EPA notes that industrial drums containing recovered materials can meet applicable U.S. Department of Transportation specifications for packaging hazardous materials. Additionally, the National Motor Freight Traffic Association specifications for containers used to transport goods via truck do not prohibit the use of industrial drums containing recovered materials.

## Section H-4. Awards and Plaques

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-4, procuring agencies establish minimum content standards for use in purchasing awards and plaques containing recovered materials.

Table H-4. -- Recommended Recovered Materials Content Levels for Awards and Plaques Containing Recovered Materials

| Material | Postconsumer Content (%) | Total Recovered Materials Content (%) |
|---|---|---|
| Glass | 75 - 100 | 100 |
| Wood | -- | 100 |
| Paper | 40 - 100 | 40 - 100 |
| Plastic and Plastic/Wood Composite | 50 - 100 | 95 - 100 |

Note: EPA's recommendations do not preclude a procuring agency from purchasing awards or plaques made from other materials. They simply require that procuring agencies, when purchasing awards or plaques made from paper, wood, glass, or plastics/plastic composites, purchase them made with recovered materials when these items meet applicable specifications and performance requirements.

Specifications: EPA is not aware of specifications or standards for awards or plaques containing recovered materials. EPA recommends that procuring agencies ensure that there is no language in their specifications for awards and plaques that would preclude or discourage the use of products containing recovered materials.

**Section H-5. Mats**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-5, procuring agencies establish minimum content standards for use in purchasing mats containing recovered materials.

Table H-5. -- Recommended Recovered Materials Content Levels for Mats

| Material | Postconsumer Content (%) | Total Recovered Materials Content (%) |
|---|---|---|
| Rubber | 75 - 100 | 85 - 100 |
| Plastic | 10 - 100 | 100 |
| Rubber/Plastic Composite | 100 | 100 |

Note: EPA's recommendations do not preclude a procuring agency from purchasing mats made from other materials. They simply require that procuring agencies, when purchasing mats made from rubber and/or plastic, purchase them made with recovered materials when these items meet applicable specifications and performance requirements. When purchasing mats with steel or aluminum linkages, the Agency recommends that these linkages also contain recovered materials.

Specifications: EPA is not aware of specifications or standards for mats containing recovered materials. EPA recommends that procuring agencies ensure that there is no language in their specifications for mats that would preclude or discourage the use of products containing recovered materials. EPA is aware of one ASTM specification for wrestling mats, but does not believe that this type of mat is purchased in appreciable quantities by procuring agencies.

**Section H-6. Manual-Grade Strapping Containing Recovered Steel and Plastic**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-6a, procuring agencies establish minimum content standards for use in purchasing manual-grade strapping containing recovered materials.

Table H-6a. -- Recommended Recovered Materials Content Levels for Manual-Grade Polyester, Polypropylene, and Steel Strapping

| Product | Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|---|
| Polyester strapping | PET | 50-85 | 50-85 |
| Polypropylene strapping | PP | -- | 10-40 |
| Steel strapping | Steel | 16<br>67 | 25-30<br>100 |

Notes: EPA's recommendations do not preclude a procuring agency from purchasing another type of strapping, such as nylon. They simply require that procuring agencies, when purchasing polyester, polypropylene, or steel manual-grade strapping, purchase these items made with recovered materials when these items meet applicable specifications and performance requirements.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

Specifications: EPA is not aware of specifications unique to strapping containing recovered materials. EPA notes that strapping containing recovered materials can meet the ASTM strapping specifications and selection guide listed in Table H-6b.

Table H-6b. -- Recommended ASTM Specifications and Guide for Strapping

| ASTM Specification/Guide Number | Title |
|---|---|
| ASTM D 3953 | Standard Specification for Strapping, Flat Steel and Seals |
| ASTM D 3950 | Standard Specification for Strapping, Nonmetallic (and Joining Methods) |
| ASTM D 4675 | Standard Guide for Selection and Use of Flat Strapping Materials |

**Section H-7. Signage**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-7, procuring agencies establish minimum content standards for use in purchasing plastic signs for non-road applications (e.g., building signs, trail signs) and aluminum signs for roadway or non-road applications containing recovered materials. EPA also recommends that, based on the recovered materials content levels shown in Table H-7, procuring agencies establish minimum content standards for use in purchasing sign supports and posts containing recovered plastic or steel.

Table H-7. -- Recommended Recovered Materials Content Levels for Signs Containing Recovered Plastic or Aluminum and Sign Posts/Supports Containing Recovered Plastic or Steel

| Item/Material | Postconsumer Content (%) | Total Recovered Materials Content (%) |
|---|---|---|
| Plastic signs | 80 - 100 | 80 - 100 |
| Aluminum signs | 25 | 25 |
| Plastic sign posts/supports | 80 - 100 | 80 - 100 |
| Steel sign posts/supports | 16<br>67 | 25 - 30<br>100 |

Notes: Plastic signs and sign posts are recommended for nonroad applications only such as, but not limited to, railway signs in parks and directional/informational signs in buildings.

The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25% - 30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

EPA's recommendations do not preclude a procuring agency from purchasing signs or sign posts made from other materials. They simply require that procuring agencies, when purchasing signs made from plastic or aluminum or sign posts made from plastic or steel, purchase them made with recovered materials when these items meet applicable specifications and performance requirements.

Specifications: EPA is not aware of specifications for non-road signs containing recovered materials. Standard specifications for road sign size, lettering, color, strength, and performance requirements can be found in the "Manual on Uniform Traffic Control Devices," which is published by the Federal Highway Administration. Applicable portions of this manual have been placed in the RCRA public docket for the proposed CPG/RMAN III notices.

**Section H-8. Bike Racks Containing Recovered Steel or Plastic**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-8, procuring agencies establish minimum content standards for use in purchasing bike racks.

Table H-8. -- Recommended Recovered Materials Content Levels for Bike Racks

| Material | Postconsumer Content (%) | Total Recovered Materials Content (%) |
|---|---|---|
| Steel | 16 | 25 - 30 |
| HDPE | 100 | 100 |

Note: The recommended recovered materials content levels for steel in this table reflect the fact that the designated item is generally made from steel manufactured in a Basic Oxygen Furnace (BOF). Steel from the BOF process contains 25% - 30% total recovered steel, of which, 16% is postconsumer steel.

Specifications: EPA did not identify any industry standards or specifications that would preclude the use of recovered materials in bike racks.

**Section H-9. Blasting Grit Containing Recovered Steel, Coal and Metal Slag, Bottom Ash, Glass, Plastic, Fused Alumina Oxide, and Walnut Shells**

Preference Program: EPA recommends that, based on the recovered materials content levels shown in Table H-9, procuring agencies establish minimum content standards for use in purchasing blasting grit containing recovered materials.

Table H-9. -- Recommended Recovered Materials Content Levels for Blasting Grit

| Material | Postconsumer content (%) | Total recovered materials content (%) |
|---|---|---|
| Steel | 16 - 67 | 25 - 100 |
| Coal Slag | – | 100 |
| Copper and Nickel Slag | – | 100 |
| Bottom Ash | – | 100 |
| Glass | 100 | 100 |
| Glass/Plastic | 20 | 100 |
| Fused Alumina Oxide | 100 | 100 |
| Walnut Shells | – | 100 |

Note: The recommended recovered materials content levels for steel in this table reflect the fact that the designated item may contain steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF), or a combination of both. Steel from the BOF process contains 25% - 30% total recovered steel, of which 16% is postconsumer. Steel from the EAF process contains 100% total recovered steel, of which 67% is postconsumer. According to industry sources, blasting grit containing a combination of BOF and EAF steel would contain 25% - 85% total recovered steel, of which 16% - 67% would be postconsumer. Since there is no way of knowing which type of steel was used in the manufacture of the item, the postconsumer and total recovered material content ranges in this table encompass the whole range of possibilities, i.e., the use of EAF steel only, BOF steel only, or a combination of the two.

Specifications: EPA did not find any specifications that would preclude the use of recovered materials in blasting grit. EPA recommends that procuring agencies exercise OSHA or other required standard safety practices when using blasting grit, particularly when using blasting grit containing slag materials.

FEDERAL STANDARD

# MATERIAL SAFETY DATA, TRANSPORTATION DATA, AND DISPOSAL DATA FOR HAZARDOUS MATERIALS FURNISHED TO GOVERNMENT ACTIVITIES

The following changes, which form a part of FED-STD-313D, dated April 3, 1996, are approved by the General Services Administration for use by all federal agencies.

Section 2. After the ordering instructions for the Code of Federal Regulations (CFR), add the following: CFRs are also available via the internet at www.access.gpo.gov/nara/cfr/cfr-table-search.html A Toxic Release Inventory (TRI) chemical list (EPA 745/K-94-052) is available from the EPCRA Document Distribution Center, 11029 Kenwood Road, Cincinnati, OH 45242, Attention NCEPI, or on the Internet at www.epa.gov/opptintr/tri/chemical.htm

Section 2. After the US Air Force Joint Manual, delete the internet address and substitute the following: www.afmc-mil.wpafb.af.mil/Hazmat/

3.2.2 Delete "(40 CFR Part 370)", and substitute "(40 CFR Part 302)".

Section 3. Add the following new paragraph:

3.3 Preparer. The preparer is the entity that developed the MSDS and has provided the mailing address and phone number for contacting the manufacturer, and the emergency response phone number. The preparer may or may not be the contractor furnishing the material to the government. The preparer is responsible for the accuracy of the technical data in the MSDS.

4.2.1 Add the following: An MSDS is only required for a hazardous material incorporated into an end item when that incorporation does not eliminate the material's hazardous nature throughout the life cycle of the end item.

4.2.2 Delete the text, and substitute the following: Preparation of the MSDS. The MSDS shall meet all requirements of 29 CFR 1910.1200. MSDSs in the 16-part format of ANSI Z400.1 are preferred, but not required. MSDS preparers must indicate when the MSDS is available in languages other than English. Information required under paragraph 4.3 must also be provided. Contractors who have not manufactured the hazardous material they are furnishing to the government, may append the government identifiers specified in 4.3.1, 4.3.2, and 4.3.3 to the preparer's MSDS, provided the MSDS meets all other requirements of this standard. Contractors

shall cite this standard in their subcontracts for hazardous materials. The government will assume that a current MSDS submitted in good faith by the contractor is accurate unless it contains obvious errors or omissions. Examples of such omissions are: failure to include the government identifiers; failure to include either transportation data or a statement that the material is not regulated for transportation under 49 CFR; and failure to include either disposal data or a statement that the material is not regulated under 40 CFR.

4.3 Delete the last sentence.

4.3.4 Delete the text, and substitute the following: The chemical and common name(s), CAS (Chemical Abstract Service) Registry number(s), and percentage(s) by weight of composition of all ingredients that are defined as hazardous in paragraph 3.2. The percentage may be specified as an upper limit or upper bound, as defined by 40 CFR 372.45. The specific hazardous chemical information must be provided unless it meets the 'trade secret' criteria of 29 CFR 1910.1200 or 40 CFR 350. The contractor shall treat trade secret data consistent with 29 CFR 1910.1200 or 40 CFR 350, as applicable. The contractor must indicate the authority under which trade secret data is withheld. The Government must maintain trade secret data in confidence, and only release the data consistent with 29 CFR 1910.1200 or 40 CFR 350, as applicable.

4.3.5 Delete the text, and substitute the following: The OSHA permissible exposure limit, ACGIH Threshold Limit Value, and any other exposure limit known to the preparer for the product as a whole, or any of its hazardous constituents. This may include recommendations made by recognized toxicological groups, the manufacturer, or importer preparing the MSDS.

4.3.7 Delete, "and USPS Mailability".

Section 5. Delete the addresses for the Air Force and General Services Administration (GSA) receipt points, and substitute the following:

Air Force: IERA/RSH
2513 Kennedy Circle
Brooks AFB, TX 78235-5123

Section 5, under 'Army', change line 4 to read – ATTN: AMXLS-TP

GSA – All Commodities: GSA/FSS
Attn: HMIS (6FET)
1500 East Bannister Road, Building 6
Kansas City, MO 64131

MILITARY INTEREST:
Military Coordinating Activity
DLA-DLSC-LEP

Custodians
Army - MD
Navy - SA
Air Force - 07

Review Activities
Army - SM
Navy - MS, AS, SH,
Air Force - 69
DLA - GS
Marine Corps - MC (LF1, LPP, SD, HQ)

CIVIL AGENCY COORDINATING ACTIVITIES:
COM-NIST
DOE
EPA
HHS-NIH
HHS-DSR
DOL-TEC
DOT-OST
VA-OSS

PREPARING ACTIVITY:

GSA-FSS

[NOT MEASUREMENT SENSITIVE]
FED-STD-313D
APRIL 3, 1996
SUPERSEDING
FED-STD-313C
March 1, 1988

# FEDERAL STANDARD
# MATERIAL SAFETY DATA, TRANSPORTATION DATA AND DISPOSAL DATA FOR HAZARDOUS MATERIALS FURNISHED TO GOVERNMENT ACTIVITIES

The General Services Administration has authorized the use of this federal standard by all federal agencies.

1. **Scope and Purpose.** This standard establishes requirements for the preparation and submission of Material Safety Data Sheets (MSDS) by contractors who provide hazardous materials to government activities. Data obtained will be used within the government in employee safety and health programs and to provide for safe handling, storage, use, transportation and environmentally acceptable disposal of hazardous materials by government activities.

2. **Referenced Documents.** The following documents form a part of this standard to the extent specified herein. Unless otherwise specified, the issue in effect on the date of invitation for bids or request for proposal shall apply.

**Code of Federal Regulations (CFR)**

10 CFR - Energy

29 CFR Part 1910 - Occupational Safety and Health Standards.

29 CFR Part 1926 - Safety and Health Regulations for Construction

40 CFR - Protection of Environment

49 CFR Parts 100-180 - Hazardous Materials Regulations

(The CFR is available mail order from the Superintendent of Documents, ATTN: New Order, PO Box 371954, Pittsburgh, PA 15250-7954. When indicated, reprints of certain regulations may be obtained from the federal agency responsible for issuance thereof. Charge orders may be telephoned to the Government Printing Office order desk at (202) 512-1800.)

**US Air Force Joint Manual:**

AFJMAN 24-204/TM38-250/NAVSUP PUB 505/MCO P4030.19F/DLAM 4145.3-
Preparing Hazardous Materials for Military Air Shipments

(Application for copies should be addressed via the Contract Administration Office (CAO), Defense Contract Management Area Operations (DCMAO's) or the Defense Plant Representative Office (DPRO). An electronic copy of AFJMAN 24-204 can be accessed via the World Wide Web (WWW) Air Force HAZMAT Bulletin Board at http://www.afmc.wpafb.af.mil:12000/lib/ppb.html, and then selecting the HAZMAT Bulletin Board.)

FSC MISC

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration, Engineering & Commodity Management Division (10FTE), 400 15th St. SW, Auburn, WA 98001.

**International Air Transport Association:**

"Dangerous Goods Regulations"

(Application for copies should be addressed to: Publications Assistant, International Air Transport Association, 2000 Peel Street Room 3050, Montreal, Quebec, Canada H3A 2R4. This is also available from commercial booksellers.)

**International Maritime Organization:**

"International Maritime Dangerous Goods Code"

(Application for copies should be addressed to: International Maritime Organization, 4 Albert Embankment, London, SE1 7SR, England. This is also available from commercial booksellers.)

**American Conference of Governmental Industrial Hygienists (ACGIH):**

"Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment"

(Application for copies should be addressed to: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH 45240.)

**International Civil Aviation Organization**

"Technical Instructions for the Safe Transport of Dangerous Goods By Air"

(Application for copies should be addressed to the Document Sales Unit, International Civil Aviation Organization, 1000 Sherbrooke St. W. Suite 400, Montreal, Quebec, Canada H3A 2R2.)

**US Postal Service Mailability Regulations**

Domestic Mail Manual CO23
Publication 52 - Acceptance of Hazardous, Restricted, or Perishable Matter

(Copies are available from Business Mail Acceptance at USPS Headquarters, and Postal Service Rates and Classification Service Centers around the country.)

**American National Standards Institute (ANSI)**

Z400.1 - Material Safety Data Sheets - Preparation
ANSI/UCC -1.1995 UPC Symbol Specification

(Application for copies should be addressed to: American National Standards Institute, 11 West 42nd Street, New York, New York 10036.)

3. **Definitions.**

3.1 **Contractor.** Any contractor, supplier, manufacturer, or other party who provides material to a government agency.

3.2 **Hazardous material.**

3.2.1 Any item or chemical which is a "health hazard" or "physical hazard" as defined by OSHA in 29 CFR 1910.1200, which includes the following:

- chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes;

-chemicals which are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;

-chemicals which in the course of normal handling, use, or storage operations may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics.

3.2.2 Any item or chemical which is reportable or potentially reportable or notifiable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 370), or as an environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372), which includes the following:

-chemicals with special characteristics which in the opinion of the manufacturer can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

3.2.3 Any item or chemical which, when being transported or moved, is a risk to public safety or an environmental hazard and is regulated as such by one or more of the following:

-Department of Transportation Hazardous Materials Regulations (49 CFR 100-180);

-International Maritime Dangerous Goods Code of the International Maritime Organization (IMO);

-Dangerous Goods Regulations of the International Air Transport Association (IATA);

-Technical Instructions of the International Civil Aviation Organization (ICAO);

-US Air Force Joint Manual, Preparing Hazardous Materials for Military Air Shipments (AFJMAN 24-204).

3.2.4 The item or chemical is a special nuclear source, or by-product material as defined in 10 CFR or is regulated or referred to as radioactive under one or more of the referenced documents in paragraph 2 above.

## 4. Requirements

4.1 **Referencing this standard in purchase documents.** Government agencies shall reference this standard in commodity specifications, contracts, and other purchase documents to assure inclusion of adequate requirements and clear instructions to contractors for the preparation and submission of Material Safety Data Sheets.

4.2 **Preparation and submission of MSDS.**

4.2.1 Items requiring an MSDS. Contractors shall furnish a separate MSDS for each individual item which is defined as hazardous in paragraph 3.2, or which is required by the contract or order, or as specified in Appendix A.

4.2.2 Preparation of the MSDS. The MSDS shall meet all requirements of the 29 CFR 1910.1200 and should be in accordance with the 16 part format specified by the ANSI Z400.1 standard and shall include all information that is pertinent to the product. In addition, all information required in paragraph 4.3 must be included in the MSDS.

4.2.3 Submission of the MSDS.

4.2.3.1 Copies of the MSDS shall be provided as specified in the contract, order, and the Hazard Communication Standard (29 CFR 1910.1200)

4.2.3.2 Unless otherwise specified in the contract or order, one copy of the MSDS shall be furnished to the Service/Agency MSDS receipt point(s) listed in paragraph 5 for the Military service or Federal agency that purchased the item.

4.2.3.3 Electronic transmission of the MSDS may be accepted, depending on the receiving agencies capabilities.

4.2.4 Revision of MSDS. The contractor shall submit a revised MSDS when there has been a change in the composition or characteristics of the product which affects any of the information on the MSDS, or when the contractor becomes newly aware of any significant information regarding the hazards of a chemical or ways to protect against hazards. The revised MSDS shall be submitted to the Service/Agency MSDS receipt point(s) listed in paragraph 5 for the Military service or Federal agency that purchased the item, and shall be included with future shipments.

4.3 **Additional information required on the MSDS.** The MSDS shall contain the following information in addition to all health and safety information pertinent to the product. The preparer of the MSDS shall provide a response for each item listed below.

4.3.1 The contract or solicitation number, manufacturer's CAGE (Commercial and Government Entity) code, and contractors name and CAGE code.

4.3.2 The national stock number, activity control number, or local stock number specified in the contract. If these are not present, enter the Federal Supply Schedule Special Item Number for the item.

4.3.3 Where applicable, the specification reference including specification number, revision letter, type, grade, and class.

4.3.4 The chemical and common name(s), CAS (Chemical Abstract Service) Registry number, and exact percentage by weight of composition of all ingredients which are hazardous as defined in paragraph 3.2.

4.3.5 The OSHA permissible exposure limit, ACGIH Threshold Limit Value, and any other exposure limit used or recommended by any other recognized toxicological group, the manufacturer, importer, or employer preparing the MSDS, for each hazardous ingredient.

4.3.6 Report toxic chemicals as required under 40 CFR Part 355, 40 CFR Part 370, and 40 CFR Part 372.

4.3.7 Transportation data, to include the Proper Shipping Name, United Nations or North America Identification Number, Hazard Class, Packaging Group, and USPS Mailability.

5. **Material Safety Data Sheet Receipt Points.** In addition to any other MSDS requirements in the contract, contractors shall submit one copy of each MSDS to the address indicated below for the Service/Agency/GSA Commodity Center which procured the item.

| Procuring Service/Agency | MSDS receipt point |
|---|---|
| Air Force: | AL/OEMB<br>2402 E Drive<br>Brooks AFB, TX 78235-5114 |
| Army: | Chief<br>USAMC LOGSA Packaging, Storage, and Containerization Center<br>ATTN: AMXLS-TP-T<br>11 Hap Arnold Blvd.<br>Tobyhanna, PA 18466-5097 |
| Defense Logistics Agency: | Commander<br>Defense Supply Center, Richmond<br>ATTN: DSCR-VBA<br>8000 Jefferson Davis Highway<br>Richmond, VA 23297-5607 |
| Defense Mapping Agency: | Director<br>Defense Mapping Agency<br>ATTN: HRG, Occupational Health, A-8<br>8613 Lee Highway<br>Fairfax, VA 22031 |
| GSA - All Commodities: | GSA-FSS<br>Paints and Chemicals Commodity Center<br>ATTN: HMIS (10FTE)<br>400 15th St. SW<br>Auburn, WA 98001-6599 |
| Marine Corps: | Commanding Officer<br>Navy Environmental Health Center<br>ATTN: Code IH-HMIS<br>2510 Walmer Ave.<br>Norfolk, VA 23513-2617 |
| National Aeronautics and Space Administration: | National Aeronautics and Space Administration<br>Occupational Health Office<br>Code UOO<br>300 E Street<br>Washington, DC 20546 |
| National Security Agency: | Director<br>National Security Agency<br>Central Security Service<br>ATTN: CODE L542<br>Ft. George G. Meade, MD 20756-6000 |

| | |
|---|---|
| Navy: | Commanding Officer<br>Navy Environmental Health Center<br>ATTN: Code IH-HMIS<br>Walmer Ave.<br>Norfolk, VA 23513-2617 |
| Postal Service: | United States Postal Service<br>Safety and Risk Management<br>475 L'Enfant Plaza West, SW<br>Washington, DC 20260-4231 |
| Tennessee Valley Authority: | Tennessee Valley Authority<br>Employee Relations and Safety Program Operations<br>P.O. Box 1010<br>MPB 1B<br>Muscle Shoals, AL 35662-1010 |
| US Coast Guard: | Commandant (G-KSE)<br>United States Coast Guard<br>2100 2nd Street, SW<br>Washington, DC 20593-0001 |
| Veterans Affairs: | Submit to the Facility Safety Official at the Veterans Affairs facility contracting for the item.<br><br>National Engineering Service Center<br>Department of Veterans Affairs<br>2350 Market Plaza, Suite 100<br>St. Louis, MO 63103 |

## 6. NOTES

6.1 Universal Product Code (UPC). It is recommended that the UPC number, as printed on the product label, be printed on the MSDS. The UPC is equivalent to the CAGE Reference number. Use of the UPC as a license plate will greatly improve the ability to find the correct MSDS for the product.

**MILITARY INTEREST:**

**Military Coordinating Activity**
DLA-DH

**Custodians**
Army - MD
Navy - SA
Air Force - 07

**Review Activities**
Army - SM
Navy - MS, AS, SH
Air Force - 69
DLA - GS
Marine Corps - MC (LF, LPP, SD)
(Headquarters)

**CIVIL AGENCY COORDINATING ACTIVITIES:**

COM-NIST
DOE
EPA
HHS-NIH
HHS-DSR
DOL-TEC
DOT-OST
VA-OSS

**PREPARING ACTIVITY:**
GSA-FSS

APPENDIX A - Identification of Hazardous Items by Federal Supply Class/Group (FSC/FSG)

10. **FSC/FSG identification of hazardous items.** Any FSC/FSG could contain a hazardous item.

**Table I and Table II are not intended to be inclusive listings of all hazardous items, but to identify the major classes/groups which contain hazardous items. However, not all items in these classes/groups are hazardous.**

10.1 **FSC's in which most items are hazardous.** An MSDS is required for all items listed in Table I unless the offeror provides written documentation that the items are not hazardous by any definition in section 3.2 of this standard.

**Table I - MSDS Required For All Hazardous Items**

| FSC | Title |
|---|---|
| 6810 | Chemicals |
| 6820 | Dyes |
| 6830 | Gases: Compressed and Liquefied |
| 6840 | Pest Control Agents and Disinfectants |
| 6850 | Miscellaneous Chemical Specialties |
| 7930 | Cleaning and Polishing Compounds and Preparations |
| 8010 | Paints, Dopes, Varnishes, and Related Products |
| 8030 | Preservative and Sealing Compounds |
| 8040 | Adhesives |
| 9110 | Fuels, Solid |
| 9130 | Liquid Propellants and Fuels, Petroleum Base |
| 9135 | Liquid Propellant Fuels and Oxidizers, Chemical Base |
| 9140 | Fuel Oils |
| 9150 | Oils and Greases: Cutting, Lubricating, and Hydraulic |
| 9160 | Miscellaneous Waxes, Oils and Fats |

10.2 **Other FSG's.** An MSDS shall be submitted for all hazardous items defined in paragraph 3.2. Table II lists some examples of hazardous items in other Federal Stock Groups not listed in Table I.

**This is not an all inclusive list, but is only meant as guidance.**

**Table II - Examples of Hazardous Items in Other FSG's.**

| FSG | Title | Examples of Hazardous Items |
|---|---|---|
| 12 | Fire Control Equipment | Initiator propellants, cartridges power device |
| 13 | Ammunition & Explosives | Explosive devices, fire starter, flares |
| 14 | Guided Missile Components & Accessories | Cartridges power device, rockets, PCB's |
| 15 | Aircraft & Airframe Structural Components | Radioactive materials |
| 16 | Aircraft Components & Accessories | Items containing asbestos |
| 22 | Railway Equipment | Items containing asbestos |
| 25 | Vehicular Equipment Components | Items containing asbestos |
| 26 | Tires & Tubes | Items containing flammable or toxic compounds |
| 34 | Metalworking Machinery | Compressed Gases, cleaners, acids, flux, and supplies containing or producing hazardous fumes |
| 36 | Miscellaneous Machinery | Flammable or toxic hazardous fumes |
| 42 | Fire Fighting, Rescue, & Safety Equipment | Extinguishing agents, repair and refill kits containing hazardous chemicals, items containing compressed gases or initiating charges |
| 53 | Hardware & Abrasives | Asbestos material, lead caulking, hazardous chemicals, items producing hazardous dust |
| 54 | Prefabricated Structures & Scaffolding | Repair kits containing hazardous chemicals |
| 56 | Construction & Building Materials | Cutback asphalt, deck and floor covering, sealing compounds, asbestos, formaldehyde, repair kits containing hazardous chemicals |
| 58 | Communication, Detection, & Coherent Radiation Equipment | Circuit cooler items containing ozone depleting substances, cleaners with hazardous chemicals |
| 59 | Electrical & Electronic Equipment Components | Items with PCB's, radioactive materials, flammable solvents, asbestos, or magnetic items |
| 61 | Electric Wire, & Power Distribution Equipment | Lithium, mercury, lead-acid, nickel-cadmium batteries |
| 62 | Lighting Fixtures & Lamps, Household & Quarters Use | Items containing mercury or radioactive materials |
| 63 | Alarm, Signal, & Security Detection Systems | Items containing wet batteries or radioactive materials |
| 65 | Medical, Dental, & Veterinary Equipment and Supplies | Items containing hazardous chemicals, radioactive materials, mercury, asbestos, or flammable solvents |

| | | |
|---|---|---|
| 66 | Instruments & Laboratory Equipment | Radioactive materials, flammable compounds, mercury, asbestos, compressed gases |
| 67 | Photographic Equipment | Radioactive compounds, solvents, thinners, and cements |
| 75 | Office Supplies & Devices | Solvents, thinners, cleaning fluids, flammable inks, varnishes, and chemicals which off-gas |
| 84 | Clothing, Individual Equipment, & Insignia | Maintenance kits containing flammable solvents |
| 85 | Personal Toiletry Articles | Pressurized containers with flammable or nonflammable propellants |
| 87 | Agricultural supplies | Items containing herbicides and/or insecticides |
| 93 | Fabricated Materials | Items containing flammable solvents or toxic materials |
| 96 | Ores, Minerals, and their Primary Products | Asbestos, mica, silica |

# Material Safety Data Sheet

**MSDS No.:** D-0403A
**Issue Date:** 2/18/83
**Revision Date:** 4/21/09

**Supplier:**
Xerox Corporation
Rochester, NY 14644

Xerox Canada Ltd.
5650 Yonge Street
North York, Ontario M2M 4G7

**Telephone Number(s):** *Safety Information:* (800) 828-6571
*Health Emergency:* (585) 422-2177
*Transportation Emergency (Chemtrec)*: (800) 424-9300

## Section 1: Product Identification

**Trade Name/Synonyms:** Platen Glass, Lens and Mirror Cleaner

**Part No.:** 43P81, 8R3669, 673K52480 (kit)
XCI: 544P23338

**WHMIS Status:** Class B/Div. 2, Flammable liquid and Class D, Div. 2B, Toxic

| Ingredients (% by wt.) | CAS No. |
|---|---|
| Ethanol (60-100%) | 64-17-5 |
| Isopropanol (5-15%)[1] | 67-63-0 |

## Section 2: Emergency and First Aid

**Primary Route of Entry:**
Inhalation

**Eyes:**
Immediately flush with plenty of water for 15 minutes.
If irritation persists, get medical attention.

**Skin:**

Wash thoroughly with soap and water

**Inhalation:**
Remove from exposure.

**Ingestion**
Dilute stomach contents with several glasses of water

**Symptoms of Overexposure:**
Central nervous system depression, respiratory distress, and gastrointestinal irritation.

**Medical Conditions Generally Aggravated by Exposure:**
None when used as described by product literature.

**Additional Information**
None

## Section 3: Toxicology and Health Information

*The toxicity data noted below is based on the test results of similar reprographic materials:*

**Oral $LD_{50}$:** >21 g/kg (rats)
**Dermal $LD_{50}$:** >20 g/kg (rabbits)
**Inhalation $LC_{50}$:** N.D.
**Eye Irritation:** Irritant
**Skin Sensitization:** Not a sensitizer
**Skin Irritation:** Not an irritant
**Human Patch:** Non-irritating, non-sensitizing
**Mutagenicity:** N.D.
**Carcinogens:** None present
**Aquatic $LC_{50}$:** N.D.

**TLV/STEL:** 1000 ppm (ethyl alcohol)
400 ppm (isopropyl alcohol)
**TLV/TWA:** 200 ppm (isopropyl alcohol)
**OSHA/PEL:** 1000 ppm (ethyl alcohol)
400 ppm (isopropyl alcohol)
**Ceiling:** N.E.
**XEL[2]:** N.E.

**Additional Information:** Prolonged or repeated skin contact may cause defatting of the skin

[1]This ingredient is a toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40CFR Part 372.
**[2]XEL-Xerox Exposure Limit.**

**N.A. - Not Applicable N.E. -None Established N.D. -Not Determined** **600E66270**

## Section 4 –Physical Data

| | | | |
|---|---|---|---|
| **Appearance/Odor:** | Clear liquid/ alcoholic odor | **Softening Range:** | N.A. |
| **Boiling Point:** | 76-82°C | **Melting Point:** | N.A. |
| **Solubility in Water:** | Completely | **Specific Gravity ($H_2O$=1)** | 0.82 |
| **Evaporation Rate:** | 3.1 (n-butylacetate=1) | **Vapor Pressure (mm Hg):** | 15@20°C |
| **Vapor Density (Air=1)** | 0.85 | **pH:** | 10.6 |
| **Volatile:** | 100 % (Wt.) N.A. % (Vol.) | **VOC:** | 780 g/l |

## Section 5 – Fire and Explosion Data

**Flash Point (Method Used):** 27°C (80°F) ASTM Open Cup
**Flammable Limits:** **LEL:** Not applicable, **UEL:** Not applicable
**NFPA 704:** Health -1, Fire-3, Reactivity-0
**Extinguishing Media:** Alcohol foam, carbon dioxide, water fog, or dry chemical.
**Special Fire Fighting Procedures:** None
**Fire and Explosion Hazards:** None

## Section 6 –Reactivity Data

**Stability:** Stable
**Hazardous Polymerization:** Will Not Occur
**Hazardous Decomposition Products:** None
**Incompatibility (Materials to Avoid):** Acetyl chloride, oxidizers.

## Section 7 – Special Protection Information

**Respiratory Protection:** None required when used as intended in Xerox products.
**Eye Protection:** None required when used as intended in Xerox products.
**Protective Gloves:** Nitrile or latex gloves. Use fresh gloves with each new operation.
**Other:** None

## Section 8 – Special Precautions

**Handling and Storage:** Do not handle or store near heat, sparks, flames, or oxidizing agents. Store in a cool place.
**Conditions to Avoid:** Avoid prolonged or repeated skin contact.

## Section 9 – Spill, Leak, and Disposal Procedures

**For Spills or Leakage:** Eliminate sources of ignition. Small spills should be flushed with large quantities of water. Large spills should be absorbed on vermiculite or similar absorbent material collected for disposal.
**Waste Disposal Method:** Absorb liquid on vermiculite or other absorbent material or atomize into an incinerator where permitted. Dispose of in accordance with federal, state, and local regulations.

## Section 10 – Transportation Information

| | Proper Shipping Name | Hazard Class | ID# | Packing Group | Exception may apply |
|---|---|---|---|---|---|
| US DOT | Alcohols, n.o.s. | 3 | UN1987 | III | Limited Quantity: 49CFR 173.150 (b)<br>Consumer Commodity, ORM-D: 49CFR 173.150 (b) |
| ICAO/IATA | Alcohols, n.o.s.<br>(Ethanol, Isopropanol) | 3 | UN1987 | III | Section 2.8 Limited Quantities<br>ID8000 Consummer Commodity may apply |
| IMO/IMDG | Alcohols, n.o.s.<br>(Ethanol, Isopropanol) | 3 | UN1987 | III | Chapter 3.4 Limited Quantities.<br>Section 3.4.7 may apply |
| Canadian T.D.G. | Alcohols, n.o.s.<br>(Ethanol, Isopropanol) | 3 | UN 1987 | III | 1.17 Limited Quantities<br>1.17(2) Consumer Commodity may apply |

**600E66270**

# Value Added Information

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Internal:** | ☐ | **Article:** | ☐ | **Kit:** | ☐ | **End Item:** | ☐ | **Published:** | ☑ | **Radioactive:** | ☐ |
| **Purchased:** | ☑ | **Product:** | ☑ | **Kit Part:** | ☐ | **End Item Component:** | ☐ | **Proprietary:** | ☐ | **Sensitive:** | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| **Product Serial/Doc. #:** | CPTPR | **Product Revision #:** | 1 | **Product Record Status:** | ACTIVE |
| **Replaced By #:** | | | | | |
| **Service/Agency:** | D - DEFENSE LOGISTICS AGENCY | **Service/ Activity:** | DG | | |
| **FSC:** | 6850 | **NIIN:** | 015099840 | | |
| **Product Identity:** | PLATEN GLASS, LENS AND MIRROR CLEANER | | | | |
| **Trade Name:** | | | | | |
| **Part #:** | 8R3669 | | | | |
| **Responsible Party Name:** | XEROX CORP | | | **CAGE:** | 26921 |
| **Responsible Party Emergency Phone #:** | 585-422-2177(HEALTH); 800-424-9300(CHEMTREC) | | | | |
| **Description:** | CLASS B/ DIV 2. FLAMMABLE LIQUID AND CLASS D, DIV.2B, TOXIC | | | | |
| **Product Language:** | ENGLISH | **Product Load Date:** | 01/12/2004 | **Manufacturer's MSDS #:** | D-0403A |

CONTRACTOR INFORMATION

REVIEWED ON: 07/14/2006

| | | | | | |
|---|---|---|---|---|---|
| **CAGE:** | 26921 | **Company Name:** | XEROX CORP | | |
| **Contract #:** | | **Purchase Order #:** | | | |
| **P.O. Box:** | | | | | |
| **Street:** | 100 CLINTON AVE S | | | | |
| **City:** | ROCHESTER | **State:** | NY | **Zip Code:** | 14644-1877 |
| **Country:** | UNITED STATES | **Phone Number:** | 585-423-5090 | | |

| | | | | | |
|---|---|---|---|---|---|
| **CAGE:** | 0G4A2 | **Company Name:** | IMAGING SYSTEMS LLC | | |
| **Contract #:** | SP0450-04-M-NQ86 | **Purchase Order #:** | | | |
| **P.O. Box:** | | | | | |
| **Street:** | 4160 CTR PARK DR | | | | |
| **City:** | COLORADO SPRINGS | **State:** | CO | **Zip Code:** | 80916-6450 |
| **Country:** | UNITED STATES | **Phone Number:** | 719-573-0800 | | |

| | | | | | |
|---|---|---|---|---|---|
| **CAGE:** | 48J03 | **Company Name:** | PENMAR SOLUTIONS INC. | | |
| **Contract #:** | SP0407-06-M-9952 | **Purchase Order #:** | | | |
| **P.O. Box:** | | | | | |
| **Street:** | 30 E MAIN ST | | | | |
| **City:** | WAYNESBORO | **State:** | PA | **Zip Code:** | 17268 |
| **Country:** | UNITED STATES | **Phone Number:** | 717-762-5696 | | |

SAFETY & HEALTH INFORMATION

REVIEWED ON: 07/14/2006

| | | | | | |
|---|---|---|---|---|---|
| **Appearance & Odor:** | CLEAR LIQUID/ ALCOHOLIC ODOR | | | | |
| **Physical State:** | LIQUID | **Carcinogen:** | ☐ | | |
| **Autoignition Temperature:** | | **Flash Point Temperature:** | = 80 F<br>= 26.7 C | | |
| **Specific Gravity (water = 1):** | 0.82 | **Vapor Pressure:** | 15@20C | **Vapor Density (air = 1):** | 0.85 |
| **Evaporation Rate:** | 3.1(N-BUTYLACETATE=1) | **Solubility in Water:** | COMPLETELY | | |
| **Viscosity:** | | **pH:** | = 10.6 | | |
| **Volatile Organic Compounds:** | 780 g/L<br>6.5092757179 lbs/gal | **% Volatiles By Volume:** | 100% | | |
| **Neutralizing Agent:** | N/P | | | | |

**COMPONENT/INGREDIENT INFORMATION**

| CAS # | Component/ Ingredient Name | Wt % | Vol % | % Text | Other Recorded Limits | ODS | ACGIH STEL/ TLV | OSHA PEL/ STEL | DOT/ EPA RQ | RTECS #/ RTECS Code | CAA | CERCLA | EPA 17 | EPCRA 302 | EPCRA 313 | FIFRA | HAP | RCRA | TSCA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SECTION 2 OR 3 INGREDIENTS** | | | | | | | | | | | | | | | | | | | |
| 67-63-0 | ISOPROPANOL | H: 15 L: 5 | | | | N | 1230 MG/ M3;500 PPM / 983 MG/M3;400 PPM | 980 MG/ M3;400 PPM / | / | X / | ☐ | ☐ | ☐ | ☐ | ☑ | ☑ | ☐ | ☐ | ☑ |
| 64-17-5 | ETHANOL | H: 100 L: 60 | | | | N | NOT ESTABLISHED / 1880 MG/ M3;1000 PPM | 1900 MG/ M3;1000 PPM / | / | X / | ☐ | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☑ |

RADIOLOGICAL INFORMATION CURRENTLY UNREVIEWED

Radiological information does not exist for the selected product

TRANSPORTATION INFORMATION REVIEWED ON: 07/14/2006

**N.O.S. Technical Shipping Name:** (ETHANOL, ISOPROPANOL)

**CAA:**

**COE:**

**DOT Exemption #:**

**AF MMAC Code:**

**DOT RQ:** ☐

**Limited Qty:** ☐

**Marine Pollutant:** ☐

**Magnetic Material:** ☐

**Magnetic Strength:**

**EX #:**

**Net Explosive Weight:**

**Net Propellant Weight:**

**Department of Defense ID Code:**

**High Explosive Weight:**

**Net Explosive Qty. Distance Weight**

**HCC:** F3 - FLAMMABLE LIQUID, PACKING GROUP III, OSHA IC

**Flash Point Temperature:** 80 F 26.7 C

**Additional Information:**

TRANSPORTATION DATA PER MANUFACTURER'S MSDS.

## DOT PSN INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| **PSN Code:** | GJL | **Symbols:** | G | | |
| **Proper Shipping Name (PSN):** | FLAMMABLE LIQUIDS, N.O.S. | | | | |
| **PSN Modifier:** | | | | | |
| **Hazard Class/ Div:** | 3 | **UN ID #:** | UN1993 | **Packing Group:** | III |
| **Hazard Label:** | FLAMMABLE LIQUID | | | | |
| **Special Provisions:** | B1,B52,IB3,T4,TP1,TP29 | | | | |
| **Packaging Exceptions:** | 150 | | | | |
| **Non-Bulk Packaging:** | 203 | **Bulk Packaging:** | 242 | | |
| **Maximum Qty. Passenger Air/ Rail:** | 60 L | **Maximum Qty. Cargo Aircraft Only:** | 220 L | | |
| **Water Shipment Vessel Stow:** | A | **Water/Ship/ Other Requirements:** | | | |

## AFJM PSN INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| **PSN Code:** | MCA | **Symbols:** | * | | |
| **Proper Shipping Name (PSN):** | FLAMMABLE LIQUIDS, N.O.S. | | | | |
| **PSN Modifier:** | | | | | |
| **Hazard Class/ Div:** | 3 | **UN ID #:** | UN1993 | **Packing Group:** | III |
| **Subsidiary Risk:** | | | | | |
| **Special Provisions:** | P5 | | | | |
| **Packing Paragraph:** | A7.2. | | | | |

## IATA PSN INFORMATION

| | | | |
|---|---|---|---|
| **PSN Code:** | MCA | **UN ID #:** | UN1993 |
| **Proper Shipping Name (PSN):** | FLAMMABLE LIQUID, N.O.S. * | | |
| **PSN Modifier:** | | | |
| **Hazard Class/ Div:** | 3 | **Subsidiary Risk:** | |
| **Hazard Label:** | FLAMMABLE LIQUID | | |
| **Packing Group:** | III | | |
| **Passenger Air Packing-Lmt Qty. Pkg. Instr.:** | Y309 | **Passenger Air Packing-Lmt Qty. Max. Qty. per Pkg.:** | 10 L |
| **Passenger Air Packing-Note Passenger Air Packing Instr.:** | 309 | **Max. Qty. Passenger:** | 60L |
| **Note Cargo Aircraft Packing Instr.:** | 310 | **Max. Qty. Cargo:** | 220L |
| **Special Provisions:** | | | |

## IMO PSN INFORMATION

| | | | |
|---|---|---|---|
| **PSN Code:** | HIA | **UN ID #:** | UN1993 |
| **Proper Shipping Name (PSN):** | FLAMMABLE LIQUID, N.O.S. | | |
| **PSN Modifier:** | | | |
| **Hazard Class/ Div:** | | **Subsidiary Risk Label:** | |
| **Packing Group:** | III | **Special Provisions:** | 223, 274, 944 |
| **Limited Qty:** | 5 L | | |
| **Packing Instructions:** | P001, LP01 | **Packing Provisions:** | |
| **IBC Instructions:** | IBC03 | **IBC Provisions:** | |

| | | | |
|---|---|---|---|
| **Tank Instructions, IMO:** | T1 | **Tank Instructions, UN:** | |
| **Tank Instructions, Provisions:** | TP1, TP29 | | |
| **EMS #:** | F-E,S-E | **Stowage and Segregation:** | SEE IMDG CODE |

LOGISTICAL INFORMATION REVIEWED ON: 07/14/2006

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FLIS NIIN Verified:** | ☑ | **HCC:** | F3 - FLAMMABLE LIQUID, PACKING GROUP III, OSHA IC | **FSC:** | 6850 | **NIIN:** | 015099840 |
| **Item Manager:** | SMS | **Item Name:** | CLEANING COMPOUND,OPTICAL LENS | | | | |
| **Specification #:** | | **Type/Grade/ Class:** | | | | | |
| **Quantitative Expression Data(QED):** | 6EA | **Unit of Issue:** | BOX | **Shelf Life Code:** | 0 | | |
| **Unit of Issue Container Qty:** | 6/ 4OZ EA/ BX | **Type of Container:** | BX | | | | |
| **Net Unit Weight:** | 1.5 LBS/ BX | | | | | | |

| Special Emphasis Code(s) | Description(s) |
|---|---|
| | |

| UPC/GTIN #(s) | Lot #(s) | Batch #(s) |
|---|---|---|
| | | |

LABEL INFORMATION REVIEWED ON: 07/14/2006

| | | | | | |
|---|---|---|---|---|---|
| **Product Identity:** | PLATEN GLASS, LENS AND MIRROR CLEANER | **Product Serial/Doc. #:** | CPTPR | **Stock Number:** | 6850015099840 |
| **FIFRA Regulated:** | ☐ | | | | |
| **Item Name:** | CLEANING COMPOUND, OPTICAL LENS | | | | |

| | | | |
|---|---|---|---|
| **Specific Hazards:** | WARNING! FLAMMABLE LIQUID. HEALTH HAZARDS: EYES : IRRITATION. SKIN: NOT A SENSITIZER OR AN IRRITANT. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DEFATTING. SYMTOMS OF OVEREXPOSURE: CNS DEPRESSION, RESPIRATORY DISTRESS, AND GI IRRITATION. FIRST AID: EYE CONTACT: FLUSH WITH WATER. GET MEDICAL ATTENTION. SKIN: WASH WITH SOAP AND WATER. INHALATION: MOVE FROM EXPOSURE. INGESTION: DILUTE STOMACH CONTENTS WITH SEVERAL GLASSES OF WATER. DO NOT HANDLE OR STORE NEAR HEAT, SPARKS, FLAMES, OR OXIDIZING AGENTS. STORE IN COOL PLACE. AVOID PROLONGED OR REPEATED SKIN CONTACT. | | |
| **Signal Word:** | WARNING | | |
| **Company Address:** | | | |
| **P.O. Box:** | | | |
| **Street:** | 100 CLINTON AVE S | | |
| **City:** | ROCHESTER | | |
| **State:** | NY | **Zip Code:** | 14644-1877 |
| **Country:** | UNITED STATES | **Emergency Phone #:** | 800-424-9300 (CHEMTREC) |
| **Procurement Year:** | | **CAGE Code:** | 26921 |

DISPOSAL INFORMATION CURRENTLY UNREVIEWED

## Defense Logistics Agency

# Green Procurement Plan

**EPA-Designated Recycled Content and Environmentally Preferable Products**
**EPA/DOE Designated Energy Efficient Products**
**USDA Designated Biobased Products and Services**

**(Formerly the DLA Affirmative Procurement Plan)**

Final – December 2006

***Guidance for Compliance with Section 6002, Resource Conservation and Recovery Act (RCRA), Executive Order 13101, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition", and other Federal Requirements***

# Executive Summary

Federal Agencies are required to establish programs for buying "*green*" products. This document represents the Defense Logistics Agency's (DLA's) plan for that program and will be referred to as the Green Procurement Plan (GPP). For the purposes of this plan, the term "green" refers to designated items in the following categories for which Federal procurement preferences have been mandated:

- Recovered or recycled content (www.epa.gv/cpg)
- Environmentally preferable (www.epa.gov/epp)
- Energy efficient (www.eere.energy.gov/femp/)
- Biobased (www.biobased.oce.usda.gov)
- Alternative fuels/alternative fueled vehicles (www.eere.energy.gov/vehiclesandfuels/)

***See Attachment A for available product lists for these categories.***

DLA's policy is to comply with Federal requirements and to purchase these items to the maximum extent practicable in both supply and service acquisitions. In every procurement action, justification must be given for a decision not to procure a green alternative in accordance with the requirements of Federal green procurement preference programs. Justification must be based upon the inability to acquire the product in a timely manner, at a reasonable price, or the inability to satisfy the technical or performance requirements.

This Green Procurement applies to all DLA program and procurement offices, contractors operating DLA facilities, and all acquisitions to include micro purchases (at or below $2,500). This GPP is to be supplemented at the Field Activity (FA) for local implementation.

Day-to-day responsibility for execution of the program rests within the DLA FA, while DES-E has oversight of the GPP. The DES-E Pollution Prevention Team and the Acquisition Division/Supplier Operations Branch (J-331) provide program support. Questions on DLA's GPP, or this guidance, may be directed to:


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## Preface

Section 6002 of the Resource Conservation and Recovery Act (RCRA) and Executive Order 13101, *Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*, require Federal agencies to establish programs for purchasing Environmental Protection Agency (EPA) Comprehensive Procurement Guideline (CPG) items containing recovered materials. Executive Order 13101 also directs Executive agencies to use the principles and concepts in the EPA Guidance on acquisition of Environmentally Preferable Products (EPP) and Services to the maximum extent practicable. Section 9002 of the Farm Security and Rural Investment Act (FSRIA) of 2002 requires Federal agencies to show a preference for purchasing biobased products. Executive Order 13134, *Developing and Promoting Biobased Products and Bioenergy*, significantly expands Federal procurement activities for biobased products and services. Executive Order 13123, *Greening the Government through Efficient Energy Management*, and Executive Order 13221, *Energy Efficient Standby Power Devices* levy additional requirements on Federal procuring activities with respect to energy conservation. *The Energy Policy Act of 2005, section 104*, requires Federal Agencies to procure only products that are Energy Star® qualified or meet energy efficiency specifications set by the Department of Energy's Federal Energy Management Program (FEMP) when purchasing covered products. It also calls on DLA and the General Services Administration to supply only Energy Star® or FEMP designated product in the covered categories, subject to certain limitations. Executive Order 13149, *Greening the Government Through Federal Fleet and Transportation Efficiency, requires* Federal agencies to reduce petroleum consumption and recommends the use of alternative fuels.

This Green Procurement Plan provides guidance for compliance in all these areas.

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# DLA Green Procurement Plan

# 1.0 Purpose, Authority, and Applicability

## 1.1 Purpose

This Green Procurement Plan (GPP) provides guidance for implementing and maintaining effective programs for buying green products, in accordance with mandated Federal procurement preferences for recovered content, biobased, and energy efficient products; alternative fuels; alternative fueled vehicles; and environmentally preferable purchasing.

This plan applies to installation and mission activities and to product and service acquisitions. It will be incorporated into each DLA Field Activity's (FAs) Pollution Prevention Plans and facility-level procurement policies affecting local purchasing practices. FAs will supplement this plan to identify specific responsibilities. For example, the local supplement will identify who will verify the vendor certifications addressed in section 2.3.3.

This GPP does not replace any existing state or local affirmative procurement requirement more stringent than a comparative requirement implemented by this GPP. This plan is considered a living document and will be reviewed and updated periodically as needed.

## 1.2 Authority (RCRA, Section 6002, Section (i))

In Section 6002(i) of the Resource Conservation and Recovery Act (RCRA) Congress acknowledges the importance of recycling in managing the nation's solid waste. Congress further recognizes that recycling does not end with the collection of materials, but also includes the manufacture of recycled content products that can be purchased and used by consumers.

### 1.2.1 Farm Security and Rural Investment Act of 2002 (Farm Bill)

Section 9002 of this Act,: "Federal Procurement of Biobased Products," requires Federal agencies to show preferences for biobased products. USDA is responsible for designating products for mandatory procurement preference and will accomplish this through a series of rulemaking actions over several years. Refer to Appendix A for a list of designated and proposed biobased products.

### 1.2.2 The Energy Policy Act

The goal of the Energy Policy Act of 1992 is to enhance our nation's energy security. To meet this goal, the Act requires the acquisition and use of alternative fueled vehicles. It mandates 75% of light duty vehicles acquired in a fiscal year by Federal agencies be alternative fueled vehicles.

The Energy Policy Act of 2005, Section 701, requires federal Agencies to use alternative fuels in dual-fuel vehicles unless the Secretary of Energy determines an agency qualifies for a waiver.

The Energy Policy Act of 2005 also addresses Federal Procurement of Energy Efficient Products in section 104. It requires Federal Agencies to procure only energy-consuming products listed by Energy Star or designated by the Department of Energy's Federal Energy Management Program (FEMP) when purchasing covered products, subject to certain exceptions. (See Attachment A for a list of the covered products.) The Act requires that these conforming (energy-efficient) products be "clearly identified and prominently displayed in any inventory or listing of products by the General Services Administration (GSA) or DLA" and states "the GSA or DLA shall supply only *Energy Star*® products or FEMP designated products for all product categories covered by the *Energy Star*® programs or the FEMP," subject to exceptions.

Note: "Product" does not include any energy consuming products and systems procured for combat or combat-related mission.

### 1.2.3 Executive Order 13101 (September 1998)

Executive Order 13101, *Greening the Government through Waste Prevention, Recycling, and Federal Acquisition* issued September 14, 1998. The order reiterates the long-standing RCRA Section 6002 requirements for agencies to purchase recovered content materials. It also directs agencies to develop and implement affirmative procurement programs and to identify and purchase environmentally preferable products and services.

### 1.2.4 Executive Order 13134 (August 1999)

Executive Order 13134, *Developing and Promoting Biobased Products and Bioenergy*, issued August 12, 1999, boosts the emerging market in biobased products and biobased energy. The USDA has developed several categories of biobased products which can be found at Attachment A. A product listing of designated items and proposed items can be found at Attachment A.

### 1.2.5 Executive Orders 13123 and 13221 (June 1999, Jul 2001)

Executive Order 13123, *Greening the Government through Efficient Energy Management*, issued June 3, 1999, requires the Federal Government to significantly improve its energy management in order to save taxpayer dollars and reduce emissions that contribute to air pollution and global climate change. It requires agencies to procure energy efficient products. Executive Order 13221, *Energy Efficient Standby Power Devices*, issued July 31, 2001, requires agencies to purchase devices that use no more than one watt of energy in the standby power consuming mode.

### 1.2.6 Executive Order 13149 (April 2000)

Executive Order 13149, *Greening the Government Through Federal Fleet and Transportation Efficiency*, issued April 21, 2000, requires Federal agencies to reduce petroleum consumption and recommends the use of alternative fuels and the acquisition of vehicles with higher fuel economy, including hybrid vehicles.

### 1.2.7 EPA Comprehensive Procurement Guidelines (CPG)

EPA is required to designate items that are or can be made with recovered materials, and to recommend practices for buying these products. Once an item is designated, procuring agencies are required to ensure their purchase of the item meets or exceeds the EPA guidelines; exception is made for technical and other reasons. Any product containing recovered material that cannot meet reasonable performance standards shall be documented with retention for required reporting. Federal agency adherence to the practices recommended in the CPG constitutes compliance with Section 6002 of RCRA. Refer to Attachment A for a list of designated items. Additional information can be found at EPA's CPG website www.epa.gov/cpg.

### 1.2.8 Federal Acquisition Regulation

The Federal Acquisition Regulation (FAR) governs Federal agencies and DLA acquisitions in part 23.2, Energy and Water Efficiency and Renewable Energy; part 23.4, Use of Recovered Materials; and part 23.7, Contracting for Environmentally Preferable and Energy-Efficient Products and Services.

### 1.2.9 Department of Defense (DoD) Green Procurement Strategy

The DoD Green Procurement Strategy, issued August 27, 2004, mandates that all activities will update their affirmative procurement strategies to meet the framework and content of the DoD GPP. Similar to affirmative procurement, the goal of green procurement is to ensure compliance with procurement preferences and make it a daily part of the purchasing activity operation. Rather than focusing on any specific Federal procurement preference program, the DoD GPP defines the management framework all DoD organizations will use to ensure compliance with procurement preference requirements.

## 1.3 Applicability

Section 6002 (a) of RCRA and EPA's comprehensive procurement guidelines apply to all procuring agencies, defined as "any Federal agency, or any State agency, or agency of a political subdivision of a State which uses appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract". Section 9002 of the Farm Bill states that Federal agencies shall comply if the purchase price of a biobased item exceeds $10,000 or if the quantity of such items purchased in the preceding fiscal year was $10,000 or more.
Accordingly, this GPP shall be implemented by all DLA program and procurement offices, operation offices, sites, and contractors.

For DLA contractors, DLA must ensure: 1) appropriate new contracts contain GPP compliance provisions and 2) appropriate existing contracts are modified to include GPP compliance provisions. Related procurement policy will be provided to DLA's contractors in their contracts, which will include FAR 52.223-4, Recovered Material Certification and FAR 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products and will address energy efficient and biobased issues as appropriate. DLA's contractors who procure a majority of the products regulated by USDA and DOE should be made aware of GPP requirements.

Once appropriate provisions or clauses are included in each contract, the contractor is required to comply with DLA's GPP as if the contractor were a DLA entity. Hence, the contractor will be required to monitor and report on its GPP activities as well as require its applicable sub-contractors to comply with DLA's GPP.

Executive Order 13101 requires DLA's procurement/contracting organizations to include any provisions or clauses relating to DLA's waste prevention, recycling, and affirmative procurement programs in all new solicitations for contracts. Since contractors are purchasing goods and services on DLA's behalf, they need detailed statements of work for implementing DLA's affirmative procurement policies. For example, construction contracts should include the requirement to use concrete containing fly ash or ground granulated blast furnace slag as well as building insulation containing recovered material. With respect to waste prevention, the statements of work should state that the contractors will use recycled content paper according to current EPA threshold levels. Contracts should specify that any documents submitted during the performance of a contract will be printed on both sides and any copied documents will be copied on both sides of papers submitted during the term of the contract. (See section 9.0.) Contractors creating specifications must be made aware of DLA's GPP to include the use of EPA designated items.

## 2.0 Buying Green: Affirmative Procurement Program at DLA

For recovered content items designated by EPA, DLA is required to implement an affirmative procurement (also known as green procurement) program consisting of four elements:

- a preference program
- a promotion and training program
- a program for vendor estimation, certification, and verification
- an annual review and monitoring program

The Farm Bill requires biobased product procurement programs to include three of these four elements: preference, promotion and training, and an annual review and monitoring. Refer to Attachment A-1 for a list of biobased products that have been designated or proposed to be designated by the USDA.

## 2.1 Preference Program

The preference program demonstrates to our suppliers and customers that DLA prefers to acquire recycled content, biobased, energy efficient and environmentally preferable products.

DLA's preference program is based on EPA's CPG for designated items. For those items included in the CPG, preference will be given to procuring and using such products containing the highest percentage of recovered materials practicable versus products made with virgin materials, when adequate competition exists, and when price, performance, and availability are equal (in accordance with section 6002(c)(1) of RCRA). Likewise, for items included in USDA's categories of designated biobased products, preference will be given to procuring and using those products containing the highest biobased content practicable.

A decision to purchase an EPA-designated item that does not meet the recovered materials standards requires a written determination and approval. See section 3.2 and Attachment C for Waiver information.

Attachment A contains lists of recycled and energy efficient items that have been designated for Federal procurement preference, and a list of biobased items that are largely proposed for designation. As additional items are identified, this GPP will be updated to incorporate them.

## 2.2 Promotion and Training Program

The promotion and training program increases awareness of the GPP requirements and encourages employees, contractors, and suppliers to comply. Due to the diverse nature of DLA, Field Activities (FAs) should implement green procurement training consistent with their mission and intent. FAs that cannot supply adequate training should contact the DLA Training Center (DTC); which has expertise in green procurement. For more information regarding Affirmative/Green Procurement training see Attachment H.

At the Enterprise level, DES-E, J-3, and J-4 together are responsible for actively promoting DLA's Green Procurement Program. DLA will promote its desire to buy environmentally friendly products by:

- Identification of applicable "green" items managed by DLA
- Periodically announcing or otherwise promoting the green procurement program in trade publications, recycling journals, and procurement publications
- Including explicit preference standards in appropriate solicitations for bids and statements of work
- Providing informational materials and training to program and procurement offices regarding the DLA preference program
- Providing vendor and product information to program and procurement offices
- Ensuring that training is provided for Government Purchase Card holders regarding the DLA preference program

Similarly, at the FA level, personnel involved in the acquisition process, including not only representatives of the technical, supply, and procurement communities but also the customers they serve and the contractors who provide products and services, will share the responsibility for promotion and training with the environmental coordinator. The contracting officer (supervisor) is responsible for knowing who needs training and ensuring they take it. The environmental coordinator can assist with identifying appropriate training.

## 2.3 Vendor Estimation, Certification, and Verification

**(Note: This section N/A to biobased and energy efficient products)**

The third RCRA requirement for affirmative procurement programs is a program for vendor estimation,

certification, and verification. For EPA designated items, DLA procuring activities must ensure vendors provide an estimate of the total recycled content of their products and certify that the recycled content meets minimum content standards.

Note: Federal supply sources such as General Services Administration (GSA), Government Printing Office (GPO), and DLA have established their own estimation, certification, and verification procedures for EPA-designated items. Therefore, program offices procuring designated items exclusively through these supply sources need not conduct independent estimation, certification, and verification reviews.

The following procedures to verify estimates and certifications apply when a program office chooses to procure designated items:

### 2.3.1 Estimation

The procuring activities' content standards for designated items shall be specified in the statement of work. A separate estimate from the vendor regarding the percentage of recovered materials in the product is required. If the product exceeds the minimum content standards specified, the percentage of recovered materials must be stated in order to be given consideration. FAR clause 52.223-9 "Estimate of Percentage of Recovered Material Content for EPA-Designated Products" shall be inserted into solicitations, including specifications requiring using and/or procuring recovered material. (Attachment D)

### 2.3.2 Certification

Vendors are responsible for: 1) providing written certification to the contracting officer stating their products meet minimum content standards; 2) maintaining copies of certification documents; and 3) producing copies of the written certification upon request.

Currently, the FAR contains a "Recovered Material Certification" provision (52.223-4) which Federal agency contracting officers shall insert into solicitations, including specifications requiring using and/or procuring recovered materials (Attachment D).

### 2.3.3 Verification

Procuring activities shall periodically review vendor certification documents as part of the annual review and monitoring process. Such reviews shall enable DES-E to verify compliance with Executive Order 13101.

## 2.4 Annual Review and Monitoring Program

The final required element is annual review and monitoring. This applies to the overall GPP, and includes recycled-content products, biobased products, and energy efficient products along with alternative fuels and other environmentally preferable products. Each FA must review and evaluate the

effectiveness of the GPP at their facility annually. This review can be incorporated in the annual self assessment all FAs must accomplish in accordance with DLAD 50525.30 (One Book), Environmental Compliance chapter, paragraph 4.6 (https://today.dla.mil/onebook/process/170.htm) or with comparable procurement reviews. Evaluation guidelines can be found in The Environmental Assessment and Management (TEAM) Guide (available on DENIX, https://www.denix.osd.mil/denix/DOD/Library/Assessment/TEAM/team.html), section 6. In addition, the Air Force Center for Environmental Excellence (AFCEE) web page (See Attachment G) provides a GPP guide with an example format for the annual review. FAs may adopt this format or develop one of their own. Results of the review may also be useful for RCRA reporting and/or facility compliance audits, although this requirement is separate and distinct from the requirement to report GPP purchase data to Congress or for RCRA reporting.

## 2.5 Awards

DLA FAs can compete for Environmental awards at multiple levels. The DLA Environmental Award is presented annually to an individual or team within DLA demonstrating leadership and innovation in the broad environmental arena. Also within DLA, the DLA Green Products and Services Award recognizes extra-ordinary efforts in making environmental products and services available to the customers. At the Department of Defense level (The Office of the Deputy Under Secretary of Defense (Installation & Environment) administers an annual Secretary of Defense Environmental Awards program, which recognizes successful and innovative environmental programs throughout the Department. At the Federal level is the prestigious White House "Closing the Circle" award. DES-E has the lead for identifying winners of these DLA awards and may nominate individuals and teams for DoD and Federal awards. DLA FAs should strive to win these awards as a means of gaining recognition for their achievements and improving their GPPs. DLA activities are encouraged to establish their own awards programs as part of their promotion and training program.

## 2.6 Goals and Progress

Whenever possible, FAs should be working to meet and monitor progress towards local, DoD, and Federal goals in their GPP. The following are examples of goals:

- Executive Order 13101, Part 6 requires Federal agencies to set goals for solid waste prevention and recycling for solid waste diversion. While DoD had established a goal of 40% solid waste diversion that applied through 2005, the new metric emphasizes continuous improvement. For details, see: https://www.denix.osd.mil/denix/DOD/Working/Metrics/finalmetrics10012004tabA.doc, section IV.

- The DoD goal is for 75% of all light duty vehicle acquisitions to be alternative fueled vehicles. DLA's goal is to plan for 100%.

- The DoD goal is to achieve 100% compliance with mandatory Green Procurement Programs in all acquisition transactions, with each organization responsible for compliance with purchasing mandates.

- DLA FAs are required to assure 100% of their purchases meet or exceed EPA's CPG. Any

shortcomings above the micro purchase threshold ($2,500) must be justified in writing (see Section 3.3.2 Waivers).

- DLA's FAs have the goal of ensuring that purchase card holders receive green procurement training that is current within 3 years.

Procuring organizations should strive to continually improve progress towards the goals as measured by the DoD Affirmative Procurement Metrics. (See section 8.3 for details) DLA FAs may establish additional goals that are relevant locally.

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## 3.0 Responsibilities of Procurement Request Originators

A procurement request originator is an individual or organization responsible for defining the requirements for a purchase or acquisition program. This term includes, but is not limited to, engineers, acquisition program managers, and all contract specification writers/reviewers. (Note: this is the term defined by DoD and included in Attachment I to this document, Definitions.)

Procurement request originators should read and understand the content of section 3.0 and complete affirmative procurement training. To procure designated items meeting or exceeding environmentally preferred product guidelines, procurement request originators shall consider the following, as noted below in parts 3.1. through 3.4:

### 3.1 Federal Supply Sources

The use of established Federal supply sources is an advantageous method for the purchase of EPA-designated items and other green alternative products. In addition to DLA, Federal supply sources include GSA and Government Printing Office. Procuring items through these sources offers the advantage of competitive bidding, compliance with EPA minimum content thresholds for recovered materials, and central tracking for some transactions. These sources also provide an additional service through independent estimation, certification, and verification of EPA-designated items containing recovered materials, thereby reducing overhead costs for procurement request originators to monitor vendor compliance with affirmative procurement requirements. Information on Federal supply sources of recycled and green alternative products is contained in Attachment F.

### 3.2 Acquisition Planning

For items not available through Federal supply sources, GPP requirements must be incorporated during the acquisition planning phase. In developing plans, drawings, statements of work, specifications or other product descriptions, procurement request originators shall consider the following factors: energy efficiency, elimination of virgin material requirements, use of recovered materials or biobased components, reuse of product, life-cycle cost, recyclability, use of environmentally preferable products, waste prevention (including reduction or elimination of hazardous waste), and ultimate disposal.

All applicable statements of work, procurement requests, and grants shall explicitly state a requirement for items containing recovered materials and include a minimum recovered material content level (which meets or exceeds the EPA's CPG). Case-by-case procurements shall be used when making procurement award determinations where minimum content standards cannot be met. The idea here is to ensure that contracts awarded will provide items containing recovered material to the maximum extent practicable.

EPA issues guidance on buying recycled content products in Recovered Materials Advisory Notices (RMANs). The RMANs recommend recycled and post-consumer content ranges for CPG items based on current information on commercially available recycled content products. RMAN levels are updated as marketplace conditions change. For more info, see: http://www.epa.gov/cpg/products.htm.

Similarly, energy efficiency criteria will be included where possible into the specifications for all product or service procurements involving energy consuming products and systems covered by the Energy Policy Act of 2005, and into the factors for the evaluation of offers received. These criteria will be those used for rating Energy Star and FEMP designated products. See section 3.4 below for additional information and links.

As recommended by the regulating agencies, DLA procuring activities will review their procurement practices and eliminate those inhibiting or precluding the use of items containing recovered or biobased materials.

## 3.3 Procurement from Other than Federal Sources of Supply

The easiest way for procurement request originators (including Government Purchase Card holders) to meet the GPP requirements is to use DLA, GSA, GPO or other pre-existing contractual vehicles for purchases of EPA CPG items. As noted in Section 3.1, purchasing through these sources provides a number of benefits, not the least of which is all tracking and reporting of purchases for RCRA purposes is accomplished at the contract level. If you elect to purchase CPG items outside of a Federal supply source, then additional tracking and reporting is required as described in Sections 3.3.1 and 3.5 below.

### 3.3.1 Recovered Materials Determination Form

Procurement request originators are responsible for defining product specifications using the recommended minimum content standards when procuring EPA-designated recovered content items from outside vendors. The procurement request originator must complete a Recovered Materials Determination Form (Attachment B) for each deliverable containing an EPA-designated item. By completing this form, the procurement request originator is certifying that the statement of work or specifications for the requisition of materials/services specified complies with recommended minimum content standards for recovered materials. The completed form becomes part of the official contract file.

## 3.4 Procurement of Biobased, Energy Efficient, and Environmentally Preferable Products

USDA has the responsibility for creating a **biobased** product list for Federal use. Current plans are to designate biobased products in multiple product categories. In March 2006, USDA designated the first 6 items and expects to designate approximately 100 more, as shown in Attachment A-2. The requirement for Federal agencies to give procurement preference to designated biobased products begins one year after USDA designates the items. For the latest details on USDA's biobased product work, see: http://www.biobased.oce.usda.gov/public/index.cfm.

Federal agencies are required to procure **energy efficient** products qualified in the Energy Star program or designated by FEMP. (See Attachment A-3 for a list of covered products.) Energy Star® is a voluntary partnership between the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), product manufacturers, local utilities, and retailers. The partnership promotes the use of energy efficient products and educates consumers about the benefits of energy efficiency. For details, see: http://www.energystar.gov/. FEMP is a DOE program that works to advance energy efficiency and water conservation in Federal agencies. For details see: http://www.eere.energy.gov/femp/. Federal agencies are also required to procure devices that use no more than one watt of energy in the standby power consuming mode. For details, see http://www.eere.energy.gov/femp/procurement/eep_standby_power.cfm.

**Environmentally preferable purchasing** is also required in the Federal sector and seeks products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service. Unlike the mandates for recycled content, biobased, and energy efficiency, there is no designated list of covered environmentally preferable products nor a requirement for waivers. For more details, see: http://www.epa.gov/opptintr/epp/

## 3.5 Exceptions and Waivers

Decisions NOT to procure green products subject to certain Federal procurement preferences must be documented as described below:

a. Any decision not to procure items meeting EPA guideline standards shall be justified in writing if the purchase is greater than the micro purchase threshold (i.e., >$2500). A waiver is appropriate only if the items are:

- Not available competitively,
- Not available within a reasonable time frame,
- Unable to meet appropriate performance standards or functional requirements, or
- Only available at an unreasonable price (see definition of "unreasonable price")

NOTE: DoD intends to pursue a blanket exception for products or systems designed or procured for

combat or combat-related missions, so exception documentation for such purchases is not necessary.

The contracting officer must place in the contract file a written justification if an acquisition of EPA-designated products above the micro-purchase threshold does not contain recovered material. For installation acquisitions, the Request for Waiver Form (Attachment C) will be used. For stock or mission acquisitions, a locally developed form may also be used. In all cases, the original form/justification becomes part of the official contract file and a copy is forwarded to DES-E.

b. Exception requirements for biobased and energy efficient products are similar to those for the recycled content products and the form at Attachment C may be used. Key differences are that these programs generally exclude combat related products, and for energy efficient, the unreasonable price determination must consider energy costs throughout the life cycle, using the life-cycle cost analysis methods prescribed by 10 CFR part 436, subpart A.

## 3.6 Alternative Fueled Vehicle Program and Alternative Fuels

### Alternative Fueled Vehicles (AFV)

The Energy Policy Act of 1992 mandates that 75% of light duty vehicles acquired in a fiscal year by Federal Departments be AFVs. Executive Order 13149 expanded on these provisions, and DLA policy is to comply with AFV requirements. The DLA goal is to plan for 100% AFV acquisitions. DLA leases vehicles from the General Services Administration (GSA) Fleet rather than purchasing them. DLA FAs Fleet/Equipment Managers work with their GSA Fleet Representative to obtain AFVs each year. For additional policy and guidance, contact DES-I.

### Alternative Fuels

The Energy Policy Act of 2005 (EPAct 2005) mandates that AFVs operate on alternative fuel. DOE is to provide guidance on waivers and implementing procedures, which will be provided to FAs through DES-I. DLA intends to meet this new requirement when alternative fuel is reasonably available.

## 3.7 Life-Cycle Cost Analysis

The concept of “green procurement” is predicated upon an assessment of life cycle costs. Federal agencies are required by Office of Federal Procurement Policy (OFPP) Policy Letter 92-4 (See http://www.whitehouse.gov/omb/procurement/policy_letters/92-4_110292.html) to use life cycle cost analysis, wherever feasible and appropriate, to assist in selecting products and services. When comparing alternative products, the initial cost of the acquisition as well as lifetime maintenance costs, operational costs, etc., must be considered in the analysis because a product with higher initial cost might prove to be a better value in the long run. For Energy Star and FEMP designated products, energy cost savings over the life of the products must be taken account. The FAR provides that agencies should use “best value” for acquisitions.

## 3.8 Government Specification Preparation, Review, and Revision

Procurement request originators and specification preparing activities are responsible for reviewing and revising specifications, standards, and product descriptions during the acquisition-planning stage to increase procurement of green products. Those specifications and standards unrelated to performance or presenting barriers to procuring green products should be revised or eliminated when reviewing or drafting procurement specifications.

Environmental factors will be considered when converting to Commercial Item Descriptions (CID). DLA must ensure government specifications or product descriptions are up to date and that the CID meets or exceeds these requirements.

The following are suggested revisions to specifications to make them more environmentally friendly:

- Express preference for recovered/recycled material, to the maximum extent practicable
- Allow for purchase of products with recovered material
- Eliminate requirements for virgin materials
- Express preference for biobased or energy efficient products
- Revise performance standards currently excluding items with recovered material or biobased content
- Revise performance standards having more stringent requirements than necessary to meet agency's needs

Whenever a specification or standard is revised to allow for a green product, additional types, grades, or classes should be added for the green product. In addition, assigning green products new National Stock Numbers precludes mixing green stock with the non-preferred product.

**Note: when DLA is the order fulfillment agency, only the Specification Preparing Activities can revise a specification or standard, but this may involve collaboration with or initiatives by DLA personnel aware of barriers to or preferences for environmentally preferred products.**

## 4.0 Responsibilities of Contracting Officials

Contracting officials are responsible for reviewing all procurement requests and making sure that green products and services are incorporated into the solicitations for contracts as required and appropriate. Contracting officers should ensure that all procurement personnel receive proper training and periodically audit their personnel to make sure they are complying with regulations. Contracting officers can accomplish these goals by:

- Encouraging procurement request originators to complete affirmative procurement training
- Documenting the completion rates of affirmative procurement training as well as other procurement data for management review purposes
- Incorporating appropriate affirmative and green procurement language and FAR provisions and clauses into solicitations for contracts, consistent with the needs of the customer
- Ensuring that all contracts are developed with consideration of FAR 23.405, which requires

written justification for purchases above the micro purchase threshold of $2,500.00 for the procurement of non affirmative items.
- Encouraging manufacturers to generate responsible stewardship programs that allow for the return of excess un-used materials, used items, containers, and packaging.

Together with Environmental Coordinators, the acquisition teams or integrated requirement teams at the FAs are responsible for implementing training and promotion programs, and for reviewing and monitoring the FAs GPP. Representatives from Contracting will be key players in the FAs Green Procurement Team established by the Commander (see section 7.0).

The responsibilities of installation procurement offices outlined in DOD's Green Procurement Plan Policy and Strategy are listed at Appendix I.

## 5.0 Responsibilities of Environmental Coordinators and Environmental Management Representatives

Together with the acquisition team or integrated requirement team, FAs Environmental Coordinators are responsible for implementing training and promotion programs for their FAs. As part of a promotion and training program, Environmental Coordinators advise procurement request originators and contracting officers on strategies to comply with affirmative procurement. Ways this can be done include:

- Providing a Federal listing of green products and services (See Attachments A, F and G)
- Advising procurement request originators and contracting officers on green acquisition strategies
- Providing recommendations to management involved in the purchasing process on the preparation, implementation, and monitoring of the GPP
- Implementing an awareness program to promote green procurement, to include recognition or awards

Together with the acquisition team or integrated requirement team, Environmental Coordinators are also responsible for annual review and monitoring of the FAs GPP (See section 2.4 above). The Environmental Coordinator will be a key player in the FAs Green Procurement Team established by the Commander (see section 7.0).

A helpful strategy is inclusion of affirmative procurement as an objective in DLA Environmental Management Systems (EMS). This approach facilitates affirmative procurement goals through the EMS structure of milestones, audits, and annual reviews. Environmental management representatives, who are the coordinators of the EMS at DLA FAs, will consider affirmative or green procurement as an objective in the EMS. For additional information on EMSs, see the following websites: https://today.dla.mil/dss/ems/ and http://www.fedcenter.gov/programs/ems/.

## 6.0 Responsibilities of Supply Chain Managers

When DLA manages an item, the Supply Chain Managers will work to assist customers in fulfilling

their environmental obligations while meeting their supply needs by ensuring that:

- as an established Federal supply source, the DLA inventory includes all green products in their commodity areas for which procurement preferences have been mandated;
- the appropriate information related to these products is provided for communication to customers, using systems such as the Federal Logistics Information System (FLIS), Business System Modernization (BSM), etc.;
- opportunities to identify other environmental alternative products for addition to the inventory (beyond the mandated items) are aggressively pursued in order to offer customers as many green options as possible.

Supply Chain Managers will establish responsibilities and procedures for executing these functions. This could include designating an individual focal point or several coordinators, establishing a separate green product council, supplementing an existing team, or some other locally appropriate mechanism. Note that collaboration with the Specification Preparing Activities (SPA) may be required to ensure that green products are included in the inventory, to include appropriate specification preparation as described in section 3.8. DES-E can assist managers with contacts through DoD command channels when necessary to engage activities outside DLA (such as the SPA).

Note that many of the requirements in section 3.0 above, for Procurement Request Originators, also apply to Supply Chain Managers.

## 7.0 Responsibilities of DLA Field Activity Commanders

Installation and operational Commanders will encourage their personnel to comply with affirmative and green procurement. Commanders will:

- Issue an activity policy on Green Procurement to demonstrate commitment and provide direction. See Attachment E for a model policy letter.
- Designate an activity Green Procurement Team which will include personnel representing contracting (development and administration), environmental, logistics (purchase request originators), government purchase card administration, and any others deemed appropriate locally, such as additional acquisition personnel for commodity management activities. The Green Procurement Team will supplement this document with a plan that will address local objectives, responsibilities (including training and promotion), exemption processes, and procedures for maintaining continuity of the plan.
- Ensure that all appropriate environmental and procurement personnel are aware, skilled, and accountable for complying with affirmative procurement requirements
- Monitor and review installation objectives and targets for green procurement
- Periodically evaluate performance relative to green procurement objectives and targets

## 8.0 Green Procurement Reporting

The Environmental Reporting Logistics System (ERLS) Green Procurement Report (GPR) is designed

to assist DoD procuring activities in tracking annual purchases of green items and associated conventional (non-green) items. For details see: http://www.dlis.dla.mil/erlsgpr/. DLA FAs will use the ERLS GPR tool to assist in green procurement monitoring and reporting.

## 8.1 Reports

HQ DLA (DES-E) must report annually on DLA purchases of EPA designated recycled content items under the GPP to ADUSD (ESOH) who in turn compiles a DoD-wide report for submission to the Federal Environmental Executive (FEE) and OFPP in accordance with section 6002 of RCRA. The FEE reports to OMB annually and OFPP reports to Congress biennially. HQ DLA will issue a data call to the FAs each year, consolidate inputs, and submit required data to the requesting DoD official. Contract compliance information reported through the Federal Procurement Data System (FPDS) provides additional data for this report.

## 8.2 Data Analysis and Feedback

In addition to fulfilling Federal reporting requirements, HQ DLA (DES-E and J-331) may analyze the data to identify strengths and weaknesses of the GPP and provide feedback to program and procurement offices. FAs are encouraged to incorporate data analysis into their annual review and monitoring required in section 2.4, using tools such as the FPDS and ERLS GPR.

## 8.3 DoD Affirmative Procurement Metrics

The Office of the Secretary of Defense will measure progress towards compliance with the Federal GPP through the following metrics.

1. The codes in the DD Form 350, *Individual Contracting Action Report*, Line B12F, will be assessed for achieving the percent reduction in the number of "E" codes and the percent increase in "A" codes (tracked in the FPDS).

2. DLA's ERLS GPR tracks the purchases of Federally-defined indicator items. This metric will be evaluated for achieving an increase in the percentage of purchases of Federally-defined indicator items relative to the number of all similar purchases in each category.

3. Data from the Defense Acquisition University's (DAU) training information database will be used to monitor the number of contracting personnel trained in green procurement once it is available. This metric will be evaluated for achieving an increase in the percentage of contracting personnel trained in affirmative procurement.

In addition, the DLA Enterprise Support metrics include green procurement training for purchase card holders, and will include metrics for training of contracting personnel once the DAU system is mature.

## 9.0 Waste Prevention Opportunities

Section 101 of Executive Order 13101 encourages Federal agencies to incorporate waste prevention and recycling in the agency's daily operations in support of the national policy of preventing pollution. DLA strongly encourages electronic transfer of documents and double-sided copying of all documents as a waste prevention strategy. FAR clause 52.204-4 (b) "Printed or Copied Double-Sided on Recycled Paper" shall be inserted into solicitations, including specifications requiring using and/or procuring recovered material. The clause states "*In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.*" DLA will utilize an electronic acquisition system once such a system is developed and implemented for DoD/Federal government use

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## 10.0 Other Recycled and Green Products

EPA's guidelines may not always reflect products or services most often used by DLA. Procurement request originators are encouraged to request, procure, and use other green products not specified in this guide. In many cases, a choice of virgin and recycled product may be offered through Federal supply sources and outside vendors providing opportunities to buy recycled beyond the mandated items. In addition, opportunities to procure biobased and energy efficient products are increasing each year.

EPA has developed seven guiding principles for identifying and purchasing products and services.

(1) Consideration of environmental preference should begin early in the acquisition process and be rooted in the ethic of pollution prevention.
(2) Environmental preference is a function of multiple attributes.
(3) Environmental preference should reflect life cycle considerations of products and services to the extent feasible.
(4) Environmental preference should consider the scale (global vs. local) and temporal reversibility aspects of the impact.
(5) Environmental preference should be tailored to local conditions where appropriate.
(6) Environmental objectives of products or services should be a factor or sub-factor in competition among vendors when appropriate.
(7) Agencies need to carefully examine product attribute claims.

DLA will use these principles to identify and purchase environmentally preferable products and will review and revise specifications, solicitation procedures, and policies where appropriate.

# Attachment A – Summary of Designated Preference Items

## A-1 EPA Categories and Designated Items

The Comprehensive Procurement Guidelines (CPG) is the document EPA uses to formally designate the items made from recovered or recycled materials covered by the GPP. Periodically, EPA reviews a broad list of potential products made from recovered materials and solicits input from end users, manufacturers, distributors and the general public on the feasibility of mandating the item for affirmative procurement programs. Listed below are the eight categories of currently listed CPG items:

- Construction Products
- Landscaping Products
- Non-paper Office Products
- Paper and Paper Products
- Park and Recreation Products
- Transportation Products
- Vehicular Products
- Miscellaneous Products

EPA has created an excellent Web page for CPG information at www.epa.gov/cpg. The "Products" section of the page lists all currently designated and proposed guideline items and their associated recycled-content requirements. The full text of each CPG is found in the "Background" section. Other sections of the Web page provide product Fact sheets, give CPG program updates, and answer frequently asked questions.

## A-2 Biobased Items

The USDA is in the process of designating products for mandatory Federal procurement preference. The attached listing includes those that have been or may be proposed for this designation list. For the latest information, see http://www.biobased.oce.usda.gov/public/index.cfm.

## A-3 Energy Efficient Items

The attached listing includes energy efficient items listed by Energy Star or designated by the Department of Energy's Federal Energy Management Program. For additional information, see http://www.eere.energy.gov/femp/procurement/

# Attachment A-1 EPA Designated Recovered Content Products (continued)

*Construction Products*

Building insulation products
Carpet and carpet cushion
Cement and concrete containing coal fly ash, ground granulated blast furnace slag, cenospheres, or silica flume
Consolidated and reprocessed latex paint
Floor tiles
Flowable fill (backfill)
Laminated paperboard
Modular threshold ramps
Nonpressure pipe
Patio blocks
Railroad grade crossing surfaces
Shower and restroom dividers/partitions
Structural fiberboard

*Landscaping Products*

Compost made from yard trimmings or food waste
Garden and soaker hoses
Hydraulic mulch
Lawn and garden edging
Plastic lumber landscaping timbers and posts

*Non-Paper Office Products*

Binders, clipboards, file folders, clip portfolios, and presentation folders
Office furniture
Office recycling containers
Office waste receptacles
Plastic desktop accessories
Plastic envelopes
Plastic trash bags
Printer ribbons
Toner cartridges

*Paper and Paper Products*

Commercial/industrial sanitary tissue products
Miscellaneous papers (tray liners)
Newsprint
Paperboard and packaging products
Printing and writing papers

*Park and Recreation Products*

Park benches and picnic tables
Plastic fencing
Playground equipment
Playground surfaces
Running tracks

*Transportation Products*

Channelizers
Delineators and flexible delineators
Parking stops
Traffic barricades
Traffic cones

*Vehicular Products*

Engine coolants
Rebuilt vehicular parts
Re-refined lubricating oils
Retread tires

*Miscellaneous Products*

Awards and plaques
Bike racks
Blasting grit
Industrial drums
Manual-grade strapping
Mats
Pallets
Signage
Sorbents

Attachment A-2

## Federal Biobased Preferred Procurement Program - Approved Items (USDA)

### Round 1

Urethane Roof Coatings
Hydraulic fluids (mobile equipment)
Penetrating oils
Diesel additives
Water Tank Coatings
Bedding, Bed Linens, and Towels

## Federal Biobased Preferred Procurement Program - Proposed Items (USDA)

### Round 2

Adhesive and Mastic Removers
Biodegradable Containers
Bio-Fluid Filled Transformers
Composite Panels
Fertilizers
Grease and Graffiti Removers
Hand Cleaners and Sanitizers
Insulating Foams – Wall Construction
Metal Working Fluids
Sorbents

### Round 3

2 Cycle Engine Oils
Biodegradable Cutlery
Biodegradable Films
Carpet Cleaners
Carpets
Dust Suppressants
Glass Cleaners
Greases
Hydraulic Fluid – Stationary Equipment
Lip Care Balm

### Round 4

Bath and Tile Cleaners
Biobased Clothing
Concrete and Asphalt Release
Cutting, Drilling and Tapping Oils
De-Icers
Durable Plastic Films
Expanded Polystyrene Foam Recyclers
Fire Arm Lubricants
Laundry Products
Wood and Concrete Sealers

# Attachment A-3

ENERGY STAR Labeled and FEMP Designated Products*

**ENERGY STAR®-qualified and FEMP-designated Products***

**(† - Standby power requirement; *no Purchasing Specification*)**

***Lighting:***
Compact Fluorescent Lamps
*Residential Light Fixtures*
Fluorescent Lamps & Ballasts*
Fluorescent Luminaires*
Downlight Luminaires*
Industrial Luminaires*
Exit Signs
*Ceiling Fans*
*Traffic Lights*

***Commercial & Industrial Equipment:***
Unitary (Packaged) Air Conditioners
Air-Cooled Electric Chillers*
Water-Cooled Electric Chillers*
Air-Source & Water-Source Heat Pumps*
Ground-Source Heat Pumps*
Commercial Boilers*
Electric Motors*
Distribution Transformers

***Food Service Equipment:***
Solid Door Refrigerators and Freezers
Gas Griddles*
Fryers
Hot Food Holding Cabinets
Steam Cookers
Beverage Vending Machines
Water Coolers
Ice Machines*
Pre-Rinse Spray Valves*

***Office Equipment:***
Computers†
Monitors†
Laptops†
Printers†
Fax Machines†
Copiers†
*Scanners†*
*Multifunction Devices†*
*External Power Adaptor, Mailing Machines*

***Home Electronics:***
*Televisions (TV)†*
*Video Cassette Recorders (VCR)†*
*Combination Units (TV + VCR)†*
*Digital Video Display (DVD) Products†*
*Cordless Telephones*
*Answering Machines*
*Combination Telephone/Answering Machine*
*Home Audio†*

***Appliances:***
Refrigerators
Freezers
Dishwashers
Clothes Washers
Room Air Conditioners
*Dehumidifiers*
*Room Air Cleaners*

***Residential Equipment:***
Central Air Conditioners
Air-Source Heat Pumps
Ground-Source Heat Pumps
Gas Furnaces
Residential Boilers
Electric Water Heaters*
Gas Water Heaters*
*Ventilation Fans*
*Programmable Thermostats*

***Plumbing:***
Faucets*
Showerheads*
Urinals*

***Construction Products:***
Residential Windows, Doors and Skylights
Roof Products

* **FEMP** is the Federal Energy Management Program, which is a DOE program for the Federal Government; Federal buyers are now required by the Energy Policy Act of 2005 to purchase products that are ENERGY STAR®-qualified or FEMP-designated. See details at: http://www.eere.energy.gov/femp/procurement/

# Attachment B

## Recovered Materials Determination Form

### Instructions

The procurement request originator completes this form when EPA-designated recovered content items are procured from vendors not on a GSA schedule or when a GSA schedule is not used. This form is not required for items requisitioned from established Federal supply sources.

1. The procurement request originator or purchase cardholder identifies the item(s) being purchased, signs and date the bottom of the form.

2. The completed form becomes part of the official contract file.

Procurement Request No._____

Purchase Card Action Date_____ Vendor_____

The statement of work and specifications covering this procurement request are subject to the Defense Logistics Agency's Affirmative Procurement Program. The items being procured are: (Check category and circle appropriate item)

_____Paper and Paper Products (commercial/industrial sanitary tissue products, miscellaneous papers, newsprint, paperboard and packaging products, printing and writing papers)

_____Vehicular Products (coolants, re-refined lubricating oils, retread tires, rebuilt vehicle parts)

_____Construction Products (Building insulation, Carpet, Carpet cushion, Cement/Concrete containing granulated blast furnace slag/fly ash, Reprocessed latex paint, Floor tiles, Flowable fill, Laminated paperboard, Modular threshold ramps, Non-pressure pipe, Patio blocks, Railroad grade crossing surfaces, Shower and restroom dividers/partitions, Structural fiberboard)

_____Transportation Products (Channelizers, Delineators, Flexible delineators, Parking stops, Traffic barricades, Traffic cones)

_____Park and Recreation Products (Park benches and picnic tables, Playground surfaces and equipment, Running tracks, Plastic fencing)

_____Landscaping Products (Garden and soaker hoses, Hydraulic mulch, Plastic lumber landscaping timbers and posts, Lawn and garden edging, Compost from yard trimmings)

_____Non Paper Office Products (Binders, clipboards, file folders, clip portfolios and presentation folders, Office furniture, Office recycling containers, Waste receptacles, Plastic desktop accessories, Plastic envelopes, Plastic trash bags, Printer ribbons, Remanufactured toner cartridges)

_____Miscellaneous Products (Awards and plaques, Bike racks, Blasting grit, Industrial drums, Mats, Pallets, Signage, Sorbents, Manual-grade strapping)

I hereby certify the Statement of Work/Specifications for the requisition of materials/services listed above complies with EPA Comprehensive Procurement Guidelines for minimum recovered/recycled material content levels.

_____ _____

Procurement Request Originator's Signature Date

_____ _____

Purchase Cardholder' Signature Date

# Attachment C

## Request for Waiver or Exception

### Instructions

Complete this form when preferred procurement products or services subject to DLA's Green Procurement Plan ***are not*** procured. (These include EPA designated recovered-content, biobased, or energy efficient products).

1. The procurement request originator/purchase cardholder or contracting officer checks the appropriate justification(s), provides a written explanation, and signs and dates the form.

2. The original completed form becomes part of the contract file.

3. The procurement request originator submits a copy of the form to the field activity's designated Environmental Coordinator.

4. The Environmental Coordinator forwards a copy of each Request for Waiver form to DES-E within 30 days.

5. Attach additional pages, if necessary

Name of Product or Service: _____

Stock Number or Description: _____

Purchase Request Number: _____

Method of Purchase: _____Date: _____

Vendor or Source: _____

Applicable Exception (check one):

_____ Availability (not available within a reasonable period of time)

Date needed: _____ Date available: _____

_____ Performance (fails to meet performance standard in the specifications)

Describe the standard and what is needed: _____

_____

Describe how the guideline item fails to meet the standard: _____

_____ Price (only available at unreasonable cost, taking life cycle energy costs into account)

Price of preferred product/service: _____

Price of non-preferred product/service: _____

_____ Limited **sources** (not available from 2 or more sources)

Market research was performed by contacting _____ (insert number) vendors, but only

_____ (enter name) was able to supply the product or service.

This determination is made in accordance with FAR 23.203(A), 23.405(c).and/or 23.703 as applicable.

_____ _____
Technical OPR -- Signature and Office Symbol Date

_____ _____
Concurrence – Contracting Officer Date

_____ _____
Concurrence -- Environmental Coordinator Date

_____ _____
Concurrence – Director, DLA Date
(for covered energy consuming products only)

# Attachment D

## Federal Acquisition Regulation Recovered Material Certification

The following FAR provisions, "Recovered Material Certification" (52.223-4) and “Estimate of Percentage of Recovered Material Content for EPA-Designated Products” (52.223-9), shall be inserted into solicitations having specifications requiring the use and/or procurement of recovered materials.

Recovered Material Certification (October 1997):

> ***As required by the RCRA of 1976 (42 U.S.C. 6962(c)(3)(A)(i)), the offeror certifies, by signing this offer, that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by the applicable contract specifications***
>
> (End of Provision)

Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Aug 2000)

> ***(a) Definitions. As used in this clause—***
> ***“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”***
> ***“Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.***
> ***(b) The Contractor, on completion of this contract, shall—***
> ***(1) Estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of postconsumer material content; and***
> ***(2) Submit this estimate to _____ [Contracting Officer complete in accordance with agency procedures].***
>
> (End of clause)

Attachment E

## Model Green Procurement Policy Letter for Field Activities

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Green Procurement Policy

Conservation of energy and material resources are national policies embodied in Federal law. Supporting strategies include the consideration of environmental factors in purchasing decisions. Within the Federal government, several laws and executive orders direct agencies to buy recycled content, energy efficient, and biobased products – a practice known as green procurement.

The Federal green procurement mandates can affect our purchasing practices at all levels, from purchase cardholders to base operating supplies to commodities and services provided for customers. The XXXX Activity policy is to consider environmental factors in all purchasing decisions, giving preference to those products and services designated by or recommended in Federal green procurement preference programs. As a practical matter, these programs generally allow exceptions for performance, price, and availability, with appropriate documentation. All activity personnel will meet the requirements for procurement of:

- recycled content products designated by the Environmental Protection Agency,
- energy efficient products designated by the Department of Energy or the Energy Star program, or
- biobased content products to be designated by the United States Department of Agriculture.

I have established a Green Procurement Team that will implement and maintain a plan for the green procurement program at XXXX, including training. All employees who make purchasing decisions must take appropriate actions to actively participate in the success of this program. I intend to recognize our accomplishments locally and send forward those deserving recognition at DLA or DoD levels.

Signed/COMMANDER

# Attachment F

## Federal Sources of Recycled and Environmentally Preferred Products

General

Thousands of recycled and environmental products are available to DLA procuring activities and their contractors through established Federal supply sources, and new items are continuously being added. Federal sources of EPA-designated items, and other recycled and environmental products, are listed in Table F.1.

Table F.1 Federal Sources of Recycled and Environmental Products

| EPA-designated Items | GSA Federal Supply Service | Government Printing Office | Defense Logistics Agency |
|---|---|---|---|
| Paper & Paper Products | √ | √ (printing and writing papers only) | thru Document Automation and Production Service (DAPS) |
| Re-Refined Oil | | | √ |
| Retread Tires | √ | | |
| Building Insulation | √ | | |
| Recycled Toner Cartridges | √ | | √ |
| Other Environmentally Preferable Products | √ | √ (soy-based inks) | |
| Coolants | | | √ |

GSA's Federal Supply Service carries other environmental products such as recycled latex paints, energy and water saving items, and items that have been chemically reformulated to be more "environmentally friendly." GSA produces several publications (Table F.2) to assist customers in identifying and requisitioning environmentally preferred products.

Table F.2 GSA Federal Supply Service Publications

| Publication | Description |
|---|---|
| GSA Supply Catalog | Contains information on several thousand products available through the Federal Supply Service, including hundreds of recycled and environmentally preferable products (highlighted in green for easy identification).<br><br>Also includes information on requisitioning these products through GSA. |
| Market tips | A bimonthly bulletin frequently containing information about new environmentally preferable items being introduced.<br><br>Includes customer-training seminars scheduled through GSA's regional offices. |

These publications are available through:

Centralized Mailing List Service (CMLS)
P.O. Box 6477
Fort Worth, TX 76115
Phone: (817) 334-5215, FAX: (817) 334-5227

Or

On-line at: www.gsa.gov/cmls

## Attachment G

## Information Resources

- Air Force Center for Environmental Excellence:

http://www.afcee.brooks.af.mil
AFCEE's webpage provides a wealth of information on the Air Force's pollution prevention and environmental compliance programs. Included is a suggested format for the annual review.

- California Recycled-Content Product Database:

http://www.ciwmb.ca.gov/RCP
This site contains information on why and how to buy recycled-content products, and provides access to information manufacturers and distributors.

- DLA Environmental, Safety, and Occupational Health Office:

http://www.dla.mil/dss/DES-E
Look here for the latest DLA Affirmative Procurement Program guidance and links to environmental reporting systems.

- DLA Environmental Products Catalog

http://www.dscr.dla.mil/userweb/dscrld/epa/EPSearch.asp

- Energy Star®

http://www.energystar.gov/index.cfm?c=products.pr_index
Products meeting the Energy Star® can be found at this address.

- Environmental Protection Agency (Recovered Content):

http://www.epa.gov/cpg
This site provides the latest information on the Comprehensive Procurement Guidelines and RMANs, and also provides fact sheets on recycled products.

Environmental Protection Agency (Environmentally Preferred Products)
http://www.epa.gov/oppt/epp/
Look here for summaries of the pilot projects, sample contract language, standards information, product sources, and additional information on Environmentally Preferable Purchasing

- DLA Green Products Program

http://www.dlis.dla.mil/default.asp
Check out this site to shop for "green" products through the DoD "Electronic Mall" (EMALL).

- General Services Administration

http://www.gsa.gov/Portal/gsa/ep/home.do?tabId=0
The GSA homepage provides access to thousands of environmentally preferable products.

- Farm Security and Rural Investment Act of 2002

http://www.biobased.oce.usda.gov/public/cataloginfo.cfm

- Defense Environmental Network & Information eXchange (DENIX)

https://www.denix.osd.mil/denix/DOD/dod.html

- Energy Efficient and Renewable Energy

http://www.eere.energy.gov/femp/technologies/eeproducts.cfm

- Office of the Federal Environmental Executive (OFEE) Green Purchasing

http://www.ofee.gov/gp/gp.htm

- Office of Federal Procurement Policy (OFPP)

http://www.whitehouse.gov/omb/procurement/index.html

- Joint Service Pollution Prevention Technical Library

http://p2library.nfesc.navy.mil/

- United States Department of Agriculture, Biobased Products

http://www.biobased.oce.usda.gov/public/index.cfm

- Department of Energy Federal Energy Management Program

http://www.eere.energy.gov/femp/

# Attachment H

## Affirmative/Green Procurement Training

**Affirmative Procurement:**

**Air Force Affirmative Procurement Training Course**
https://webu.brooks.af.mil/webu/secure/coursedesc.asp?id=4#

- DAU Purchase Card Continuous Learning Module
  https://learn.dau.mil/html/clc/Clc.jsp

**Green Procurement**

- **Buying Green: A Multi Functional Approach to Pollution Prevention**
  For more information contact the DLA Training Center at (614) 692-5969, 1-800-458-7903, (269) 961-7046, or FAX (269) 961-7055

- **Green Procurement Seminar.** The U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) offers onsite Green Procurement Training to credit card holders, procurement request originators, and contracting personnel.
  http://chppm-www.apgea.army.mil/gwswp/SolidWaste/training.htm

- U.S. Office of Personnel Management Course – "What is "Green" Purchasing, Anyway?" This fun and instructional course for contracting personnel, purchase card holders, facilities managers, and fleet managers provides an introduction to the Federal "green" purchasing program.
  http://www.usalearning.gov/coursecatalog/index.cfm?FuseAction=BasicSearch

# Attachment I

Roles and Responsibilities, from DOD Green Procurement Program Strategy, found at: https://www.denix.osd.mil/denix/Public/ES-Programs/Pollution/Procurement/GPP/gpp-intro.html

**Installation Procurement Offices**

Contracting officials are responsible for:

- Reviewing all procurement requests to ascertain and validate whether green products or services are involved in the procurement action.
- Providing guidance to procurement request originators and facilitating acquisition planning with respect to green products and services.
- Providing and documenting green procurement training for procurement personnel in consultation with appropriate DoD and Component acquisition/procurement training sources and environmental management organizations.
- Incorporating appropriate green procurement language and Federal Acquisition Regulation (FAR) clauses in contracts consistent with specifications provided by the customer.
- Gathering, sorting, and reporting of procurement data for the purpose of management evaluation of green procurement performance, when such data is maintained in the Federal Procurement Data System or other databases operated by procurement organizations.
- Ensuring all contract actions from development through award, execution, and close-out meet relevant FAR requirements for green procurement. Specifically, as required by FAR 23.405, these requirements include placing a written justification in the contract file for acquisitions above the micro-purchase threshold that describes why an EPA-designated product containing recovered materials was not acquired.
- Maintaining required documents in the contract file to include estimates, certifications, and written justifications for exceptions.
- Accurately completing the DD Form 350, Individual Contracting Action Report (DFARS Part 53).
- Including environmental considerations (reuse, recycling, waste reduction, and green purchasing) as a selection criterion.
- Complying with procedures for monitoring and annually reviewing the effectiveness of the GPP.

# Attachment J

## Definitions and Acronyms

**Definitions**

**Acquisition** - acquiring by contract, using appropriated funds for supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated and evaluated. Acquisition begins agency needs are established and includes the description of requirements to satisfy agency needs, solicitation selection of sources, award of contract, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract. [Executive Order 13101]

**Acquisition Management –** management of all or any of the activities within the broad spectrum of acquisition, as defined above. Also includes training of the defense acquisition workforce and activities in support of the Planning, Programming, Budgeting, and Execution (PPBE) Process for defense acquisition systems/programs. For acquisition programs this term is synonymous with program management.

**Affirmative Procurement Program (APP) -** a program assuring guideline items composed of recovered materials will be purchased to the maximum extent practicable, consistent with Federal law and procurement regulations. [RCRA, Section 6002]

**Biobased Product** – a commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials. [Executive Order 13101]

**Case-by-Case Procurement** - specification of different (usually lower) minimum content standards for specific singular procurement actions when a procuring agency is unable to acquire an item which complies with RCRA or DoD federal procurement requirements. Content standards may be changed if the agency determines it consistently cannot procure the designated item using the standards previously established.

**Certification** – provided by offerors/bidders/vendors, it is written documentation certifying the percentage of recovered materials contained in products or to be used in the performance of the contract is at least the amount required by applicable specifications or other contractual requirements. Certification on multi-component or multi-material products should verify the percentage of post consumer waste and recycled material contained in the major constituents of the product. [EPA Guidelines]

**Comprehensive Procurement Guidelines** - regulations issued by EPA pursuant to Section 6002 of RCRA: (1) identifying items produced (or can be produced) with recovered materials and where procurement of such items will advance the objectives of RCRA; and (2) providing recommended practices for the procurement of such items. [RCRA, Section 6002]

**Cost-Effective Procurement Preference Program -** a procurement program favoring more environmentally sound or energy-efficient products and services than other competing products and services, where price and other factors are equal. [OFPP Policy Letter 92-4]

**Environmental Management System (EMS) -** is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency. [EPA website]

**Environmentally Preferable -** products or services having a lesser or reduced detrimental effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or product or service disposal. [Executive Order 13101]

**Environmentally Sound -** a product or service less damaging to the environment when used, maintained, and disposed of in comparison to a competing product or service. [OFPP Policy Letter 92-4]

**Estimation -** quantitative determination made by vendors of the total percentage of recovered material contained in offered products. Estimations should be based on historical or actual percentages of recovered materials in products sold in substantial quantities to the general public or on other factual basis. EPA recommends DLA procuring activities maintain records of these documents for three years by product type, quantity purchased, and price paid. [EPA Guidelines]

**Executive Agency** or **Agency -** an Executive agency as defined in 5 U.S.C 105. For the purpose of, military departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense. [Executive Order 13101]

**Federal Supply Source -** any supply source managed by a Federal agency such as the General Services Administration, Government Printing Office, or Defense General Supply Center. [DLA Guidance]

**Life-Cycle Assessment -** the comprehensive examination of a product's environmental and economic aspects and potential impacts throughout its lifetime including raw material extraction, transportation, manufacturing, use, and disposal. [Executive Order 13101]

**Life-Cycle Cost -** the amortized annual cost of a product, including costs associated with capital, installation, operation, maintenance, and disposal, discounted over the lifetime of the product. [Executive Order 13101]

**Micro purchase** – an acquisition of supplies or services (except construction), the aggregate amount of which does not exceed $2,500, except that in the case of construction, the limit is $2,000. [FAR 2.1, Definitions]

**Minimum Content Standard -** the minimum recovered material content specifications set to assure the recovered material content required is the maximum available without jeopardizing the intended item end use or violating the limitations of the minimum content standards set forth by EPA's guidelines. [RCRA, Section 6002]

**Performance Specification -** a specification stating the desired product operation or function, but not specifying its construction materials. [EPA Guidelines]

**Postconsumer Material -** a material or finished product whose life as a consumer item has concluded, after having served its intended use and being discarded for disposal or recovery. "Postconsumer material" is a part of the broader category of "recovered materials." [Executive Order 13101]

**Practicable -** capable of performing in accordance with applicable specifications, available at a reasonable price and within a reasonable period of time, and while a satisfactory level of competition with other products is being maintained. [EPA Guidelines]

**Preference -** when two products or services are equal in performance characteristics and price, the Government, in making purchasing decisions, will favor the more environmentally sound or energy-efficient product. [OFPP Policy Letter 92-4]

**Preference Standard -** the highest practicable minimum content standards for products. When minimum content is impractical to calculate, preference is for the presence of a recovered material or an environmentally preferable trait (i.e., retread tires). [DLA Guidance]

**Procurement Request Originators** – the individual or organization responsible for defining the requirements for a purchase or acquisition program. This term includes, but is not limited to, engineers, acquisition program managers, and all contract specification writers/reviewers.

**Procuring Agency -** any Federal (including any DLA procuring activity – ICP or Facility level operation and maintenance activity) or State agency or agency of a state's political subdivision using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract. [EPA Guidelines]

**Recycled Material -** a material utilized in place of raw or virgin material in product manufacturing consisting of materials derived from postconsumer waste, industrial scrap, material derived from agricultural wastes, and other items, all of which can be used in new product manufacture. [EPA Guidelines and OFPP Policy Letter 92-4]

Recyclability – the degree to which a product or material may be recovered or otherwise diverted from the solid waste stream for the purpose of recycling. [Executive Order 13101]

**Recycling -** the series of activities, including collection, separation, and processing, by which materials are recovered from the solid waste stream for use as raw materials in the manufacture of new products (other than fuel for producing heat or power by combustion). [Executive Order 13101]

**Specification -** a clear and accurate description of the technical requirements for materials, products, or services including the minimum requirement for materials, quality and construction and any equipment necessary for an acceptable product. In general, specifications are in the form of written descriptions, drawings, prints, commercial designations, industry standards, and other descriptive references. [EPA Guidelines]

**Unreasonable Price -** The price of a recycled-content product is considered unreasonable if it exceeds the cost of a comparable non-recycled item. (See life cycle cost definition above)

**Verification -** procedures used by DLA procuring activities to confirm both vendor estimates and certifications of the percentages of recovered material contained in the products supplied to them or used in the performance of a contract. [EPA Guidelines]

**Waste Prevention -** (also known as "source reduction") any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials. [Executive Order 13101]

**Waste Reduction -** preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products. [Executive Order 13101]

**Acronyms**

| | |
|---|---|
| AFV | Alternative Fueled Vehicles |
| ANSI | American National Standards Institute |
| APP | Affirmative Procurement Program |
| ASTM | American Society for Testing and Materials |
| CFR | Code of Federal Regulations |
| CID | Commercial Item Description |
| CMLS | Centralized Mailing List Service |
| CPG | Comprehensive Procurement Guideline |
| DLA | Defense Logistics Agency |
| DOE | Department of Energy |
| EPA | Environmental Protection Agency |
| ERLS | Environmental Reporting Logistics System |
| FA | Field Activity (formerly PLFA, Primary Level Field Activity) |
| FAR | Federal Acquisition Regulation |
| FEMP | Federal Energy Management Program |
| FPDS | Federal Procurement Data System |
| FR | Federal Register |
| FSS | Federal Supply Service |
| GPO | Government Printing Office |
| GPR | Green Procurement Report (part of ERLS) |
| GPP | Green Procurement Program or Green Procurement Plan |
| GSA | General Services Administration |
| OFPP | Office of Federal Procurement Policy |

| | |
|---|---|
| OMB | Office of Management and Budget |
| RCRA | Resource Conservation and Recovery Act |
| RMAN | Recovered Materials Advisory Notice |
| USDA | United States Department of Agriculture |

federal register

Friday
August 20, 1999

## Part VII

# Environmental Protection Agency

**Final Guidance on Environmentally Preferable Purchasing for Executive Agencies; Notice**

**ENVIRONMENTAL PROTECTION AGENCY**

**[OPPTS–00149A; FRL–6095–4]**

**RIN 2070–AC78**

## Final Guidance on Environmentally Preferable Purchasing for Executive Agencies

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice.

**SUMMARY:** This document announces the availability of a general guidance designed to assist Executive agencies in identification and acquisition of environmentally preferable products and services. The final guidance is in response to section 503 of Executive Order 13101, entitled ''Greening the Government Through Waste Prevention, Recycling and Federal Acquisition'' (63 FR 49641, September 16, 1998), which requires EPA to issue guidance to address environmentally preferable purchasing by the Federal government. The guidance is designed to assist Executive agencies with the implementation of the environmentally preferable purchasing provisions of Executive Order 13101 and Section 23.704 of the Federal Acquisition Regulations. The implementation of this guidance will result in increased purchases by the Federal government of products and services which minimize harmful effects on human health and the environment.

**FOR FURTHER INFORMATION CONTACT:** For information contact: Eun-Sook Goidel, Office of Pollution Prevention and Toxics, Pollution Prevention Division, 7409, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, telephone: (202) 260–3296, fax: (202) 260–0178, e-mail: goidel.eunsook@epa.gov.

**SUPPLEMENTARY INFORMATION:**

### I. Does this Apply to Me?

You may be potentially affected by this notice if you are an Executive agency employee responsible for the acquisition and use of products and services. Those who produce and sell products and services for use by the Federal government may also find the information in this notice to be of interest. If you have any questions regarding the applicability of this notice to a particular organization, consult the person listed in the ''FOR FURTHER INFORMATION CONTACT'' section.

### II. How Can I Get Additional Information or Copies of this Document or Other Documents?

For the convenience of the reader, the final guidance is published below in its entirety in Unit VII.

1. *Electronically*. You may also obtain electronic copies of this document and various support documents from the EPA Internet Home Page at http://www.epa.gov/. On the Home Page select ''Laws and Regulations'' and then look up the entry for this document under the ''Federal Register--Environmental Documents.'' You can also go directly to the ''Federal Register'' listings at http://www.epa.gov/fedrgstr/. Alternatively, you can go to the Environmentally Preferable Purchasing program's website: http://www.epa.gov/opptintr/epp.

2. *In person*. The Agency has established an official record for this action under docket control number OPPTS–00149A. The official record consists of the documents specifically referenced in this action, any public comments received during an applicable comment period, and other information related to this action, including any information claimed as confidential business information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period, is available for inspection in the TSCA Nonconfidential Information Center, North East Mall Rm. B–607, Waterside Mall, 401 M St., SW., Washington, DC. The Center is open from noon to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Center is (202) 260–7099.

### III. Introduction

On September 14, 1998, President Clinton signed Executive Order 13101, entitled ''Greening the Government through Waste Prevention, Recycling and Federal Acquisition.'' Section 503 of this Executive Order requires EPA to establish guidance to ''address environmentally preferable purchasing.''

The guidance that is being made available today is designed to help Executive agencies meet their obligations under Executive Order 13101 to identify and purchase environmentally preferable products and services. ''Environmentally preferable'' is defined in section 201 of the Executive Order to mean products or services that have a ''lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose.'' The guidance is intended to draw on the extensive procurement experience of the Executive agencies and on the environmental expertise of EPA and others both within and outside of the government. It provides a broad decision-making framework for environmentally preferable purchasing and is a first step to help Executive agencies systematically integrate environmental preferability into the Federal government's buying decisions.

### IV. Background

This Final Guidance on Environmentally Preferable Purchasing is based on EPA's September 1995 Proposed Guidance on the Acquisition of Environmentally Preferable Products and Service and the comments received on that proposal. EPA announced the availability of and sought comment on the Proposed Guidance on the Acquisition of Environmentally Preferable Products and Service on September 29, 1995 (60 FR 50721) (FRL–4760–5). The process EPA used to develop the proposed guidance is described in that **Federal Register** notice. In addition, lessons and insights from early pilot projects have guided the development of the Final Guidance.

Since 1995, a variety of things have occurred that will directly affect the Federal government's environmentally preferable purchasing practices. Foremost are the 1997 revisions to the Federal Acquisition Regulations that incorporate policies for the acquisition of environmentally preferable and energy-efficient products and services. These changes require the consideration of environmental factors in all aspects of Federal acquisition, including acquisition planning (part 7), conducting market surveys (part 10), describing an agency's needs (part 11), evaluating and selecting a vendor (parts 14 and 15), and contract administration (part 42), as well as other provisions.

Another milestone is the 1996 enactment of the National Technology Transfer and Advancement Act of 1995 (NTTAA) which requires the Federal government to use consensus-based industry standards when available rather than creating a government-unique standard.

The acquisition streamlining reform initiatives have also brought many changes to the way the Federal government purchases products and

services. One example is increased decentralization of the purchasing decision, best exemplified by the meteoric increase in credit card use by Federal agency personnel. The number of card holders increased from 10,000 in 1989 to 250,000 in 1996 with the dollar volume increasing from $460,000 to close to $3 billion during the same time period. This trend highlights the importance of reaching out to those beyond the acquisition community with the environmentally preferable purchasing message.

Another trend is the increased interest at all levels of government--local, state and foreign--in using the government's purchasing power as a policy tool to drive environmental improvement. This trend will likely accelerate the anticipated spill-over effect of environmentally preferable purchasing practices. Beyond the governments' interest, other large institutional purchasers--non-profits and individual companies--are also beginning to include environmental factors in their buying decisions.

## V. Lessions Learned

In the years since the Proposed Guidance was first issued, a number of pilot projects were initiated to demonstrate how EPA's Proposed Guidance could be applied to specific product categories. Though limited in number, these projects have provided important insights into the development of the Final Guidance as well as the direction of EPA's Environmentally Preferable Purchasing program.

First, it is important to have the participation of both the environmental and the acquisition/procurement personnel. The acquisition of environmentally preferable products and services in the Federal government context involves both defining what is environmentally preferable for a given product or service and ensuring that the procurement process encourages the purchases of these products. Innovative approaches that leverage the expertise of the environmental and procurement experts is essential to accomplishing these tasks and institutionalizing environmentally preferable purchasing practices.

Second, on a very positive note, early pilots have shown that vendors understand that providing a broad range of environmental information is an important part of doing business with the government and that it can serve as a competitive advantage. Generally speaking, however, information about environmental performance of products and services, particularly along the various life cycle stages, and easy-to-use tools to assess environmental performance remain scarce, limiting the wide-spread adoption of environmentally preferable purchasing. This is likely to change as Executive agencies begin to implement the changes to the Federal Acquisition Regulations and as agencies begin to use information and technical expertise of non-governmental entities.

Lastly, early pilots indicate that there is not a single, ''one size fits all,'' approach to incorporate environmental preferability into Federal acquisition. Using common sense, we need to tailor our approach and level of analysis to fit the complexity of the product and service categories being purchased.

Much progress has been made since Executive Order 12873 was issued in October 1993. A number of pilot projects have been implemented by key purchasing agencies that have provided valuable insights and lessons on ways to integrate environmental considerations into the Federal procurement process. These pilots have helped to identify gaps in information and tools. Future pilots will be instrumental in guiding both EPA's and other Executive agencies' efforts in environmentally preferable purchasing. As EPA and the other agencies move forward, the debate about the appropriate approaches and goals will likely continue. This is desirable given the dynamic nature of the issue. Based on feedback from all stakeholders, EPA will continue to test a variety of approaches and develop and refine tools to allow agencies to more readily apply the concepts of environmental preferability in government purchasing decisions.

## VI. Major Changes to the Guidance

This section describes some of the key changes made to the 1995 Proposed Guidance. EPA has also prepared a more detailed Response to Comment document, which has been included in the public record for this guidance.

### *A. Guidance Framework*

The Guidance framework remains largely unchanged and includes an introduction (Section I), intended audience (Section II), approach (Section III), a set of guiding principles (Section IV), suggested steps for Executive agency implementation (Section V), and appendices (Section VII). A new section, Section VI, lists available resources and tools related to environmentally preferable purchasing.

### *B. Guiding Principles*

A number of changes have been made to the guiding principles, including the addition of a new principle and the merging of a number of principles. As a result, the Final Guidance now has five, rather than seven, guiding principles. Taken together, the principles are intended to provide a broad guide to help Executive agency purchasers address environmental preferability in acquisition of products and services. Specifically, the following changes have been made:

1. A new principle on product safety, price, environmental considerations, performance and availability has been added as Principle #1 and reads:

> Environmental considerations should become part of normal purchasing practice consistent with such traditional factors as product safety, price, performance, and availability.

This was in response to a number of comments requesting more emphasis be placed on the point that the addition of environment is not in lieu of traditional purchasing factors. Although the original proposal noted this, the addition of this new principle should send a clearer message on the importance of putting environmental considerations in the context of other purchasing factors.

2. The guiding principles on life cycle and multiple attributes have been collapsed into one principle (Principle #3) and reads:

> A product's or service's environmental preferability is a function of multiple attributes from a life cycle perspective.

This change is based on comments and also EPA's strong belief that the two concepts are integral in determining environmental preferability. The discussion that follows the guiding principle has also been modified to reflect that although the determination of environmental preferability should be based on multiple attributes, the purchasing decision may at times be based on a single attribute.

3. The guiding principles on impacts and local conditions have been modified and collapsed into one principle (Principle #4) and reads:

> Determining environmental preferability may involve comparing environmental impacts. In comparing environmental impacts, Federal agencies should consider: the reversibility and geographic scale of the environmental impacts, the degree of difference among competing products or services, and the overriding importance of protecting human health.

This change was made to remove the perceived conflict between the two original principles and to provide purchasers with more guidance on how to assess relative impacts. The original principles were intended to convey that, in general, global and irreversible

environmental impacts should be given greater weight in determining preferability than local and rapidly reversible environmental impacts. However, we also recognize that there may be situations in which there are unique mitigating circumstances locally, and in those cases, the purchaser can make the judgement that the local conditions and impacts should be given priority.

4. The principles on competition and product attribute have been revised and a new principle (Principle #5) on environmental information has been added. It reads:

> Comprehensive, accurate and meaningful information about the environmental performance of products or services is necessary in order to determine environmental preferability.

This revision was based on lessons from the pilots and reflects the importance of having relevant environmental information for determining environmental preferability. The discussion related to competition which originally appeared under guiding Principle #6 is now captured under guiding Principle #1.

*C. Federal Agency Implementation*

A number of changes have been made to facilitate Executive agency implementation of environmentally preferable purchasing, including:

1. EPA recommends that Executive agencies look to EPA's list of the top 20 prioritized product categories to focus their pilot projects. The description of this list is included in Section VI of the Final Guidance and the complete list is available on EPA's Environmentally Preferable Purchasing Program's website: www.epa.gov/opptintr. The prioritized list was developed pursuant to Section 503(a) of Executive Order 13101 which states that EPA's guidance ''should be. . .targeted towards products and services that have the most effect.''

2. In implementing pilot projects, EPA recommends, pursuant to section 503(b)(2) of Executive Order 13101, that agencies use all of the options available to determine environmentally preferable attributes of products and services in pilot projects, including the use of technical expertise of non-governmental entities such as labeling, certification, or standards developing organizations. Additional guidance on the use of these organizations is elaborated in the Office of Federal Environmental Executive and EPA's April 1998 policy letter. The full text of this policy letter has been added as Appendix E.

3. EPA recommends that agencies document their pilot efforts. In order to facilitate this, the Final Guidance includes a sample case study template (Appendix E).

*D. Appendices*

A number of changes have been made to this section, including:

1. The addition of three new items:

i. Sample Policy Directive (Appendix C).

ii. Full Text of April 1998 Policy Letter on Non-governmental Entities (Appendix D).

iii. Sample Case Study Template (Appendix E).

2. The deletion of the original Appendix D, ''A Summary of the Federal Trade Commission's Guides to the Use of Environmental Marketing Claims.'' The Guides were updated in May 1998 and the information on how to access the most recent Guides is now included in Section VI--Resources.

## VII. Final Guidance on Environmentally Preferable Purchasing for Executive Agencies

For the convenience of the reader, the final guidance is published below in its entirety.

BILLING CODE 6560–50–F

# Final Guidance on Environmentally Preferable Purchasing

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# *Guidance on Environmentally Preferable Purchasing*

## I. Introduction

On September 14, 1998, President Clinton signed Executive Order (EO)13101, entitled "Greening the Government through Waste Prevention, Recycling and Federal Acquisition." Executive Order 13101 (EO 13101) supersedes EO 12873, Federal Acquisition, Recycling and Waste Prevention, issued on October 20, 1993, but retains a similar requirement for the U.S. Environmental Protection Agency (EPA) to develop guidance to "address environmentally preferable purchasing." (Section 503, EO 13101) The Final Guidance that follows is based on EPA's September 1995 *Proposed Guidance on the Acquisition of Environmentally Preferable Products and Services* (60 FR 50721, September 29, 1995) and comments received on that Proposed Guidance as well as lessons learned from pilot projects conducted to date.

The Final Guidance below is designed to help Executive agencies meet their obligations under EO 13101 to identify and purchase environmentally preferable products and services. Section 503 (c) of EO 13101 directs Executive agencies to "use the principles and concepts in the EPA Guidance on Acquisition of Environmentally Preferable Products and Services, in addition to the lessons from the pilot and demonstration projects to the maximum extent practicable, in identifying and purchasing environmentally preferable products and services" and "modify their procurement programs as appropriate." Furthermore, Section 23.704 of the Federal Acquisition Regulation requires agencies to "affirmatively implement" the objective of "obtaining products and services considered to be environmentally preferable (based on EPA-issued guidance)."

"Environmentally preferable" is defined in Section 201 of EO 13101 to mean products or services that "have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service."

Implementation of the Final Guidance will draw on the procurement experience of the Executive agencies and on the environmental expertise of EPA and other organizations both within and outside of the Federal government. This guidance provides a broad framework of issues to consider in environmentally preferable purchasing and will help Executive agencies systematically integrate environmental preferability principles into their buying decisions.

The guidance is <u>not</u>, however, a step-by-step, "how to" guide and it is not intended to answer many of the specific questions that might arise in the acquisition of a particular product category or service. The list of resources in Section VI provides more specific guidance and information about various product and service categories, environmental attributes that have been identified for them, and the approaches used to consider those attributes in acquisition decisions. For the latest information on other resources and tools under development, Executive agency personnel and others are directed to EPA's Environmentally Preferable Purchasing Program Web site at:<www.epa.gov/opptintr/epp>

The Final Guidance strives to meet the National Performance Review and procurement reform goals of simplifying and streamlining Federal purchasing while recognizing that the definition of "environmentally preferable" will likely require the consideration of different environmental factors as appropriate for different situations. In sum, the guidance:

- Applies to all acquisition types, from supplies and services to buildings and systems.
- Provides a set of guiding principles.
- Requests Executive agencies to select and implement pilot acquisitions or demonstration projects.
- Provides a framework for Executive agencies to implement the environmentally preferable purchasing provisions of EO13101.

## II. Intended Audience for the Guidance

The target audience of this guidance includes all Executive agency employees involved in the acquisition of supplies, services, systems, and/or facilities. The general guidance and the information generated by the pilot projects also will be useful to Executive agency employees who request, maintain, or use the supplies, services, systems and facilities. In addition, both the general guidance and the pilot project information should provide pragmatic direction for private sector businesses who wish to manufacture, market, or provide environmentally preferable products and services for use by the Federal government.

## III. Overall Approach for Implementing Executive Order 13101

Section 503 of EO 13101 has two key components: (1) development of this guidance; and (2) implementation of the guidance through pilot and demonstration projects. This guidance sets a broad policy framework for implementing environmentally preferable purchasing within the context of Federal government. For the second component, Section 503 (b) of the EO states "[A]gencies are encouraged to immediately test and evaluate the principles and concepts contained in the EPA's Guidance...through pilot projects...". These pilots may be undertaken using the in-house expertise of EPA and other Executive agencies, as well as the technical expertise of nongovernmental entities, including, but not limited to, voluntary consensus standards bodies (see§ 12(d) of the National Technology Transfer and Advancement Act (Pub. L. 104-113, §12(d), 15 U.S.C. 272 note), environmental standard setting organizations, third party certification programs, environmental labeling or environmental "report card" programs, and other environmental consulting organizations. Section V of this Final Guidance provides more detail about how these pilot projects might work. These pilots are expected to yield more specific and practical information about applying this Final Guidance to purchases of particular products and services.

In addition to promoting environmentally preferable purchasing, EO 13101 encourages Executive agencies to purchase bio-based products. (Section 504 (b)). Under the EO, "biobased product" means "a commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal and marine) or forestry materials."

Bio-based products may also be environmentally preferable. Made from renewable resources by definition, these products have many positive environmental aspects and should be considered by agencies looking to make environmentally preferable purchases. However, Federal purchasers should not assume all bio-based products are automatically environmentally preferable. As with other products, Executive agencies should consider a range of environmental impacts associated with bio-based products when making purchasing decisions. In some cases, factors such as pesticide use or high water consumption might make a bio-based product less environmentally preferable. The list of bio-based products which the U.S. Department of Agriculture will issue under Section 504 of EO 13101 will be a good starting point for Executive agencies looking to identify environmentally preferable purchasing. During the development of pilots under Section 503 (b) of the EO, EPA will look for opportunities involving bio-based products.

## IV. Guiding Principles

EPA has developed five guiding principles to provide broad guidance for applying environmentally preferable purchasing in the Federal government setting. Applicability of these principles in specific acquisitions will vary depending on a variety of factors, such as: the type and complexity of the product or service being purchased; whether or not the product or service is commercially-available; the type of procurement method used (e.g., negotiated contract, sealed bid, etc.); the time frame for the requirement; and the dollar amount of the requirement.

In all acquisitions, Executive agency personnel use their professional judgement and common sense, whether assessing a product or service's performance, cost, or availability. Similarly, in applying these environmentally preferable principles Executive agency personnel should use reasonable discretion about the level of analysis needed to determine environmental preferability. For example, an extensive life cycle assessment might not be conducted to purchase rubber bands. On the other hand, for large-volume or systems acquisitions, or for complex products, such assessments may be appropriate, and might already be required. Or, in some cases, much of the information upon which to build such an analysis might have already been collected.

***Guiding Principle 1: Environment + Price + Performance = Environmentally Preferable Purchasing***

*Environmental considerations should become part of normal purchasing practice, consistent with such traditional factors as product safety, price, performance, and availability.*

The manufacture, use, and disposal of certain products might have adverse impacts on human health and the environment. These impacts impose costs that the purchasing entity, and ultimately, society as a whole, end up paying for in one way or another. For the Federal government, the hazardous or toxic nature of a product or service can result in significant cleanup or liability costs, as well as in less directly quantifiable, but cumulative and persistent environmental damage. Even non-hazardous waste is associated with ever-increasing disposal costs that can be avoided or reduced. Responsible management, beginning with the initial purchase of products and services that minimize environmental burdens, can diminish the Federal government's raw material, operating, maintenance, and disposal costs. In addition, a product or service's environmental preferability can often have positive impacts on its overall performance.

For these reasons, the Federal government's purchasing decisions are no longer confined to considerations of price and functional performance but should include considerations of environmental performance as well. Today agencies can obtain improved environmental attributes not at the expense of, but instead may operate in concert with, other traditional factors like price and functional performance. Those product or service providers who can optimize all these factors will capture and maintain the largest market-share of government customers.

Just like price, performance, and health and safety, environmental factors should be a subject of competition among vendors seeking government contracts. In turn, this increased competition among vendors should stimulate continuous environmental improvement and increase the availability of environmentally preferable products and services. The purpose of this guidance is to encourage Executive agencies to award contracts to companies that take environmental concerns into account. This process, consequently, will lead to the development of environmentally preferable products and services that perform better and cost less because they reduce waste and negative environmental impacts. As stated, this principle reflects the spirit of a number of reinvention initiatives at EPA and across the Federal government aimed at testing cleaner, cheaper, and smarter approaches to environmental protection.

Agencies have considerable discretion in incorporating environmental preferability into procurement decisions, especially within the context of "best value" contracting. For example, environmental considerations that result in payment of a price premium for goods or services may be reasonably related to an agency's definition of its "minimum needs" and, therefore, may be permissible. This is not much different than paying a higher price for better performance or quality. Federal personnel may consider paying a reasonable premium for environmentally preferable products on a number of grounds. For example, a reasonable price premium may be justified because the environmental attributes of a product or service provide offsetting reductions in operating and disposal costs.

***Guiding Principle 2: Pollution Prevention***

*Consideration of environmental preferability should begin early in the acquisition process and be rooted in the ethic of pollution prevention, which strives to eliminate or reduce, up-front, potential risks to human health and the environment.*

It is never too early in the acquisition process to begin considering environmental preferability. Pollution prevention, the reduction or elimination of waste at the source, can not only reduce pollution, but it can save money for agencies as well. Defense and civilian Federal agencies have ongoing programs for pollution prevention under EO 12856 and other authorities that can result in cost savings throughout the product or service life cycle. Furthermore, pollution prevention measures can lead to a higher degree of environmental protection by reducing subsequent costs for disposal or cleanup of hazardous wastes and materials. A key reason for environmentally preferable purchasing is to protect the environment by reducing waste and pollution at the source with the resulting benefit of reduced overall cost to the government and the public (taxpayers and society as a whole).

Under this guiding principle, pollution prevention should be the primary motivation and strategy for the Federal government's implementation of environmentally preferable purchasing. There are many ways to apply pollution prevention to the acquisition process:

a) Customized purchases or projects in which program managers, architects, engineers, systems designers, or others have input into the design phase afford agencies an early opportunity to apply environmentally preferable concepts. In addition, early involvement offers agencies a unique point of leverage from which to address environmental impacts. Although these types of purchases are not the bulk of Federal acquisition requirements, the early stage of customized product or project design is the time when decisions about different approaches, materials, and manufacturing processes are made. Estimates show that 70 percent or more of the costs associated with product development, manufacture, and use are determined during the initial design stages.[1] By incorporating environmental factors during product or service design, Federal agencies can minimize environmental problems and their associated costs. For example, early environmental consideration helps agencies avoid potential liabilities due to fines as well as the costs of record keeping and reporting.

b) During the early stages of acquisition, Executive agency personnel can also apply a systems analysis approach for certain products or services (such as computers, buildings, and transportation systems) in which a number of components have interdependent functions. A systems analysis approach takes into consideration the full set of product

[1]U.S. Congress, Office of Technology Assessment, Green products by Design: Choices for a Cleaner Environment, OTA-E-541 (Washington, D.C.:U.S. Government Printing Office, October, 1992)

elements, focusing on how they interact from a life cycle perspective and helping to identify the most efficient options for meeting the government's needs.

c) Executive agency personnel might also appropriately ask whether a product or a service is even necessary or can be replaced by a less damaging process. For instance, in degreasing operations, questions arise as to whether an efficient cleaner using halogenated solvents is better or worse for the environment than an aqueous-based cleaner. A more appropriate question may be whether the cleaning/degreasing step can be eliminated without affecting the overall performance of the product or system. This might be accomplished, for example, by consolidating cleaning and degreasing in a later stage of the manufacturing process or changing the process itself. As this example illustrates, environmental preferability does not just involve substituting a "green" product for another. It also involves questioning whether a function needs to be performed and how it can best be performed to minimize negative environmental impacts.

The Department of Defense integrates pollution prevention into all of its major weapons system acquisition programs. For example, the New Attack Submarine (NSSN) Program has worked to include environmental considerations in all phases of the submarine's life cycle, from initial design to eventual disposal some 30 or more years later.

By considering all viable environmental alternatives during the design phase, the NSSN Program identified a number of options that will result in benefits. Just a few examples are listed below:

- A redesigned nuclear reactor core will eliminate the need for refueling and disposal of spent nuclear fuel, while achieving a multi-million dollar cost avoidance.
- 31 percent reduction in the number of paints and coatings used in manufacturing the NSSN while ensuring that all of the selected paints satisfy applicable performance and environmental requirements.
- 61 percent reduction in the number of adhesive products to be used on the NSSN compared to the number required for previous submarine classes.
- 80 percent reduction in the number of solvents and cleaners.
- Research and development effort to identify and test a biodegradable hydraulic fluid for submarines to replace the current toxic mineral oil-based fluid.

By recognizing early on that the key to reducing environmental impact throughout the ship's life cycle is pollution prevention and hazardous material control and management, the NSSN Program was able to design a submarine that meets strict safety and performance requirements, achieves significant cost savings, and minimizes risk to the environment.

### *Guiding Principle 3: Life Cycle Perspective/Multiple Attributes*

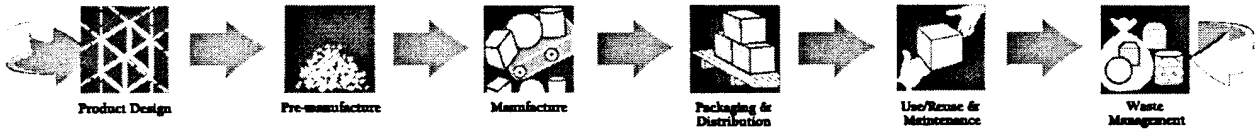
*A product or service's environmental preferability is a function of multiple attributes from a life cycle perspective.*

Federal agencies should consider the following concepts in applying this principle :

a) Life cycle perspective—A product or service has environmental impacts long before and after the Federal government purchases and uses it. The manufacture, use,

distribution, and disposal of products create a variety of burdens on the environment. Federal agencies should strive to purchase products or services with as few negative environmental impacts in as many life cycle stages as possible. In other words, Federal agencies should determine the "environmental preferability" of a product or service by comparing the severity of environmental damage it causes throughout its life cycle with that caused by competing products—from the point of raw materials acquisition, product manufacturing, packaging, and transportation to its use and ultimate disposal. By doing so, the Federal government can minimize the overall environmental impacts of products and services. In addition, by actively seeking and considering life cycle information to inform buying decisions, Executive agency personnel can send a clear signal that government business will go to those who consider the effect of their product's life cycle on the environment.

## Life Cycle Stages of a Typical Product




Although most people would agree that considering life cycle impacts in purchasing decisions is desirable, there are disagreements on how to make purchasing decisions that best reflect a life cycle perspective. Even the term "life cycle" is interpreted differently by different people. To some, it connotes an exhaustive, extremely time-consuming, and very expensive analysis. To others, a life cycle perspective is possible in an abbreviated process, in which a long list of potential environmental attributes and/or impacts is narrowed to a few, allowing for comparison across a particular product category. In addition, the ability of Federal purchasers to make buying decisions from a life cycle perspective depends on a variety of factors including: the type of product or service being purchased; the availability of life cycle information and/or willingness by the provider to give the information; and the availability of easy-to-use tools that can translate this information to support purchasing decisions by the Federal government. EPA recognizes that agencies may find it easier to apply a life cycle perspective when the result will be internal agency environmental benefits and/or cost savings rather than external benefits. Nevertheless, EPA encourages agencies to consider reducing impacts along all stages of the product or service life cycle.

This guidance promotes the use of a range of practices, from life cycle considerations to a more rigorous, scientifically defensible life cycle assessment methodology. EPA encourages Executive agencies to use currently available tools as well as help refine and address the needs of Federal purchasers. Examples of available tools and references are

listed in Section VI. For the most current list of available tools, Executive agency personnel are referred to EPA's EPP Program Web site: <www.epa.gov/opptintr/epp>. EPA also encourages experts both within and outside of the Federal community to develop additional life cycle tools to support environmental preferability decisions.

b) Multiple environmental attributes — Environmental preferability should reflect the consideration of multiple environmental attributes such as increased energy efficiency, reduced toxicity, or reduced impacts on fragile ecosystems. In addition, these attributes should be considered from a life cycle perspective. Focusing on one environmental attribute of a product or a service, without considering others, might inadvertently exclude important impacts on the determination of environmental preferability. For example, improving one attribute (e.g., increased energy efficiency or reduced toxicity) may result in other unintended environmental life cycle impacts. It is also possible that focusing on a single aspect of the product or service will cause Executive agency personnel to overlook improvements that the vendor has or can make in other aspects of the product or service. In short, it is difficult to be confident that an alternative product is environmentally preferable without some consideration of multiple attributes from a life cycle perspective. Analytical tools such as life cycle assessment can help Federal agencies ensure the product or service they purchase does not create new problems for some other aspect of the environment by identifying other potential negative impacts that should be alleviated.

Although the determination of environmental preferability should be based on multiple environmental attributes, Federal agencies may at times make purchasing decisions based on a single attribute when that attribute distinguishes the product or service in a category. In its environmentally preferable purchasing effort, EPA aims to build upon those attributes that are well-defined, measurable and familiar to Federal purchasers (e.g., recycled content and energy efficiency). EPA also seeks to support the development of similar definitions and measures for other attributes that are less understood and to advance consideration of multiple environmental attributes in purchasing decisions.

The menu of environmental attributes described in Appendix B offers a preliminary look at what should be considered in environmentally preferable purchasing decisions. Many of the attributes are relevant to a number of different product life cycle stages, while others are more pertinent to one particular stage. The menu should serve as a means to inform Executive agency personnel about the different types of attributes that can make a product or service environmentally preferable. Each and every element in the menu is not meant to be applicable to all products and services nor is the menu all-inclusive

***Guiding Principle 4: Comparison of Environmental Impacts***

*Determining environmental preferability might involve comparing environmental impacts. In comparing environmental impacts, Federal agencies should consider: the reversibility and geographic scale of the environmental impacts, the degree of difference*

*among competing products or services, and the overriding importance of protecting human health.*

In determining environmental preferability, Executive agency personnel might need to compare the various environmental impacts among competing products or services. For example, would the reduced energy requirements of one product be more important than the water pollution reductions associated with the use of a competing product? The ideal option would be a product that optimized energy efficiency and minimized water pollution. When this is not possible, however, Executive agency personnel will have to choose between the two attributes. It is important to consider both the nature of the environmental impact and the degree of difference among competing products.

There is no widely accepted hierarchy that ranks the attributes or environmental impacts that are most important. The following three factors are intended to help Executive agency personnel analyze the environmental impacts of competing products and services and make decisions about environmental preferability when faced with trade-offs among environmental attributes. These factors are not listed in order of importance.

a) Recovery time and geographic scale—Federal agencies should consider recovery time and geographic scale in comparing environmental impacts. To what extent is an environmental impact reversible? An impact is less acceptable if the recovery time is longer.[2] The geographic scale of the problem and the importance of the affected ecosystems are also significant. Global environmental impacts are more significant, therefore, than ecological stressors that have a local or regional ecosystem impact.[3]

The table shown below provides a basic framework for considering the reversibility and geographical scale of environmental impacts and includes some examples of how certain impacts might fit into the matrix.

While some environmental standards or other sources of comparative information on products are national or international in scope, Federal agencies should also be prepared to consider unique local impacts and site-specific uses. Information based on an assessment of national or global needs, by its nature, rarely allows for the consideration of local impacts associated with how products are used,

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[2]This is based on the findings of the Science Advisory Board, published in its 1990 report entitled "Reducing Risk: Setting Priorities and Strategies for Environmental Protection," a statement of policy on priority pollutants affecting environmental and public health. In this report, environmental stressors were judged to be significant based on two primary criteria—the geographic scale and degree of reversibility of the impact.

The Science Advisory Board is a public advisory group providing extramural scientific information and advice to the Administrator and other officials of the Environmental Protection Agency. The Board is structured to provide balanced, expert assessment of scientific matters related to problems facing the Agency.

[3]Refer to above footnote.

recycled, and/or discarded. Executive agency personnel are encouraged to consider local factors, where they are relevant, and not rely exclusively on national or global information. For example, although it may be generally accepted that an aqueous-based degreaser is preferred over a halogenated solvent degreaser, the environmentally preferable purchasing decision may depend on whether there is sufficient local wastewater treatment capacity to deal with the aqueous waste.

There may be rare occasions where the goal of minimizing a local impact, such as smog, is in conflict with the goal of minimizing a global impact, such as ozone depletion and global climate change. In these instances, EPA encourages purchasers to engage as much as possible in applying Principle #2 and aiming to prevent pollution, thereby avoiding such trade-offs. Where there are unique local circumstances, the purchaser can make the judgment that the local conditions and impacts should be given priority.

## ECOLOGICAL PRIORITY IMPACTS MATRIX

| | | *Reversibility* | | |
|---|---|---|---|---|
| | | *Years* | *Decades* | *Centuries/ Indefinite* |
| *Geographic Scale* | *Local/Regional* | * Erosion<br>* Conventional Pollutants | | |
| | *National* | *Hazardous Air Pollutants<br>* Chemical Releases | * Bioaccumulative Pollutants | |
| | *Global* | | | * Loss of biodiversity<br>* Ozone Depleting Chemicals<br>* Global Warming Gases |

++ This matrix provides a few examples of how certain environmental stressors and impacts might fall into the different categories of reversibility and geographic scale considerations and is not meant to be comprehensive.

b) Differences among competing products—In some situations, a purchaser may determine preferability by looking at the differences of environmental performance among competing products, rather than by comparing environmental problems. Guiding Principle 3 addresses the importance of identifying relevant attributes for a product. There might be significant differences among competing products for some of these attributes, while for others, the differences could be minimal. In purchase comparisons, Executive agencies might prefer the product or service that provides a significant improvement over competing products, without making a determination that one environmental problem is more significant than another. For example, a product that significantly reduces

toxicity might be preferable to one that makes a minimal reduction in waste reduction.

*c)* *Human health* -A product or a service should be at least equivalent to comparable products/services in protecting human health to be considered environmentally preferable. EPA's Science Advisory Board listed the environmental factors listed to the right as significant contributors to human health risks.

**List of High Priority Human Health Stressors**
(not in any order of importance):

Ambient air pollutants
Hazardous air pollutants
Indoor air pollution
Occupational exposure to chemicals
Bioaccumulative pollutants

EPA recognizes that Executive agencies considering these three factors ( recovery time and geographic scale; differences among products; and human health) must rely on providers of products and services to supply practical environmental information on products. EPA encourages organizations that provide environmental standards or other types of comparative product information to consider these factors in evaluating and reporting environmental information for purchasers.

***Guiding Principle 5: Environmental Performance Information***

*Comprehensive, accurate, and meaningful information about the environmental performance of products or services is necessary in order to determine environmental preferability.*

a) Importance of Environmental Information — Executive agency personnel will need comprehensive, accurate and meaningful life cycle-based information about the environmental characteristics of products and services in order to evaluate whether one product or service is more or less damaging than another. Even with this thorough information, however, making these evaluations can be difficult. Yet, without such information, determinations of environmental preferability are even more challenging. Executive agency personnel are encouraged to seek, and product and service providers are encouraged to provide, life cycle-based information about the environmental performance of products and services. This information should be sought and provided in all appropriate stages of the acquisition process including, but not limited to market surveys, request for proposals, etc. (See Federal Acquisition Regulation, (FAR) 48 C.F.R. Subpart 23.7, which includes a mandate for the acquisition of environmentally preferable and energy-efficient products and services.

Executive agency purchasers may encourage product and service providers to describe their product or service's performance according to the menu of environmental attributes included in Appendix B (1).

Product and service providers' disclosure of environmental information about their products and services will also foster competition and encourage a market-driven approach to environmental improvement. The accessibility of the information to the public (both Executive agency personnel and the general public) will help ensure its accuracy and credibility.

b) What/How Information is Conveyed - A number of resources about the environmental performance of products or services are currently available. Two general categories of information sources can be distinguished: (1) manufacturers who provide environmental information (e.g., environmental claims, product profiles, etc.) about their products either on the label or through product literature, including advertisements; and (2) environmental information compiled, evaluated, and reported by non-governmental entities. Included in this second category are third-party certification programs that evaluate the environmental aspects of products and award symbols (e.g., "seals-of-approval") or compile "report cards" of environmental information. Non-governmental entities may also verify specific claims made by manufacturers (e.g., paper contains 30 percent recycled content).

Information conveyed through claims and seals can help Executive agency personnel identify environmentally preferable products, depending on the types of products being purchased and the legal acquisition requirements involved. A more detailed discussion of how Executive agencies can use technical expertise and research of non-governmental entities in their environmentally preferable purchasing practices is included in Section V and Appendix D. In evaluating the environmental attribute claims made by anyone, whether they are manufacturers, vendors, or other non-governmental entities, Executive agency personnel should refer to the Federal Trade Commission's (FTC's) *"Guides for the Use of Environmental Marketing Terms." (Green Guides.)*

## V. Executive Agency Implementation

This section recommends steps that each agency can take to implement the environmentally preferable purchasing provisions of EO 13101.

### A. Policy directive and affirmative procurement plans

Recognizing that effective implementation of environmentally preferable purchasing will require clear direction and support from the top levels of each agency, this Final Guidance recommends that each Executive agency issue a Policy Directive promoting the practice. A sample is included in Appendix C. The policy directive should include the elements listed below:

An overall statement of policy:

- Agency personnel should seek to reduce the environmental damages associated with their purchases by increasing their acquisition of environmentally preferable products and services to the extent feasible, consistent with price, performance, availability, and safety considerations.

- Environmental factors should be taken into account as early as possible in the acquisition planning and decision-making process. (See EO 13101, Section 401.)

- Responsibility for environmentally preferable purchasing should be shared among the program, acquisition, and procurement personnel.

A commitment to the following:

- Increasing the acquisition of environmentally preferable products and services. (See EO 13101, Sections 102, 503 (.c), and 602.)

  Under section 6002 of the Resource Conservation and Recovery Act of 1976 and FAR Subpart 23.4, procuring agencies are required to establish affirmative procurement programs for purchasing EPA-designated recycled products. EPA recommends that agencies expand the scope of their affirmative procurement programs to include environmentally preferable products and services. EO 13101, Section 302, (a)(1)(a) calls for a Strategic Plan to include the "direction and initiatives for acquisition of recycled and recyclable products and environmentally preferable products and services." Furthermore, Section 302 (b) (1) requires Agency Environmental Executives to "translate [this] Government-wide Strategic Plan into specific agency and service plans."

- Identifying and implementing pilot projects (See Section V (B) below).

- Establishing internal agency incentive and award programs to recognize those people, teams, and interagency work groups who are most successful at promoting the purchase of environmentally preferable purchasing (see Executive Order 13101, Section 802). Collaboration among agencies to provide education and training is highly encouraged.

In order to minimize the burden on Executive agencies, EPA recommends that each agency incorporate in its Policy Directive to promote environmentally preferable purchasing into its Affirmative Procurement and Strategic Plans. This incorporation can transpire as agencies revise their plans. Agencies should ensure that their Policy Directive is made available to the field-level procurement and environmental personnel.

B. Pilot Projects

Section 503 (b) of EO 13101 states "[A]gencies are encouraged to immediately test and evaluate the principles and concepts contained in the EPA's Guidance on the Acquisition of Environmentally Preferable Products and Services through pilot projects to provide practical information to the EPA for further updating of the guidance." Furthermore, Section 704 states "Each executive agency shall establish a model demonstration program. . . to demonstrate and test new and innovative approaches such as incorporating environmentally preferable...products...." into model facility programs. To help Executive agencies implement these provisions of the EO, this Final Guidance includes some suggested steps for initiating and implementing pilot acquisitions.

The suggestions that follow are based on lessons from early pilots undertaken by the General Services Administration and the Department of Defense in partnership with EPA. Case studies from these and other pilot projects are available from the Pollution Prevention Information Clearinghouse (202 260-1023) or they can be accessed through EPA's EPP Program Web site <www.epa.gov/opptintr/epp>.

Additional pilot acquisitions will be important testing grounds for applying the guiding principles and testing their applicability. The pilots will also provide valuable information for the development of tools and resources to facilitate widespread adoption of environmentally preferable purchasing practices.

EPA will track pilots that are planned or already underway on the EPP Web site, providing a clearinghouse for information on government-wide activities related to environmentally preferable purchasing. (See EO 13101, Section 503 (b)(4).) EPA will disseminate information about different pilots among the agencies through the EPP Web site, updates, and fact sheets to ensure that lessons learned are shared and used to inform other pilot projects.

The discussion below further describes how these pilots and demonstration projects might proceed. EPA encourages Executive agencies to undertake pilots and use all existing sources of information and technical expertise to carry them out. EPA is committed to supporting these pilots and providing overall coordination and technical assistance, as resources allow.

1. Selection of pilots. Selection of pilot acquisitions is at the discretion of the individual Executive agencies. There are at least two options for how agencies can approach this selection process. First, an agency may want to identify an environmental problem that it wants or needs to address. Once the problem has been identified, the agency can develop a list of products and services that contribute to that specific environmental problem. Alternatively, an agency may start out with a product or service category for which it wants to find alternatives. In either case, criteria that agencies might wish to consider in selecting pilot acquisitions include:

- Potential for a reduction in risk to human health and the environment.

- Status on EPA's prioritized list. Pursuant to EO 13101, Section 503 (a), and in order to assist Executive agencies focus their efforts on minimizing serious environmental impacts, EPA has developed a prioritized list of the top 20 product categories. The complete list, along with a discussion of the methodology used in its development can be found in EPA's EPP Web site at <www.epa.gov/opptintr/epp>.

- Existence of less harmful product or service alternatives. Alternatives could vary anywhere along the product or services' life cycle, for example, different ways of manufacturing or disposing. Alternatives might also include different ways of getting the same result, even if it means acquiring a completely different type of product or service.

- Feasibility/degree of flexibility in the acquisition.

- Products or services that are widely used within the Federal government and are representative or typical of the procurement system. This maximizes the pilot's potential value to others by providing lessons about the effectiveness of the guidance and increasing the likelihood that the pilot could be replicated. (See EO 13101, Section 503 (b) (1).)

2. Implementation of pilot projects. In implementing the pilot projects, Executive agencies can look to the process and results of projects others have completed or develop a different approach for environmentally preferable purchasing. In undertaking the pilots, agencies are encouraged to:

- Ensure the participation of environmental and procurement experts.

- Use all of the options available to them to determine the environmentally preferable attributes of products and services in their pilot projects, including the technical expertise of non-governmental entities. This is pursuant to EO 13101, Section 503 (b) (2). More specific guidance on the use of non-governmental entities is included in Appendix D.

Once a product or service has been chosen, pilots typically involve:

a) Determining environmentally preferable products and services. This can be accomplished by Executive agencies:

- Identifying product attributes that can serve as indicators of environmental preferability. Agencies can look to Appendix B for a menu of attributes. Selection of attributes should be tied to the most significant environmental problems or impacts.

- Collecting information from product and service providers. This may require the development of contract language to ensure that vendors provide environmental information.

  With the recent changes to the FAR and the trend toward best value contracting, agencies can now more easily consider environmental factors when making purchasing decisions. However, environmental information is often not provided by vendors. Thus, it may be necessary for Executive agency personnel to clearly request or require relevant environmental information from vendors in market surveys and proposals whenever appropriate.

- Evaluating the environmental information.

b) Incorporating results of the environmental information research into the acquisition process to purchase environmentally preferable products and services. While the acquisition strategy and method are determined by the purchasing agency, EPA asks that agencies select a strategy that:

- Maximizes the number of environmentally preferable product or service choices available to the purchasing agency.

- Promotes competition across products and services in terms of environmental performance.

- Stimulates product and service process innovation and continuous improvement.

- Allows for the consideration of local environmental conditions.

- Promotes a definition of environmentally preferable products and services that can improve over time.

c) Documenting the pilot effort, including a description of how the project was initiated and implemented and the lessons learned. A sample case study template is attached in Appendix E and is also available on EPA's EPP Web site. The results of pilot projects will be shared among Executive agencies through EPA's EPP Web site.

More specific information about pilot implementation will be made available through a variety of tools that EPA currently is developing including: an interactive training module; a "best practices guide" with examples of specific contract language that have been used by purchasing agencies; and a database of existing environmental standards that have been developed by governmental and non-governmental entities.

Section 12(d) of The National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. 104-113, §12(d), 15 U.S.C. 272 note) and OMB Circular A-119 (63 FR 8546, February 19, 1998) direct Federal agencies to use both domestic and international voluntary consensus standards in lieu of government-unique standards in their procurement and regulatory activities, except where it would be inconsistent with applicable law or otherwise impractical. The Act's purpose is to reduce the cost of procurement and regulation by requiring a Federal agency to draw upon any suitable technical standard already used in commerce or industry rather than inventing a new standard. Some of those standards might relate to evaluating environmental performance and measuring the environmental attributes of products or services. In establishing Environmental Preferable Purchasing pilot projects or planning other environmentally-sensitive activities, agencies should first determine whether there is an applicable voluntary consensus standard that would meet its needs.

The NTTAA also requires a Federal agency, when it is consistent with the agency's mission, authorities, priorities, and budget resources, to participate in the standards-setting activities of voluntary consensus standards bodies. Such participation helps ensure the development of standards that meet the agency's needs, including those related to Environmental Preferable Purchasing concerns. This collaboration can also promote national goals and objectives. OMB Circular A-119 specifically mentions the need to promote the use of environmentally sound and energy-efficient materials, products, systems, services, or practices as well as the improvement of public health and safety. (See OMB A-119, Section 7a.)

In the long run, institutionalizing the purchase of environmentally preferable products and services requires that Executive agencies continue their efforts after the pilot's are completed. Given that environmental information about products and services is still scarce, agencies should rely on all sources of information and technical expertise in making determinations about environmental preferability. To foster agencies continue acquisition of "green" products, EPA will coordinate the development and standardization of environmental information about potential product and service categories for future pilots. This effort will consist of identifying environmental performance characteristics and measurement methods and will involve technical experts both inside and outside the Federal government. Executive agencies should examine all information generated through these types of efforts. The agencies, and not the nongovernmental entities, must make all final determinations regarding environmental preferability.

The experience gained from Executive agency pilots will be key in determining the scope and nature of EPA's long-term activities to advance Federal environmentally preferable purchasing. The lessons learned and partnerships formed from these pilots will help establish a broader infrastructure to support this initiative. EPA might use existing mechanisms or help develop new resources such as guidance, networks, and databases in support of the Federal purchasing community— to build this infrastructure. The infrastructure will help bridge the gap between the environmental and procurement expertise within the Executive agencies.

All Executive agency personnel will have a role in creating a demand for environmentally preferable products and services. Thus, the infrastructure will also have to support the development of tools that are easy and convenient for general and diverse use.

In light of the evolving acquisition landscape and the dynamic nature of the marketplace, the infrastructure will have to be flexible. In the increased globalization of the economy and trends toward commercialization of the Federal marketplace, will also require agencies to coordinate this initiative with new international trade and standardization developments. Ultimately, the measure of this initiative's success will be in the increased availability and purchase of products and services that pose fewer adverse impacts on human health and the environment.

## VI. List of Resources

This section includes a partial list of current resources that Executive agency personnel may find useful in implementing environmentally preferable purchasing. For a more complete and updated list, please refer to EPA's EPP Web site, described below.

A. EPA's EPP Program Web site: <www.epa.gov/opptintr/epp>

This comprehensive Web site serves as the main repository of information and resources related to environmentally preferable purchasing, including:

- Publications such as case studies, program updates and fact sheets.
- Interactive features designed to elicit information exchange such as topical discussion forums, a listing of upcoming events, a bulletin board for posting questions and comments and sharing users' experiences, as well as tools that have been helpful in implementing EPP.
- A list of top twenty prioritized product and service categories selected because they represent large volume federal procurements with environmental impacts, along with a description of the methodology used. The list is provided to assist Executive agencies in selecting pilots that will have the most effect.

The site will also include training modules, a collection of promising green contracting practices, and a database of existing environmental standards, specifications and contract language.

B. Federal Case Studies of Environmentally Preferable Purchasing

EPA has developed a number of documents that describe the results of EPP pilot projects, including:

- "*Cleaners Pilot Project Case Study*" documents a collaboration between the General Services Administration and the Environmental Protection Agency.

- *"Paving the Road to Success"* describes Department of Defense's efforts to "green" a parking lot repair and maintenance contract.

- *"Leading by Example"* documents how EPA incorporated environmental features into two new buildings, the Ronald Reagan Building and the Research Triangle Park office complex.

- *"Defending the Environment at the Department of Defense"* describes the addition of environmental factors in the maintenance of the Pentagon and other DOD facilities.

In addition, Executive agencies have either initiated or are contemplating a number of other pilot projects involving products such as degreasing agents, paints, adhesives and copier paper[4], and services such as conferencing. Examples of where environmental preferability was factored into purchasing decisions can be found under "How to Do EPP" as well as "EPP Resources" on EPA's EPP Web site.

C. Life Cycle-Based Resources

- *Building for Environmental and Economic Sustainability*

  A life cycle-based, decision-support software tool to assist users in balancing environmental and economic concerns among products. The tool generates relative scores for alternative products based on environmental and economic performance weights that individual users can set. Although originally designed for building materials and product comparisons, the tool will be expanded to include other materials. The disks can be obtained by contacting the Pollution Prevention Information Clearinghouse at 202 260–1023.

- *Federal Facility Pollution Prevention Project Analysis: A Primer for Applying Life Cycle and Total Cost Assessment Concepts*

[4] Under the Pulp and Paper Cluster Rule published in 1998, EPA's Air and Water Offices have created the Voluntary Advanced Technology Incentives Program in order to move the industry toward the minimum environmental impact "mill of the future." EPA also has proposed to add a procurement incentive in line with this goal in the near future. The purchase of recycled content, chlorine-free paper would be a way to advance several Administration initiatives, including the Technology Incentives Program, President Clinton's directive to purchase paper containing 30 percent post-consumer fiber and the President's directive to agencies to purchase environmentally preferable products and services. For those interested in EPA's views on recycling and chlorine content in copier paper, please see EPA's *Effluent Guidelines and Standards for Pulp, Paper, and Paperboard Category, Phase I*, promulgated on April 15, 1998. (See 40 CFR Parts 63, 261 & 430)

D. Agency Environmental Catalogs

The General Services Administration (GSA) and the Defense Logistics Agency (DLA) in the Department of Defense, the two major suppliers for the rest of the Federal government, publish product catalogs that highlight some environmental attributes. These catalogs are listed below:

- *Environmental Products Guide*
  Published by the GSA, this guide contains a list of over 3,000 products and services with environmental attributes, such as low volatile organic compound content, recycled content, energy-efficiency, etc. All products featured in the guide are available through the supply system of GSA's Federal Supply Service. The guide is available on MUFFIN (Multi-Use File for Interagency News).

- *Environmental Products Catalog*
  Published by the DLA, this catalog includes products that meet the requirements of EPA's Comprehensive Procurement Guidelines as well as products that help reduce hazardous waste or eliminate the use of ozone-depleting chemicals. Currently, the catalog does not have a systematic way of screening products for their environmental characteristics, so inclusion in the catalog does not necessarily connote an environmentally preferable product. A DLA pilot is underway to develop environmental standards for a category of products in the catalog. For more information, contact the Defense General Supply Center at 1 800 352-2852.

E. Federal Trade Commission's *Guides to the Use of Environmental Marketing Claims (Green Guides)*, 16 C.F.R. Part 260

The *Green Guides*, recently revised in May 1998, are intended to reduce consumer confusion and prevent false or misleading use of environmental terms in product advertising and labeling. The *Green Guides* indicate how the Federal Trade Commission will apply Section 5 of the Federal Trade Commission Act, which prohibits unfair or deceptive acts or practices, in environmental marketing claims. The Green Guides apply to all forms of product and service marketing to the public, including advertisements, labels, package inserts, promotional materials, and electronic media. The *Green Guides* can be accessed via FTC's Web site: <www.ftc.gov> (Select "Consumer Protection", then select "Environment", and then select "Guides"). For hard copies, contact FTC at 202 FTC-HELP (382-4357). For questions, contact Janice Podoll Frankle at 202 326-3022.

F. Office of Federal Environmental Executive's Web Site —<www.ofee.gov>

The Office of the Federal Environmental Executive (OFEE) maintains a comprehensive Web site. Updated frequently, it includes background information on OFEE's mission, history, and staff; resources for implementing EO 13101; best practices and success stories for environmental procurement, recycling, and waste prevention; federal agency compliance guidance; and posts information on current and upcoming conferences, activities, publications, and other relevant news. The site also showcases the *Closing the Circle Awards* recognizing outstanding performance towards "greening" the government. OFEE also manages an interactive forum (list serve) for the exchange of information on environmental purchasing, recycling, and waste prevention.

G. Other Resources and Tools

- "Greening" of the Federal Logistics Information System (FLIS)
  The Defense Logistics Agency is working through a multi-agency group to incorporate positive environmental attributes (such as recycled content, energy efficiency and water efficiency) into FLIS, is a database of more than 7 million supply items purchased by the Federal government. With the supply items tagged with environmental attributes, FLIS will provide Federal consumers with specific environmental information about the products they buy.

- There are a variety of other resources and tools that are currently available or under development to assist Executive agency personnel implement environmentally preferable purchasing practices. For the latest list of resources and tools, please check the EPP Web site <www.epa.gov/opptintr/epp>.

## VII. Appendices

Appendix A Glossary of Terms

Appendix B Environmental Attributes
(1) Menu of Environmental Attributes
(2) Definitions for Terms on the Menu of Environmental Attributes

Appendix C Sample EPP Policy Directive

Appendix D Text of Office of Federal Environmental Executive and U.S. Environmental Protection Agency's April 1998 Policy Letter on Use of Non-Governmental Entities

Appendix E Pilot Project Case Study Template

## Appendix A—Glossary of Terms

***Acquisition*** - means the acquiring of products and services (including construction) by contract with appropriated funds by and for the use of the Federal government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to meet those needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract. (EO 13101, Section 201)

***Bio-based products*** - are defined as commercial or industrial products (other than food or feed) that utilize biological products or renewable, domestic, agricultural (e.g., plant, animal and marine), or forestry materials. (EO 13101, Section 201)

***Environmentally preferable*** - products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. The product or service comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal. (EO 13101, Section 201)

***Life cycle assessment*** - means the comprehensive examination of a product's environmental and economic aspects and potential impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use, and disposal. (EO 13101, Section 201)

The International Standards Organization, through ISO 14040, has defined life cycle assessment slightly differently as follows: Compilation and evaluation of the inputs, outputs, and the potential environmental impacts of a product system throughout its life cycle.

***Life cycle cost*** - means the amortized annual cost of a product, including capital costs, installation costs, operating costs, maintenance costs and disposal costs discounted over the lifetime of the product, according to OMB Circular A-94 and Executive Order 13101, Section 201. However, this definition does not include external costs (i.e., those not borne directly by the entity that owns and operates a product/service, such as environmental costs to society at large). For the purposes of this guidance, EPA encourages agencies to consider all internal and external costs associated with a product, process, or activity throughout its entire life cycle—from raw materials acquisition to manufacture, recycling and final disposal.

***Non-governmental entities*** - within the context of this guidance, non-governmental entities include, but are not limited to, voluntary consensus standards bodies (see§ 12(d) of the National Technology Transfer and Advancement Act (Pub. L. 104-113, §12(d), 15 U.S.C. 272 note), environmental standard setting organizations, third party certification programs, environmental labeling or environmental "report card" programs and other environmental consulting organizations.

***Pollution prevention*** - "source reduction," as defined under the Pollution Prevention Act of 1990 (42 U.S.C. § 13102), and other practices that reduce or eliminate the creation of pollutants through: increased efficiency in the use of raw materials, energy, water, or other resources; or protection of natural resources by conservation..

The Pollution Prevention Act defines **source reduction** to mean any practice that:

- Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal

- Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

The term includes: equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

## Appendix B—Lists of Environmental Attributes

Below is a list of environmental attributes that can help Executive agencies assess the environmental performance of products and services. This list, viewed from a life cycle perspective can enable Executive agency purchasers to select the product or service that minimizes adverse environmental impact. Although, it is a preliminary list of the major sources of potential human health and environmental risk, this source should not be considered definitive. Definitions for each of the attributes follow the list. Agency personnel can use this list in two ways:

(1) To provide a framework for identifying the most important environmental attributes of products and services, and using that information in product or service comparisons.

(2) As a check list of environmental issues to consider when designing and acquiring systems or buildings.

Not all of the environmental attributes will apply to each product or service; indeed, in some cases, information on just a few key environmental attributes will enable Executive agency personnel to determine environmental preferability.

The list of environmental attributes suggests that Federal agency personnel can use two different approaches to soliciting information from providers of products and services. The first includes consideration of releases of pollutants that occur during the life-cycle of the product. In the research on product life-cycle assessments that have been conducted over the past several years, these releases are known as ``inventory" items. Alternatively, the risks (or risk surrogates) associated with various life-cycle stages of a product can be identified. This approach seeks to identify actual environmental impacts rather than solely environmental releases. When calculating risks, general population (both environmental and human) exposures and occupational exposures need to be considered. Executive agencies may consider using both risk and release data in their decisions to purchase environmentally preferable products and services.

If product and service providers use this list as a basis for making environmental marketing claims, the claims should conform to the FTC's *Guides for the Use of Environmental Marketing Claims (Green Guides)*, 16 C.F.R. Part 260). A copy of the *Green Guides* can be obtained through FTC's Web site <www.ftc.gov>. Any party making a claim (or an independent third party that is certifying a claim) concerning a product's environment attribute must, at the time the claim is made, possess and rely upon a reasonable basis for substantiating the claim (16 C.F.R.§ 260.5). A reasonable basis consists of competent and reliable evidence. In the context of environmental marketing claims, such substantiation will often require competent and reliable scientific evidence, defined as tests, analyses, research, studies, or other evidence based on the expertise of professionals in the relevant area, conducted and evaluated in an objective manner by persons qualified to do so, using procedures generally accepted in the profession to yield accurate and reliable results.

The *Green Guides* state that either an unqualified or inadequately qualified claim that a product is "environmentally preferable" implies to consumers that a product is generally environmentally superior to others. "Environmentally preferable" claims should be accompanied by language limiting the superiority claim to the particular attributes that can be substantiated. For example, *Green Guides* state that environmental seals-of-approval should be accompanied by information on product labels explaining the basis for the award.

## Appendix B(1) — Menu of Environmental Attributes

**Executive agency personnel are reminded that the attributes listed and defined below are not comprehensive. In addition, Executive agency personnel should note that not all of these attributes will be applicable to every product or service. Furthermore, different attributes may be applicable to each product or service life cycle stage being considered.**

### A. Natural Resources Use

- **Ecosystem impacts**, such as endangered species, wetlands loss, fragile ecosystems, erosion, animal welfare, etc.
- **Energy consumption**, which can serve as an indicator of acid rain, climate change potential, air pollution, and associated human health risks.
- **Water consumption** which can serve as an indicator of water quality impacts, risks to aquatic ecosystems, and degradation of drinking water resources.
- **Non-renewable resource consumption**, which can serve as an indicator of acid rain, climate change potential, air pollution, and associated human health risks and risks to endangered species and fragile ecosystems.
- **Renewable resource consumption**, which can serve as an indicator of loss of biodiversity and increased erosion. Although in many cases the use of renewable resources is considered environmentally preferable to use of nonrenewable resources, products made from renewable resources may also have negative environmental impacts (e.g., ethanol is derived from a renewable resource, yet its manufacture can lead to releases of VOCs).

### B. Human Health and Ecological Stressors

- **Bioaccumulative pollutants**.
- **Ozone depleting chemical global warming gases.**
- **Chemical releases** (Toxics Release Inventory (TRI) list chemicals or others.)
- **Ambient air releases** (other than TRI, including volatile organic compounds and particular matter).
- **Indoor environmental releases** (consumer and occupational).
- **Conventional pollutants released to water.**
- **Hazardous waste.**

- **Non-hazardous solid waste** (e.g., municipal solid waste, large volume waste, surface impoundments).
- **Other stressors.**

**C. Hazard Factors Associated With Materials**

- **Human Health Hazards**:
  - — acute toxicity
  - — carcinogenicity
  - — developmental/reproductive toxicity
  - — immunotoxicity
  - — irritancy
  - — neurotoxicity
  - — sensitization
  - — corrosivity
  - — flammability
  - — reactivity
  - — other chronic toxicity

- **Ecological Hazards**:
  - — aquatic toxicity
  - — avian toxicity
  - — terrestrial species toxicity

**D. Positive Attributes**

The attributes listed below are viewed as positive because they either serve as proxies for minimizing natural resource use or avoiding waste and the associated environmental impacts identified in A, B, and C. These attributes also are linked to authorities and requirements in statutes or executive orders that encourage the Federal government to promote their use. "Recyclability" and "recycled content" are attributes encouraged under RCRA. There are executive orders that encourage Federal agencies acquire bio-based products, and to promote energy efficiency and water conservation. "Durability", "reusability", "take-back", and "reconditioned or remanufactured" are positive attributes that encourage source reduction. "Product disassembly potential" increases the potential for source reduction and recycling of product components. Agencies should note that the presence of these attributes alone does not automatically make a product or service environmentally preferable. When making purchasing

decisions, executive agencies should consider a range of environmental impacts associated with products from a life cycle perspective when making purchasing decisions.

- **Recycled content**
- **Recyclability**
- **Product disassembly potential**
- **Durability**
- **Reusability**
- **Reconditioned or remanufactured**
- **Take-back**
- **Bio-based**
- **Energy efficiency**
- **Water efficiency**
- **Other attributes with positive environmental effects**

## Appendix B(2)—Definitions for Terms on the List of Environmental Attributes

### A. Natural Resource Use

(1) **Ecosystem impacts**- adverse impacts on the ecosystem, for example, endangered species, wetlands loss, fragile ecosystems, erosion.

(2) **Energy consumption**- the total amount of energy consumed for product or service manufacture, use, and disposal. Different sources of energy are associated with different environmental impacts.

(3) **Water consumption**- refers to the water resources that are consumed or used, which can serve as an indicator of water quality impacts, risks to aquatic ecosystems, and degradation of drinking water resources.

(4) **Non-renewable resource consumption**- those resources consumed that are not renewable in 200 years (e.g., fossil fuels, minerals). This can serve as an indicator of acid rain, climate change potential, air pollution, and associated human health risks and risks to endangered species and fragile ecosystems.

(5) **Renewable resource consumption**: refers to a continuum of resources, from those that are renewable in under 200 years, such as timber-based products, which can serve as an indicator of biodiversity loss and increased erosion, to those which are renewable in less than 2 years, such as grain-based feed stocks.

### B. Human Health and Ecological Stressors

(1) **Bioaccumulative pollutants**- those chemicals that bioconcentrate in the environment as described in the *Significant New Use Rule* for new chemicals. (40 CFR 721.3.)

(2) **Ozone depleting chemicals**- defined in the Protection of Stratospheric Ozone Final Rule. (58 FR 65018, December 10, 1993.)

(3) **Global warming gases**- listed in *Climate Change 1992, The Scientific Report on the IPCC Scientific Assessment.* (Table A 2.1.)

(4) **Chemical releases**- ambient releases of chemicals of concern such as those reported in the TRI of the Emergency Planning and Community Right-to-Know Act. The current list is reported in 40 CFR 372.65.

(5) **Ambient air pollutants**- pollutants for which ambient air quality standards have been developed. (40 CFR 50.4- 50.12.) These pollutants include nitrogen dioxide, sulfur dioxide, ozone precursors, particulate matter, carbon monoxide, and lead.

(6) **Indoor environmental releases**- releases to an indoor environment of potentially hazardous chemicals such as those reported in the TRI in both occupational and consumer settings.

(7) **Conventional pollutants**- defined in 40 CFR 401.16. These pollutants include biochemical oxygen demand, total suspended solids, fecal coliform, pH, and oil and grease.

(8) Hazardous waste- Quantity of Resource Conservation and Recovery Act (RCRA) hazardous waste as defined in 40 CFR 261.3.

(9) **Non-hazardous waste**- solid waste as defined in 40 CFR 261.3. Includes municipal solid waste, large volume waste (e.g., oil and gas, mining, etc.) and solids disposed of in surface impoundments.

(10) Other stressors- any other stressors associated with the product or service but not captured elsewhere.

## C. Factors Associated With Materials

### Human Health Hazards

(1) **Acute toxicity**- the potential of a chemical substance to cause adverse health effects from short-term exposure.

(2) **Carcinogenicity**- defined by EPA through a weight-of-evidence approach. (51 FR 33992, September 24, 1986 and 61 FR 17960, April 23, 1996.) When quantification is possible, slope factors or other measures such as LED10 can also be used to express carcinogenic potency.

(3) **Development/reproductive toxicity**- adverse effects on the developing organism that result from chemical exposure prior to conception (i.e., either parent), during prenatal development, or, postnatally, to the time of sexual maturation. (56 FR 63798, December 5, 1991.) Reproductive toxicity is any adverse effect on an organism's ability to reproduce. (61 FR 56274, October 31, 1996.)

(4) **Immunotoxicity**- any adverse effect on an organism's immune system that results from exposure to a chemical substance.

(5) **Irritancy**- defined according to the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR part 1910.1200) or other standard scales such as EPA or Organization for Economic Cooperation and Development (OECD) Guidelines (EPA 712-C-98-196, August, 1998.)

(6) **Neurotoxicity**- any adverse change in the development, structure, or function of the central and peripheral nervous system following exposure to a chemical agent (59 FR 42272, August 17, 1994.)

(7) **Sensitization**- an immunologically mediated cutaneous reaction to a substance. EPA test methods for evaluating sensitization potential are found in 40 CFR part 798.4100.

(8) **Other chronic toxicity**- the potential of a chemical substance to cause an adverse effect on any organ or system following absorption and distribution to a site distant from the toxicant's entry point.

( 9) **Corrosivity**- dermal corrosion is defined by EPA as the production of irreversible tissue damage in the skin following application of a test substance. Test methods for evaluating dermal corrosion can be found in the harmonized Office of Prevention, Pesticide and Toxic Substances (OPPTS) guidelines for acute dermal irritation. (OPPTS 870.2500.) These guidelines harmonize the TSCA, FIFRA and OECD requirements in this area. The OSHA HazCom Standard listed above for irritancy also explicitly or implicitly covers corrosivity, sensitization, neurotoxicity, and all other toxic endpoints.

(10) **Flammability**- defined by the OSHA HazCom Standard (29 CFR 1910.1200) and ignitability is defined in 40 CFR part 261.21.

(11) **Reactivity**- defined in 40 CFR 261.23.

**Ecological Hazards**

(1) **Aquatic toxicity**- the potential of a substance to have an adverse effect on aquatic species. Measurement methods for aquatic toxicity can be found in 40 CFR part 797, subpart B.

(2) **Avian toxicity**- the potential of a substance to have an adverse effect on avian species.

(3) **Terrestrial species toxicity**- the potential of a substance to have an adverse effect on terrestrial species, other than man.

**D. Positive Attributes**

The following attributes are generally viewed as positive because they either serve as proxies for minimizing natural resource use or avoiding waste and the associated environmental impacts identified in A, B and C. Agencies should note that the presence of these attributes alone do not automatically make a product or service environmentally preferable. Executive agencies should consider a range of environmental impacts associated with products from a life cycle perspective when making purchasing decisions.

(1) **Recycled content**: Materials that have been recovered from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer) (see Federal Trade Commission Environmental Marketing Guides mentioned above for more detail). Executive agencies are required to purchase EPA-designated items with recycled content (40 C.F.R. Part 247). Purchasers may want to consider whether the material contains pre-consumer or post-consumer recycled content. Recycled content, under the Federal Trade Commission guides, includes recycled raw material, that would have otherwise been incinerated or land filled, as well as used, reconditioned and remanufactured components. For products that are only partially made of recycled material, a recycled claim should indicate the percentage, by weight, of recycled content in the finished product. Unless it is otherwise clear from the context of the sale, for products that contain used, reconditioned or remanufactured components, a recycled claim should make clear that such components are used, reconditioned or remanufactured. Manufacturer's scrap material that would have, in any case, been incorporated into the product does not qualify as recycled under the Federal Trade Commission's guides. Refer to 16 C.F.R. § 260.7(e).

(2) **Recyclability**: Refers to products or materials that can be collected, separated or otherwise recovered from the solid waste stream for reuse, or in the manufacture or assembly of another package or product, through an established recycling program. For products that are made of both recyclable and non-recyclable components, the recyclable claim should be adequately qualified to avoid consumer deception about which portions or components are recyclable. In addition, unless recycling collection programs for the product are available to a substantial majority of communities or consumers where the product is sold, claims of recyclability need to be qualified to indicate the limited of availability of recycling collection sites. A product that is made from recyclable material, but, due to its shape, size or some other attribute, is not accepted in recycling programs for such material, should not be marketed as recyclable. Refer to the FTC Environmental Marketing Guides, 16 C.F.R. § 260.7(d).

(3) **Product disassembly potential**: Refers to the ease with which a product can be disassembled for maintenance, parts replacement, or recycling.

(4) **Durability**: Refers to the expected lifetime of the product.

(5) **Reusability**: Refers to how many times a product may be reused. Since reusable products generally require more up-front costs than disposable products, they are often subjected to a cost/benefit analysis in order to determine the life cycle cost.

(6) **Reconditioned/Remanufactured**: Refers to the process of restoring used, durable products to meet original performance standards. Remanufacturing has many other names, including: rebuilding (automotive sector); retreading (tire remanufacturing); reconditioning; and refurbishing. Remanufacturing results in less waste and raw material and energy use.

(7) **Take-back**: Refers to the manufacturer or designee accepting a return of end-of-life product; who pays for the transportation of the product may be situation-specific.

(8) **Bio-based**: Refers to a commercial or industrial product (other than food or feed) that utilizes biological products or renewable, domestic, agricultural (plant, animal and marine), or forestry materials.

(9) **Energy efficiency**: Refers to products that meet or exceed the Department of Energy (DOE)/Federal Energy Management Program's product energy efficiency recommendations which identify the top 25 percent of energy efficiency for all similar products or that meet the energy efficiency criteria of the Environmental Protection Agency (EPA)/DOE Energy Star program.

(10) **Water efficiency**: Refers to any plumbing fixtures that meet or exceed the Department of Energy's Federal Energy Management Program recommended performance standards for flow rates.

(11) Other attributes: Refers to any other positive attributes that are associated with the product but are not listed here.

## Appendix C—Sample Environmentally Preferable Purchasing Policy Directive

### Environmentally Preferable Purchasing Policy

The purchase and use of products and services can have a profound impact on the environment. [NAME OF DEPARTMENT OR AGENCY] recognizes the positive impact that it can make on the environment through the purchasing decisions that its employees make. It is the intent of [NAME OF DEPARTMENT OR AGENCY] to integrate environmental considerations into every aspect of acquisition. Although the environment may not be the core of our professional mission, the integration of these factors will result in economic, health, and environmental gains that will further our goals.

Overall Statement of Policy

- Agency personnel should seek to reduce the environmental damages associated with their purchases by increasing their acquisition of environmentallypreferable products and services to the extent feasible, consistent with price, performance, availability, and safety considerations.
- Environmental factors should be taken into account as early as possible in the acquisition planning and decision-making process.
- Responsibility for environmentally preferable purchasing should be shared among the program, acquisition, and procurement personnel.
- Environmentally preferable purchasing represents one important component of this agency's commitment to pollution prevention.

[NAME OF DEPARTMENT OR AGENCY] is committed to the following:

- Increasing the acquisition of environmentally preferable products and services.
- Identifying and implementing pilot projects to test the best ways to incorporate environmental preferability into acquisition.
- Establishing incentive and award programs to recognize those people, teams, and interagency work groups who are most successful at promoting the purchase of environmentally preferable products.

## Appendix D—Text of Office of Federal Environmental Executive and U.S. Environmental Protection Agency's April 1998 Policy Letter on Use of Non-Governmental Entities

### Pilot Project Approach on Use of Non-Governmental Entities to Implement Section 503 of Executive Order 12873 on Federal Acquisition, Recycling, and Waste Prevention

**Background:**

Section 503(a) of Executive Order 12873 directs EPA to "issue guidance that recommends principles that Executive agencies should use in making determinations for the preference and purchase of environmentally preferable products." Section 503 (b) states that Executive agencies shall use EPA's guidance to "identify and purchase environmentally preferable products" and to "modify their procurement programs by reviewing and revising specifications, solicitation procedures, and policies as appropriate."

On September 28, 1995, EPA issued a proposed *Guidance on the Acquisition of Environmentally Preferable Products and Services* which includes a series of principles that are intended to guide Federal purchasers as they consider environmental preferability in their acquisition decisions. This proposed *Guidance* was the culmination of numerous discussions EPA had with staff from key purchasing agencies and departments as well as representatives from industry and environmental and other interested organizations.

In EPA's proposed *Guidance* (Supplementary Information - Section III (E)), EPA acknowledged the existence of non-governmental entities -- including, but not limited to, environmental standard setting organizations, third party certification programs, environmental labeling or environmental "report card" programs and other environmental consulting organizations -- to which Executive agencies, in appropriate circumstances, may refer for technical assistance[1] in meeting the Executive Order goals.

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[1] For example, Executive agencies might seek technical assistance from non-governmental entities to help Executive agencies:

(a) analyze life cycle and multiple environmental attributes;
(b) analyze basic environmental performance characteristics for specific categories of products/services;
(c) identify environmentally preferable product/service criteria for a given product category based on agencies' core environmental values; and
(d) identify products/services in a given category which meet agencies' predetermined set of environmental performance criteria.

Executive agencies are reminded that they must critically examine all information from non-governmental entities. The Executive agencies involved, and not the non-governmental entities, must make all final determinations regarding environmental preferability.

In this paper, EPA suggests a pilot project approach to test the utility of various means of using non-governmental entities to achieve environmentally preferable purchasing goals. This pilot project approach will be publicized through a *Notice of Availability* in the *Federal Register*. Ultimately the findings from the pilot project approach will provide practical information to EPA in the development of its final *Guidance.*

**Spectrum of Approaches**

First, it must be emphasized that Executive agencies may choose to implement EPA's proposed *Guidance* without technical assistance from non-governmental entities. A number of on-going environmentally preferable purchasing (EPP) pilot projects are relying successfully on the in-house environmental and procurement expertise of EPA and the partnering Executive agency (e.g., General Services Administration and the Department of Defense). Therefore, this **paper should in no way be interpreted as an EPA endorsement of a specific non-governmental entity, organization or program, nor should agencies feel obligated in any way to utilize the technical assistance of such entities.**

However, to the extent that the Agencies are interested in tapping the expertise that resides outside the Government, EPA concludes that Agencies, in carrying out existing mandates for environmentally preferable purchasing may use non-governmental entities in accordance with appropriate operating guidelines. Executive agencies should note that they must avoid favoring, without reasonable justification, one non-governmental entity over another. Executive agencies should also inform their personnel about the Federal Trade Commission's *Guides for the Use of Environmental Marketing Claims* which govern environmental claims made by anyone, including manufacturers or environmental labeling or "report card" programs.

Thus far, EPA has identified a number of different potential approaches for how Executive agencies could use the technical expertise of non-governmental entities in furthering their environmentally preferable purchasing goals. <u>All of the potential approaches described below require that the Executive agencies involved critically examine all information from non-governmental entities. The Executive agencies involved, and not the non-governmental entities, must make all final determinations regarding environmental preferability.</u>

This list of approaches is not comprehensive. Agencies are encouraged to bring to EPA's attention other potential approaches for using non-governmental entities. In utilizing an approach, agencies have considerable discretion in incorporating environmental preferability into procurement decisions. For example, environmental considerations that result in limiting competition or in the payment of a price premium for goods or services may be reasonably related to an agency's definition of its "minimum needs" and therefore permissible.

***Approach 1: Use of Existing Information Developed by Non-governmental Entities***

Executive agencies' personnel could use existing information developed by non-governmental entities regarding environmental preferability of products and services, along with other available information (such as product performance and price) in defining the requirements for procurements and making more informed procurement and acquisition decisions. For example, Agencies might consider undertaking pilot projects to test the utility of non-governmental entities in the following instances:

a) Executive agencies could examine and evaluate already existing environmental criteria or standards developed by non-governmental entities for products or product categories (as well as for services or service categories), along with other available information, to identify a range of environmental attributes which can inform the agencies' own determinations of environmental preferability. Those determinations of environmental preferability could then translate into agency requirements, or at the very least, important criteria in the evaluation and selection of competing vendors or manufacturers.

b) In buying commercial items off-the-shelf, Executive agencies could inform their personnel to take into consideration environmental information (e.g., environmental claims, product profiles, "report cards", or environmental seals along with accompanying explanation, etc.,) either displayed on the products or provided through product literature or other materials (e.g., newsletters) in making purchasing decisions. This environmental information could be provided by vendors or manufacturers or by non-governmental entities. Executive agency personnel should be cautioned to avoid making their purchasing decisions on broad claims of environmental superiority.[2]

c) At the request of vendors or manufacturers, an Executive agency could include in its catalogs or schedules symbols from non-governmental entities denoting certain environmental characteristics, provided that (1) these symbols are accompanied by additional information that specify the reasons why a product has been "tagged" with a

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[2]The following excerpt from FTC's *Guides for the Use of Environmental Marketing Claims* illustrates this point:

*A product is advertised as "environmentally preferable." This claim is likely to convey to consumers that this product is environmentally superior to other products. If the manufacturer cannot substantiate this broad claim, the claim would be deceptive. The claim would not be deceptive if it were accompanied by clear and prominent qualifying language limiting the environmental superiority representation to the particular product attribute or attributes for which it could be substantiated, provided that no other deceptive implications were created by the context.* (From FTC's *Guides*, (a) General Environmental Benefit Claims, Example 6)

symbol; (2) the catalogs or schedules clearly emphasize that Executive agency personnel are not required to purchase products or services that are tagged; and (3) procurement officials should not rely on the symbols to make purchasing decisions, but instead, are required to take into account the environmental information underlying the symbol for relevance to the procurement.[3] Agencies including such symbols in their schedules or catalogs should ensure that their employees receive appropriate guidance in utilizing this approach. Vendors or manufacturers who choose not to obtain a seal or other symbols denoting certain environmental characteristics from non-governmental entities may nevertheless also request that environmental information about their products be included in the agency's catalogs or schedules.

This option will be piloted on a limited basis so that it can be closely monitored to determine its effectiveness.

d) On its own initiative, an Executive agency could tag products or services in its catalogs or schedules with its own symbol which denotes environmental characteristics that the Executive agency, through its own determination, deems preferable. This symbol could be based on existing information (e.g., environmental claims, product profiles, "report cards", or environmental seals along with accompanying explanation, etc.) available from non-governmental entities or from vendors or manufacturers themselves. This symbol should be accompanied by specific information explaining the basis for "tagging" a product as well as the source of the information. Catalogs or schedules should emphasize that Executive agency personnel would not be required to purchase products or services which are tagged, but are requested to take into account the environmental information underlying the symbol for relevance to the procurement.

### *Approach 2: Use of Non-governmental Entities as Certifiers of Specific Claims*

Executive agencies could require vendors or manufacturers to have specific, measurable and verifiable claims certified by qualified non-governmental entities. A product's percentage content of volatile organic compounds (VOCs), for example, would be considered measurable

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[3]The following excerpt from FTC's ***Guides for the Use of Environmental Marketing Claims*** provides an example of this point:

> *A product label contains an environmental seal, either in the form of a globe icon, or a globe icon with only the text "Earth Smart" around it. Either label is likely to convey to consumers that the product is environmentally superior to other products. If the manufacturer cannot substantiate this broad claim, the claim would be deceptive. The claims would not be deceptive if they were accompanied by clear and prominent qualifying language limiting the environmental superiority representation to the particular product attribute or attributes for which they could be substantiated, provided that no other deceptive implications were created by the context.* (From FTC's *Guides*, (a) General Environmental Benefit Claims, Example 5)

and verifiable. The rationale behind this approach is that credible certification by non-governmental entities (or actual evidence from vendors or manufacturers themselves) could increase the credibility of claims that may be displayed on products. Such certification, or a vendor's or a manufacturer's ability otherwise to prove particular claims of environmental preferability, could be a prerequisite for competitive consideration.

This approach assumes that (1) no particular non-governmental entity is favored (without reasonable justification) over any other non-governmental entity; and (2) vendors or manufacturers who choose not to be certified by non-governmental entities are provided the opportunity to present credible evidence that their products or services conform to established standards.

***Approach 3: Use of Non-government Entities as "Consultants" under Advisory and Assistance Contracts***

Pursuant to the competitive contracting process as set forth in the Federal Acquisition Regulation (FAR), non-governmental entities could provide consulting services to Executive agencies. Non-governmental entities may provide advice and recommendations about environmentally preferable purchasing, for example, through the identification of key environmental characteristics of product categories. Under this approach, Executive agencies would define environmental preferability with the assistance of a non-governmental entity on a procurement-by-procurement basis. As per FAR Subpart 9.5, Executive agencies must fully consider the potential for conflict of interest concerns where a non-governmental entity may be unable to render impartial advice or assistance because of private business or financial interests. Also, Executive agencies should make every effort to maximize competition in awarding these advisory and assistance contracts to avoid any exclusive or preferential relationship with any particular non-governmental entity. Finally, the environmental preferability standards developed under this approach could be used as a basis for defining the agency's "minimum needs" in particular procurements and for developing criteria for evaluating competing vendors.

**EPA's Suggested Next Steps**

One of the key tenets of EPA's proposed *Guidance* is to have Executive agencies undertake a series of pilot projects that can demonstrate the applicability and workability of the guiding principles as contained in EPA's proposed *Guidance*. The success of our efforts depends on learning from these pilot projects and sharing the results widely among the different Executive agencies. <u>It is in this spirit that EPA strongly encourages Executive agencies to enter into pilot projects that test the potential approaches for using non-governmental entities as described above</u>.

Moving forward with this non-governmental entities pilot approach is desirable for a number of reasons: 1) EPA can capture the lessons from the pilots and share them among the Executive agencies so that there is no duplication of effort; 2) we can determine where the use of expertise outside of the government is appropriate and useful and where it is not; and 3) the net effect of creating a market for such EPP services may encourage increased competition among existing and new organizations or programs that can support Federal procurement of environmentally preferable products and services. Ultimately, the results from this and other

pilot project approaches will help Executive agencies identify the most effective and practical ways to achieve the goals of environmentally preferable purchasing.

EPA recognizes that any pilot project involving a non-governmental entity will initially raise practical questions such as which non-governmental entities are legitimate and are credible and which are not; is there a need to certify a certifier? While EPA is not currently able to offer an "approved" list of non-governmental programs best suited to assist the agencies, it is prepared to provide assistance to Executive agencies on an individual procurement-by-procurement basis. As an initial step, Agencies are directed to the list of questions for evaluating non-governmental entities contained in Section III, [E] Third Party Certification Programs of EPA's proposed *Guidance on the Acquisition of Environmentally Preferable Products and Services*. The list of questions is included as Appendix 1 of this letter.

Specifically, within the context of this non-governmental entity pilot project approach, EPA's Environmentally Preferable Purchasing Program in the Office of Pollution Prevention and Toxics, is prepared to:

1) assist Executive agencies in structuring a pilot project involving non-governmental entities, including providing support to assess the utility of non-governmental entities on an individual procurement-by-procurement basis;

2) seek out and identify non-governmental entities who have expertise in the area of environmentally preferable purchasing through a variety of means, such as, but not limited to, Federal Register notices or announcements in the Commerce Business Daily (CBD). To make such a task manageable, EPA will identify, with help and guidance from the agencies, a few product or service categories upon which to focus at first. If successful, further federal register notices or CBD announcements could be issued focusing on additional product or service categories;

3) assemble a list of product categories for which eco-labeling criteria and standards have been established, both domestically and internationally for agencies to consider in developing their own criteria for environmental preferability. If appropriate, EPA will assist in such evaluations; and

4) assist Executive agencies in structuring an environmentally preferable purchasing pilot project that does not involve non-governmental entities.

In turn, Executive agencies should consult with EPA when undertaking pilots which may raise environmental issues beyond their expertise (e.g., where a pilot involves consideration of the way a product is made).

Furthermore, Executive agencies who choose to undertake pilots under option 1(c) should consult with EPA in developing a written process or procedure for the role seals or symbols and the associated information would play in their pilots. For example, agencies should provide clear guidance which specifies the importance of considering the underlying criteria, not the seal or the symbol.

As EPA and Executive agencies embark on these activities, EPA will continue to explore a number of different ways that it can address issues which are raised within the pilot project context more definitively. Executive agencies will be kept informed of developments on these issues. Agencies should inform EPA of their efforts in environmentally preferable purchasing, whether such efforts involve non-governmental entities or not in order to share lessons learned among other agencies and to aid in the evaluation of the pilot projects. In this way, EPA can make EPP concepts more practical for use within the Federal acquisition context. To facilitate this, Agencies are requested to send the attached FAX BACK form. Pilot projects involving non-governmental entities will be evaluated over a period of the next three years. EPA will use the findings from that evaluation to inform the development of its final *Guidance*.

For further information and to inform EPA of pilot project efforts, please contact:

Eun-Sook Goidel, Program Manager, Environmentally Preferable Purchasing Program, Pollution Prevention Division, Office of Pollution Prevention and Toxics (202)260-3296; (202)260-0178 FAX; e-mail: goidel.eunsook@epamail.epa.gov

For legal issues associated with use of non-governmental entities in environmentally preferable purchasing, please contact:

Tali Zemel, Esq., Office of General Counsel (202)564-4708; e-mail: Zemel.Avital@epamail.epa.gov

**Attachment 1. List of Questions for Evaluating Non-Governmental Entities[4]**

Executive agencies should consider the following list of questions in evaluating non-governmental entities before using their expertise to further internal environmental preferable purchasing goals. Does the program have:

- an open, public process that involves key stakeholders (businesses, environmental, consumer groups, and states, etc.) in developing its criteria or standards?
- award criteria, assumptions, methods, and data used to evaluate the product or product categories that are transparent (i.e., they are publicly available, easily accessed, and understandable to the lay person)?
- a system of data verification and data quality?
- a peer review process (with representation of all stakeholders) for developing the standards or criteria?
- criteria that are developed based on a "systems" or life cycle approach (i.e., "cradle to grave")?
- an outreach program to educate the consumer, which includes clear communications to consumers that provide key information concerning environmental impacts associated with the product?
- an established goal of updating standards or criteria as technology and scientific knowledge advance?
- authority to inspect the certified product's facility to ensure compliance with the standards or criteria?
- testing protocols for the certified products that ensure testing is conducted by a credible institution?
- access to obtaining the seal by small-and medium-sized companies (e.g., the cost of the seal is not so high as to prevent access by smaller companies)?
- compliance with the Federal Trade Commission's (FTC) *Guides for the Use of Environmental Marketing Claims*?

[4]Excerpted from EPA's proposed *Guidance on the Acquisition of Environmentally Preferable Products and Services*.

## FAX BACK FORM

## PLEASE INFORM EPA ABOUT YOUR PILOT PROJECT INVOLVING THE USE OF NON-GOVERNMENTAL ENTITIES IN ENVIRONMENTALLY PREFERABLE PURCHASING!

**Name:**

**Department/Agency:**

**Address:**

**Address:**

**Phone:**

**FAX**

**E-mail:**

**Type of Acquisition/Procurement:**

(e.g., small purchase, credit card purchase, competitive bid, etc.)

**Product/Service Category:**

**Name of Non-Governmental Entity:**

**Type of Non-Governmental Entity** (check all that apply):

___ environmental standard setting organizations

___ third-party environmental certification programs

___ environmental labeling organizations

___ environmental report card organization

___ environmental consultants

___ other (please specify: _____)

**Type of Information/Assistance Sought from Non-Governmental Entity:**

___ general environmental information about a product/service category;

___ analyze life cycle and multiple environmental attributes

___ analyze basic environmental performance characteristics for specific categories of products/services

___ identify environmentally preferable product/service criteria for a given product category based on agencies' core environmental values

___ identify products/services in a given category that meet agencies' predetermined set of environmental performance criteria; and

___ other (please specify:_____)

**Please FAX BACK to:** Eun-Sook Goidel at U.S. EPA 202 260-0178.

## Appendix E — EPP Case Study Template

### Project Basics

- What does your agency/department/office do? Where is it based?
- What, if anything, is unique about your efforts to purchase environmentally preferable products and services?
- What were the motivating factors behind the project?
- What kinds of products and services are you purchasing with environmental attributes in mind? Do you focus on a particular group of products or services? If so, why?

### Implementation

- How have you incorporated environmental attributes into the purchasing process? Did you alter the established procurement process in any way to accommodate environmentally preferable products?
- What obstacles did you encounter (if any) in incorporating environmental attributes into the purchasing process? How were these obstacles dealt with?
- Did you incorporate environmental attributes into procurement specifications, standards, or policies; requests for proposals; bid announcements; manufacturer certifications; etc.? (If so, please provide examples.)

### Product and Service Evaluation

- How do you evaluate the products or services you purchase that have environmental attributes? Do you rely solely on information provided by vendors, or have you developed your own criteria or your own evaluation system?
- Do you consider more than one attribute when evaluating a certain product (e.g., considering both recycled-content and bleaching when purchasing paper products)? If so, how do you go about taking multiple attributes into consideration?
- Are products or services that meet your environmental attributes priced competitively with other comparable products or services? Do you have a price preference for products or services meeting your environmental criteria?

### Vendor Reactions

- How do you inform vendors about your preference for products with environmental attributes?
- Were vendors already providing environmental information before you requested it?
- How did vendors react to your request for environmental attributes of their products?

### Customer (End-User) Reactions

- Who has been most affected by the changes brought about by your efforts to purchase environmentally preferable products (i.e., procurement staff, other employees, contractors, citizens, end-users)? How have they been affected?
- Have you attempted to inform or educate your customers about products' environmental attributes? How?
- How have customers responded to the environmental information you provided? Are you keeping track of their responses?
- Have customers been pleased with the performance of environmentally preferable products (especially when compared to products that are not considered environmentally preferable)?

### Project Results

- How are you tracking/measuring the success of your Environmental Preferable Purchasing efforts? Have you been able to quantify your success in terms of positive effects on the environment?
- Have any cost savings resulted from the purchase of environmentally preferable products? How were these calculated?
- Do you think your experience with purchasing environmentally preferable products could be valuable to others who purchase different products?
- What are your future plans regarding the purchase of environmentally preferable products? Do you expect to incorporate additional attributes or examine other product categories? What are some of the opportunities and challenges you foresee in expanding your Environmental Preferable Purchasing efforts?

**List of Subjects**

Environmental protection.

Dated: August 13, 1999.

**Carol M. Browner,**

*Administrator.*

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BILLING CODE 6560–50–C

# Guidance on Conducting Inspections of Federal Facilities for Compliance with Section 6002 of the Resource Conservation and Recovery Act

May 12, 1999 EPA 300-B-02-005

***This guidance is intended to assist EPA and State compliance inspectors determine compliance with EPA guidelines on procuring recycled content products by all Federal facilities. To promote compliance with the guidelines, this guidance is being made available to Federal facilities.***

**INTRODUCTION**: On September 14, 1998, President Clinton signed Executive Order 13101: "Greening the Government Through Waste Prevention, Recycling and Federal Acquisition." Section 403 of the Order directed that EPA develop guidance for inspections of Federal facilities for compliance with the buy-recycled program established under section 6002 of the Resource Conservation and Recovery Act (RCRA). The guidance is to be used by EPA whenever the Agency conducts RCRA inspections or multi-media regulatory compliance inspections where RCRA compliance is a component of the inspection. The guidance may also be used by States authorized to conduct inspections under RCRA.

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## EXECUTIVE ORDER 13101
## GREENING THE GOVERNMENT THROUGH WASTE PREVENTION, RECYCLING, AND FEDERAL ACQUISITION

**Sec. 403. Federal Facility Compliance. (a) Within 6 months of the date of this order, the Administrator of the EPA shall, in consultation with the Federal Environmental Executive, prepare guidance for use in determining Federal facility compliance with section 6002 of RCRA and the related requirements of this order.**

**(b) EPA inspections of Federal facilities conducted pursuant to RCRA and the Federal Facility Compliance Act and EPA "multi-media" inspections carried out at Federal facilities will include, where appropriate, evaluation of facility compliance with section 6002 of RCRA and any implementing guidance.**

**(c) Where inspections of Federal facilities are carried out by authorized States pursuant to RCRA and the Federal Facility Compliance Act, the Administrator of the EPA will encourage those States to include evaluation of facility compliance with**

**section 6002 of RCRA in light of EPA guidance prepared pursuant to subsection (a), where appropriate, similar to inspections performed by the EPA. The EPA may provide information and technical assistance to the States to enable them to include such considerations in their inspection.**

**(d) The EPA shall report annually to the Federal Environmental Executive on the results of inspections performed by the EPA to determine Federal facility compliance with section 6002 of RCRA not later than February 1st for those inspections conducted during the previous fiscal year.**

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**INSPECTION FOCUS:** EPA has determined that for the first year of implementation, inspection activities carried out pursuant to section 403 of the Order should focus primarily on information collection. EPA compliance assistance programs will use this information to promote Federal facility awareness of, and compliance with, RCRA section 6002 requirements. To ensure federal facility compliance with RCRA section 6002 in the future, EPA's response to non-compliance with that section may change.

**ENFORCEMENT:** Violations of RCRA section 6002 by federal agencies do not give rise to administrative penalty actions or orders under RCRA's enforcement authorities. This conclusion does not, however, limit EPA's authority to issue notices of violation (NOV) or enter into compliance agreements at Federal facilities for violations of RCRA section 6002 that are discovered through the inspections mandated by Executive Order 13101. Moreover, citizens may take action pursuant to RCRA section 7002 for violations of RCRA 6002 requirements.

**BACKGROUND:** When the Resource Conservation and Recovery Act (RCRA) was enacted in 1976, Congress stated that objectives of the statute included the conservation of resources through recycling. Recognizing that recycling works best if there are markets for the materials collected, Congress directed the Federal government to employ its purchasing power to help create and sustain those markets by buying products manufactured with the collected materials. Section 6002 of RCRA establishes the Federal program that directs federal purchasing decisions for recycled content products.

**BUY RECYCLED PROGRAM:** Section 6002 of RCRA establishes a Federal buy-recycled program. RCRA section 6002(e) requires EPA to: (1) designate items that are or can be made with recovered materials and (2) prepare guidelines to assist procuring agencies in complying with affirmative procurement requirements set forth in subsections (c), (d), and (i) of section 6002. Once EPA has formally designated items, section 6002 requires that any procuring agency using

appropriated Federal funds must purchase those items composed of the highest percentage of recovered materials practicable.

**RCRA §6002: Federal Procurement**

**(c)(1) ... each procuring agency which procures any items designated in such guidelines shall procure such items composed of the highest percentage of recovered materials practicable ....**

**(e) The Administrator shall ... prepare ... guidelines for the use of procuring agencies .... Such guidelines shall designate those items which are or can be produced with recovered materials ....**

**PROCURING AGENCIES:** For the purposes of RCRA section 6002, procuring agencies include the following:

1. any Federal agency;
2. any State or local agencies using appropriated Federal funds for a procurement, or
3. any contractors with these agencies (with respect to work performed under the contract).

The requirements of RCRA section 6002 apply to such procuring agencies only when procuring designated items where the price of the item exceeds $10,000 or the quantity of the item purchased in the previous year exceeded $10,000. The $10,000 threshold applies to all purchases made by an entire agency rather than regional or local offices (e.g., Department of the Interior, Department of Defense, etc). Most Federal agencies exceed the $10,000 threshold for EPA designated items.[1]

**CPG ITEMS:** The Comprehensive Procurement Guidelines (CPG) designate those items that must contain recycled content when purchased by Federal agencies. The CPG acknowledges, however, that specific circumstances may arise that preclude the purchase of products made with recovered materials.

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[1] Section 403 of Executive Order 13101 states that inspections carried out under the Order13101 are to be conducted at Federal facilities; state and local agencies using appropriated funds will not be included in these inspections. Government owned , contractor operated (GOCO) facilities are considered Federal facilities for the purposes of this guidance.

> ***... for the EPA-designated guideline items, ... and for all future designated guideline items, agencies shall ensure that their affirmative procurement programs require100 percent of their purchases of products to meet or exceed the EPA guideline unless written justification is provided that a product is not available competitively within a reasonable time frame, does not meet appropriate performance standards, or is only available at an unreasonable price.*** (EO 13101, Sec. 402 (c)).

Designated items that **do not** contain recovered materials may be purchased if it is determined that:

1. the price of a given designated item made with recovered materials is unreasonably high,
2. there is inadequate competition (not enough sources of supply),
3. unusual and unreasonable delays would result from obtaining the item, or
4. it does not meet the agency's reasonable performance specifications.

**DESIGNATED ITEMS**: To date, the EPA Comprehensive Procurement Guidelines (CPG) program has designated 36 products in 8 product categories. In 1998, EPA proposed to designate an additional 19 products; EPA expects those products to be formally listed in June of 1999. EPA research indicates that the designated items are of high quality, are widely available, and cost-competitive with products made from virgin materials. Moreover, Government procurement of these products will create markets for a variety of recycled materials that make up a large part of the municipal waste stream, including various types of paper, used tires, oil and antifreeze, plastics, steel, and yard debris. Purchase of the guideline items also creates markets for non-hazardous industrial wastes that are generated in large quantities, such as coal fly ash and blast furnace slag.

A key component of the CPG program is EPA's list of designated products and the accompanying recycled content recommendations. EPA has already designated or has proposed designating the products listed below. EPA has also published final or proposed recycled content recommendations for each item. All proposals, designations and recommendations are published in the *Federal Register.* Additional information on the CPG designated items and content recommendations can be found on the World Wide Web at

http://www.epa.gov/cpg/products.htm

# EPA Designated and Proposed CPG Items

## CONSTRUCTION PRODUCTS

**Designated:**
- Building insulation products
- Polyester Carpet
- Cement and concrete containing:
  - -Coal fly ash
  - -Ground granulated blast furnace slag
- Consolidated and reprocessed latex paint
- Floor tiles
- Laminated paperboard
- Patio blocks
- Shower and restroom dividers/partitions
- Structural fiberboard

**Proposed:**
- Carpet backing
- Carpet cushion
- Flowable fill
- Railroad grade crossings/surfaces

## LANDSCAPING PRODUCTS

**Designated:**
- Garden and soaker hoses
- Hydraulic mulch
- Lawn and garden edging
- Yard trimmings compost

**Proposed:**
- Food waste compost
- Landscaping timbers and posts (plastic lumber)

## NON-PAPER OFFICE PRODUCTS

**Designated:**
- Binders (paper, plastic covered)
- Office recycling containers
- Office waste receptacles
- Plastic desktop accessories
- Plastic envelopes
- Plastic trash bags
- Printer ribbons
- Toner cartridges

**Proposed:**
- Plastic binders (solid)
- Plastic clipboards
- Plastic clip portfolios
- Plastic file folders
- Plastic presentation folders

## PAPER AND PAPER PRODUCTS

**Designated:**
- Commercial/industrial sanitary tissue products
- Miscellaneous papers
- Newsprint
- Paperboard and packaging products
- Printing and writing papers

**Proposed:**
- None at this time.

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**PARK AND RECREATION PRODUCTS**

**Designated:**
- Plastic fencing
- Playground surfaces
- Running tracks

**Proposed:**
- Park and recreational furniture
- Playground equipment

**TRANSPORTATION PRODUCTS**

**Designated:**
- Channelizers
- Delineators
- Flexible delineators
- Parking stops
- Traffic barricades
- Traffic cones

**Proposed:**
- None at this time.

**VEHICULAR PRODUCTS**

**Designated:**
- Engine coolants
- Re-refined lubricating oils
- Retread tires

**Proposed:**
- None at this time.

**MISCELLANEOUS PRODUCTS**

**Designated:**
- Pallets

**Proposed:**
- Sorbents
- Awards and plaques
- Industrial drums
- Mats
- Signage
- Strapping and stretch wrap

**RECOVERED MATERIAL RECOMMENDATIONS:** For each of the designated and proposed products, EPA has issued a Recovered Materials Advisory Notice (RMAN) which establishes the recommended recycled content level for a given product. In most circumstances, minimum content recommendations are provided for both postconsumer recycled content and recovered material levels. "Postconsumer material" means a material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item. "Postconsumer material" is part of the broader category of "recovered material." "Recovered materials" mean waste materials and byproducts that have been recovered or diverted from solid waste, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.
Exhibit 1 below provides an example of such an RMAN for the product "Building Insulation."

**Exhibit 1: EPA's Recommended Recovered Materials Content Levels for Building Insulation**

| Product | Material | Postconsumer Content (%) | Total Recovered Materials Content (%) |
|---|---|---|---|
| Rock Wool | Slag | -- | 75 |
| Fiberglass | Glass Cullet | – | 20-25 |
| Cellulose Loose-Fill and Spray-On | Postconsumer Paper | 75 | 75 |
| Perlite Composite Board | Postconsumer Paper | 23 | 23 |
| Plastic Rigid Foam, Polyisocyanurate/ Polyurethane: | | | |
| Rigid Foam | -- | -- | 9 |
| Foam-in-Place | -- | -- | 5 |
| Glass Fiber Reinforced | -- | -- | 6 |
| Phenolic Rigid Foam | -- | -- | 5 |
| Plastic, Non-Woven Batt | Recovered and/or Postconsumer Plastics | -- | 100 |

In other circumstances, where specific recycled material content is not appropriate or where on-site management of the designated items may be more effective, the RMAN may indicate a preference for an activity over a given level of recovered material. An example of this type of RMAN, for engine coolants, is presented in Exhibit 2 below.

**Exhibit 2:Recommended Recovered Materials Content Ranges - Coolants:**

EPA recommends that procuring agencies whose vehicles are serviced by a motor pool or vehicle maintenance facility establish a program for engine coolant reclamation and reuse that consists of either reclaiming the spent engine coolants onsite for use in the agencies' vehicles or establishing a service contract for reclamation of the agencies' spent engine coolant for use in the agencies' vehicles.

| |
|---|
| EPA also recommends that procuring agencies request reclaimed engine coolant when having their vehicles serviced at commercial service centers. Additionally, EPA recommends that agencies purchase reclaimed engine coolant when making direct purchases of this item, such as when necessary to make up for losses due to leakage or spillage |
| EPA does not recommend one type of engine coolant over another. EPA recommends, however, that procuring agencies purchase engine coolant containing only one base chemical, typically ethylene glycol or propylene glycol, to prevent the commingling of incompatible types of engine coolant. |

To facilitate ease of implementation, the EPA RMAN documents also include known product specifications as well as product information such as product manufacturers and suppliers.

## INSPECTION GUIDANCE:

During initial implementation of the requirement for EPA inspections at Federal facilities for compliance with RCRA 6002, EPA has elected to focus on field level awareness of the RCRA 6002 requirements. As such, inspections at Federal facilities pursuant to RCRA and the Federal Facility Compliance Act and EPA "multi-media" inspections carried out at Federal facilities, will include;

1) distribution of a questionnaire to the facility and,
2) inspection of the facility motor vehicle maintenance activities (where such activities exist) for compliance with RCRA 6002 .

Motor vehicle maintenance activities were selected for this effort due to the:

1) common presence of such activities at a broad range of Federal facilities,
2) significant awareness and availability of products and services that meet the EPA guidelines for vehicular products and,
3) likelihood that RCRA inspections would normally be conducted at these locations.

Inspectors should become familiar with the basic concepts of the CPG program and are requested to briefly outline to facility personnel EPA's authority for both generating the CPG designations under RCRA section 6002 and conducting inspections under section 403 of EO 13101. While the introduction and background to this document provide a brief overview on this topic, inspectors should contact RCRA personnel or the Federal Facility Coordinator in their Region for additional information. Inspectors may also wish to contact the RCRA hotline at 800-424-3323 or search the Internet at **http://www.epa.gov/cpg/products/htm** for further information.

**FACILITY QUESTIONNAIRE:** Attached to this document is a questionnaire including a matrix addressing facility purchase and use of CPG items. The questionnaire and matrix should be provided to the facility environmental manager for response. The questionnaire requests that the manager, in coordination with the facility procurement manager, provide a response to each written question and complete the matrix. Once completed, the entire package is to be mailed to EPA Headquarters by the facility within two weeks of the inspection.

**INSPECTION:** The CPG designation of "Vehicular Products" has been in existence for a lengthy period of time and has received considerable attention in the Federal community. Therefore, during the first year of implementing the inspections called for in EO 13101, EPA has elected to gather information on facility compliance with this aspect of the CPG program.

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Inspectors should visit the facility motor vehicle maintenance facility if one exists. If the facility is large and has more than one vehicle maintenance/service facility, the inspector should request visit the largest facility (shop) which deals with cars, trucks and or tactical vehicles. If no motor vehicle maintenance activities occur at the facility, certain questions in the following list may be still relevant.

These recommended inspection protocols and questions are based on the EPA CPG designated items in the category of **Vehicular Products** and reflects the RMAN for those products. Some additional background questions are also included.

# INSPECTION PROCEDURES AT A SPECIFIC FEDERAL FACILITY MOTOR VEHICLE MAINTENANCE SHOP

## RE-REFINED OILS AND LUBRICANTS:

***BACKGROUND***: Re-refined lubricating oils include engine lubrication oil, hydraulic fluids, and gear oils. EPA's designation specifically excludes marine and aviation oils. The recycling of used oil has evolved from simply removing water, insolubles, and dirt, to the more complicated removal of heavy metals, nitrogen, chlorine, and oxygenated compounds. Today, re-refined lubricating oil is subject to the same stringent refining, compounding, and performance standards as virgin oil for use in automotive, heavy-duty diesel, and other internal combustion engines, hydraulic fluids, and gear oils. In addition, extensive laboratory testing and field studies have concluded that re-refined oil is equivalent to virgin oil, passes all prescribed tests, and can even outperform virgin oil. In fact, the three major U.S. automobile manufacturers now recognize that re-refined oil meets the performance criteria in their warranties.

While oil that is removed from vehicles may be disposed of as a waste, it is generally kept for pick-up by a recycling contractor. In some circumstances, the facility may burn the used oil in its boilers to “recover” the heating value of the oil.

***RMAN for RE-REFINED OILS***: Recommended Recovered Materials Content Ranges:

EPA recommends that procuring agencies set their minimum re-refined oil content standard at the highest level of re-refined oil that they determine meets the statutory requirements of RCRA section 6002(c)(1), but no lower than 25 percent re-refined oil.

EPA recommends that procuring agencies review their procurement practices and eliminate those which would inhibit or preclude procurement of lubricating oils containing re-refined oil. For example, procuring agencies should avoid the practice of inviting bids and issuing contracts to do the following:

• Supply a broad range of lubricating oil products on an "all or none" basis.
• Supply lubricating oils for an excessively long period of time.
• Deliver lubricating oils to geographic locations throughout the United States or to an excessively broad geographic area.
• Supply excessively large contract quantities.

The Defense Logistics Agency (DLA) offers re-refined engine lubricating oils for diesel and non-diesel vehicles. DLA also offers closed loop contracts for used oil removal and supply of re-refined oil.

***General questions:***

Approximately how many vehicles (including aircraft) are serviced by the shop annually?
What type of vehicles are serviced? (e.g., sedans, trucks, heavy equipment, aircraft)

***Specific questions regarding shop use of oil and lubricants:***
What is the estimated annual consumption of oil and lubricants in the shop?
Does the shop use re-refined oil for replacement engine lubricating oils?
Does the shop use re-refined oil for replacement hydraulic fluids?
Does the shop use re-refined oil for replacement gear oils?
If the shop does not use re-refined oils for any or all of the uses, are they aware of the RCRA/CPG requirement to do so?
If they are aware of the requirement to do so yet still do not use re-refined oils, what is their explanation for not using these products?

Does their facility procurement process allow them to purchase re-refined oil? If not, what are the barriers to such purchases?
Do they purchase oil for use in the shop using a government charge card at a commercial vendor (e.g., K-Mart or Sears) outside of the facility?
What is the fate of used oil removed from the facility's vehicles?
If the oil is sent out to a recycler, do they know if it ultimately used for energy recovery or if it is re-refined?

***Shop inspection protocol:***
Inspectors should ask to see the oil containers used by the facility. If the shop uses re-refined products, these products can be recognized quickly by the label on the oil container. At some facilities a bulk distribution apparatus that is fed by 55 gallon (or larger) drums of oil is used for shop distribution of engine lubricating oils and hydraulic fluids. Like quart cans and one or five gallon jugs, these drums are generally marked if their contents contain re-refined oil; the bulk distribution may not

contain any markings reflecting re-refined content. Inspectors should record and include in their inspection report whether the oil being used for engine lubrication, hydraulic fluid and gear oils is re-refined.

## RETREAD TIRES

***BACKGROUND:*** For most cases, retread tires can be driven under the same conditions and at the same speeds as new tires with no loss in safety or comfort. In fact, retread tires have been safely used on school buses, trucks, cars, fire engines, and other emergency vehicles for years. Retreading tires also helps conserve a valuable nonrenewable resource—oil. Every year, retreading saves more than 400 million gallons of oil in North America. Retread tires also help divert thousands of scrap tires from disposal each year.

***RMAN for RETREAD TIRES*:** Recommended Recovered Materials Content Ranges:

EPA recommends that procuring agencies purchase either tire retreading services for worn tires or retread tires as replacement tires. The U.S. Army Tank-automotive Command (TACOM) recently replaced the U.S. General Services Administration (GSA) as manager of tires, although GSA still offers retreading services contracts for medium truck-bus tires. TACOM offers a specification, Qualified Products List, and list of suppliers for retread tires. TACOM also is offering an inspection program to assure the quality of retreading operations.

***Questions regarding shop use of retread tires:***

Approximately how many tires does the shop replace annually?
What type(s) of tires does the shop use (i.e., bus, heavy truck, medium truck, light truck, off-road, passenger vehicle)?
Does the shop use retread tires? If so, for which types of tires?
Does the shop have in place an agreement or contract with a "retreader" to retread the facility's tires?
If the shop does not use retread tires for any or all of the uses, are they aware of the RCRA/CPG requirement to do so?
If they are aware of the requirement to do so yet still do not use retread tires, what is their explanation for not using these products?
Does their facility procurement process allow them to purchase retread tires? If not, what are the barriers?
Do they purchase retread tires for use in the shop using a government charge card at a commercial vendor (e.g., Bandag, Goodyear, or other retreader) outside of the facility?
What is the fate of used tires removed from the facility's vehicles?

***Shop inspection protocol:*** Inspectors should be aware that a facility might be using retread truck tires but not retread passenger tires because of availability problems or performance concerns. Inspectors should ask to see replacement tires stored for use by the facility. If the shop uses retread products, these products can generally be recognized quickly by the label on the side of the tire or actual

markings remaining from the retread process. If there are vehicles in the shop for repair, inspectors should determine whether the tires on a representative sample of those vehicles are retread tires. Inspectors should record and include in their inspection report whether the tires being used at the facility are retread tires.

## ENGINE COOLANT

***BACKGROUND***: Recycled engine coolants, also known as antifreeze, might actually be purer than virgin coolant because the recycling process reduces the chlorides that come from hard water. Testing shows that, like new coolant, recycled coolant meets nationally recognized performance specifications established by the American Society for Testing Materials (ASTM) and the Society of Automotive Engineers (SAE).

***RMAN for Engine Coolants***: Recommended Recovered Materials Content Ranges:

• EPA recommends that procuring agencies whose vehicles are serviced by a motor pool or vehicle maintenance facility establish a program for engine coolant reclamation and reuse that consists of either reclaiming the spent engine coolants onsite for use in the agencies' vehicles or establishing a service contract for reclamation of the agencies' spent engine coolant for use in the agencies' vehicles.

• EPA also recommends that procuring agencies request reclaimed engine coolant when having their vehicles serviced at commercial service centers. Additionally, EPA recommends that agencies purchase reclaimed engine coolant when making direct purchases of this item, such as when necessary to make up for losses due to leakage or spillage.

• EPA does not recommend one type of engine coolant over another. EPA recommends, however, that procuring agencies purchase engine coolant containing only one base chemical, typically ethylene glycol or propylene glycol, to prevent the commingling of incompatible types of engine coolant.

***Specific questions regarding shop use of engine coolants:***
How frequently is the coolant changed in each vehicle?
What is the estimated average annual usage of coolant in this shop?
Does the shop use reclaimed engine coolant?
Does the shop have in place an agreement or contract with a vendor to reclaim the facility's used coolant?
Does the shop have on-site, a reclamation device to reclaim used coolant?
If the shop does not use reclaimed coolant, are they aware of the RCRA/CPG requirement to do so?
If they are aware of the requirement to do so yet still do not use reclaimed coolant, what is their explanation for not using this product?
Does their facility procurement process allow them to purchase reclaimed coolant? If not, what are the barriers to such purchases?
Do they purchase coolant (reclaimed or virgin) for use in the shop using a government charge card at a commercial vendor (e.g., K-Mart or Sears) outside of the facility?

What is the fate of used coolant removed from the facility's vehicles?

***Shop inspection protocol:*** Inspectors should ask to see the area where engine coolants are stored for use by the facility. If the shop uses reclaimed coolant, these products can generally be recognized by the label on container. Inspectors should record and include in their inspection report how storage and disposal of engine coolants is handled at the facility.

**********

# INSPECTORS:

# SEE ATTACHED INSPECTOR CHECK LIST (Attachment 1)

# Please provide attached questionnaire to facility contact. (Attachment 2)

# INSPECTOR CHECKLIST FOR INSPECTIONS OF FEDERAL FACILITIES FOR COMPLIANCE WITH SECTION 6002 OF THE RESOURCE CONSERVATION AND RECOVERY ACT

**Note to inspectors**: If the facility has no motor vehicle maintenance shop, please provide the Inspection Questionnaire to the facility and note on the top of this form that the facility does not maintain vehicles onsite. If the facility has more than one motor vehicle maintenance shop, please indicate whether the response to questions listed below reflect practices at the entire facility or only the shop(s) inspected.

## Re-refined oils and lubricants:

***Background questions:***
Approximately how many vehicles are serviced for replacement or addition of oils and lubricants by the shop or facility annually? _____

What type of vehicles are serviced? (e.g., sedans, trucks, heavy equipment, aircraft)
_____

***Specific questions regarding use of oil and lubricants:***
What is the estimated annual consumption of oil and lubricants in the shop?
Motor oil: _____ gallons
other lubricants: _____ gallons

Approximately how frequently is the engine oil replaced in facility vehicles?
Every _____ miles *or* _____ months

Does the facility or shop test the oil to determine if replacement is needed?
*yes* _____ *no* _____

Does the shop or facility use re-refined oil for replacement engine lubricating (motor) oils?
*yes* _____ *no* _____

Does the shop or facility use re-refined oil for replacement hydraulic fluids?
*yes* _____ *no* _____

Does the shop or facility use re-refined oil for replacement gear oils?
*yes* _____ *no* _____

Do shop containers containing unused oils and other lubricants indicate these products are re-refined?

Oil - *yes* _____ *no* _____
Hydraulic fluids - *yes* _____ *no* _____
Gear oils - *yes* _____ *no* _____

Is the shop or facility aware of the RCRA/CPG requirement to use re-refined oils or lubricants?
*yes* _____ *no* _____

If the facility is aware of the requirement to use re-refined oils and lubricants and still does not use these products, what is their explanation for not using these products?

Re-refined is too expensive ____
Specifications don't allow use of re-refined ____
Re-refined is not available ____
Other _____

Where does the shop or facility purchase oil and other lubricants?

Commercial bulk vendor (e.g., Safety Kleen) *yes* _____ *no* _____
Govt. vendor (e.g., DLA, GSA) *yes* _____ *no* _____
Local commercial vendor (e.g., auto supply) *yes* _____ *no* _____
Other _____

Do shop or facility personnel purchase oil or other lubricants for use in the shop using a government charge card or account at a commercial vendor (e.g., K-Mart or Sears) outside of the facility? *Always* ____ *Occasionally* _____ *Never* _____

What is the fate of used oil removed from the facility's vehicles?

Disposed of as hazardous waste _____
Picked up by vendor for "recycling" _____
Reused at facility for heating fuel _____
Other _____

If the oil is collected or sent out to a recycler, is it ultimately used for energy recovery or is it re-refined? *Energy recovery* _____ *Re-refined* _____ *Don't know* _____

## RETREAD TIRES:

***Background questions***:
Approximately how many tires does the shop or facility replace annually? _____

What type(s) of replacement tires does the shop or facility use?

Bus *yes* _____ *no* _____
Heavy truck *yes* _____ *no* _____
Pickup truck *yes* _____ *no* _____

Passenger vehicle *yes* _____ *no* _____
Other _____

---

***Specific questions regarding the use of retread tires:***

Does the shop or facility install retread tires on facility vehicles onsite? *yes* _____ *no* _____
If yes, for which types of tires?
Bus _____
Heavy truck _____
Pickup truck _____
Passenger vehicle _____
Other _____

Does the shop or facility have in place an agreement or contract with a "retreader" to retread the facility's tires? *yes* _____ *no* _____

Does the shop or facility use an outside service or vendor for tire replacement?
*yes* _____ *no* _____
If yes, does that vendor offer retread tires? *yes* _____ *no* _____ *don't know* _____
If yes, does the facility purchase these tires? *yes* _____ *no* _____

Is the shop or facility aware of the RCRA/CPG requirement to use retread tires?
*yes* _____ *no* _____

If the shop or facility is aware of the requirement to do so yet still do not use retread tires, what is the explanation for not using these products?
Retread tires are "unsafe" ____
Specifications don't allow use of retread tires ____
Retread tires are not available to the facility ____
Other _____

Does the shop or facility purchase retread tires for use in the shop using a government charge card or account at a commercial vendor (e.g., Bandag, Goodyear, or other retreader) outside of the facility? *Always* ____ *Occasionally* _____ *Never* _____

How are used tires disposed of by the facility?
_____

## ENGINE COOLANTS:

***Background questions:***
Approximately how many vehicles are serviced for replacement or addition of coolants by the shop or facility annually? _____

What type of vehicles are serviced? (e.g., sedans, trucks, heavy equipment)
_____

***Specific questions regarding shop of facility use of engine coolants:***

Where does the shop or facility purchase coolant (reclaimed or virgin)?

Commercial bulk vendor (e.g., Safety Kleen) *yes* _____ *no* _____
Govt vendor (DLA, GSA) *yes* _____ *no* _____
Local commercial vendor (e.g. auto supply) *yes* _____ *no* _____
Other _____

Approximately how frequently is the coolant changed in each vehicle?
Every _____ miles *or* _____ months?

What is the estimated average annual usage of coolant in this shop or facility?
_____ gallons

Does the shop or facility use reclaimed engine coolant?
*yes* _____ *no* _____

Does the shop or facility have in place an agreement or contract with a vendor to reclaim the facility's used coolant? *yes* _____ *no* _____

Does the shop or facility have on-site, a reclamation device to reclaim used coolant?
*yes* _____ *no* _____

Is the shop aware of the RCRA/CPG requirement to use reclaimed coolant? *yes* _____ *no* _____

If the facility is aware of the requirement to do so yet still do not use reclaimed coolant, what is the explanation for not using this product?

Reclaimed coolant is not effective ____
Specifications don't allow use of reclaimed coolant ____
Reclaimed coolant is not available to the facility ____
Coolant reclamation devices are too costly ____
Other _____

Does the facility purchase coolant (reclaimed or virgin) for use in the shop using a government charge card at a commercial vendor (e.g., K-Mart or Sears) outside of the facility?

**May 12, 1999**

How does the facility dispose of coolant that is removed from facility vehicles (and is not reclaimed)? _____

**********

Please add any additional observations regarding this inspection.

_____
_____
_____
_____
_____

Inspectors are requested to forward a copy of this check sheet to the EPA Headquarters EO 13101 Program Manager within two weeks of the Federal facility inspection.

The checklist should be mailed to:

US Environmental Protection Agency
EO13101 Program Manager (mail code 2261A)
401 M Street SW
Washington, DC 20460

# FACILITY QUESTIONNAIRE

This questionnaire is designed to determine the level of your facility's awareness of and compliance with the recycled content procurement requirements of Executive Order 13101, Section 6002 of the Resource Conservation and Recovery Act (RCRA), and the corresponding recommendations and guidance provided by EPA. Please respond to each of the questions and return the questionnaire within two weeks to the address printed at the end of this form.

**THIS QUESTIONNAIRE SHOULD BE COMPLETED BY THOSE INDIVIDUALS MOST FAMILIAR WITH THE FACILITY'S ENVIRONMENTAL AND PROCUREMENT PROGRAMS.**

List below the name, address and point of contact for your facility and the phone number, email address and position of facility personnel completing this questionnaire.

_____

_____

_____

_____

**PLEASE PROVIDE A RESPONSE TO THE QUESTIONS LISTED BELOW. USE SPACE AT THE END OF THE QUESTIONNAIRE TO PROVIDE CLARIFICATION ON ANY RESPONSE; PLEASE REMEMBER TO INCLUDE THE QUESTION NUMBER WHEN PROVIDING ADDITIONAL INFORMATION OR CLARIFICATION.**

#1a) Prior to the receipt of this questionnaire, was your facility's environmental manager aware of the requirements in RCRA 6002 for the procurement of EPA designated recycled content products? ***yes*** _____ ***no*** _____

#1b) Was your facility's procurement manager aware of the requirements in RCRA 6002 for the procurement of EPA designated recycled content products? ***yes*** _____ ***no*** _____

#2) Do you know whether your agency (i.e. Department of Defense, Department of Agriculture) has an Affirmative Procurement Program (APP) established to meet the requirements of EO 12873, EO 13101 and/or RCRA 6002? ***yes*** _____ ***no*** _____

If yes to #2, do you have a written or electronic copy of the APP for your agency? ***yes*** _____ ***no*** _____

#3) Does your facility have a policy or program which places a preference on procurement of items containing recycled content or manufactured from recovered materials? ***yes*** _____ ***no*** _____

If yes to #3, is the program formal (e.g., written policy signed by facility manager, director

or commander)? ***yes*** _____ ***no*** _____

If yes to #3, does your facility announce and publicize the program to potential and active vendors providing services or materials to the facility? ***yes*** _____ ***no*** _____
If yes, how does your facility accomplish this?
_____

If yes to #3, how does your facility promote the program to facility and shop level personnel?
_____

If yes to #3, does your facility monitor and review the effectiveness of the program including the tracking of purchases? ***yes*** _____ ***no*** _____

If yes to #3, which entity or office in your facility (e.g., supply - procurement -shop manager) is responsible for implementing the program? (list as many as appropriate)
_____

#4) Does your facility's acquisition and/or procurement planning process investigate and/or emphasize the use of recycled content products? ***yes*** _____ ***no*** _____

If yes to #4, when you return this questionnaire, please provide a copy of a contract or procurement document or procurement policy that reflects the process described.

#5) Are personnel at your facility who are authorized to use government credit cards for procurement of items for use at your facility informed of the requirement to purchase designated recycled content products? ***yes*** _____ ***no*** _____

#6) Are records of credit card purchases of designated recycled content items maintained at your facility? ***yes*** _____ ***no*** _____

#7) Please list a sample of any items you know of that are purchased by your facility which contain recycled content or are manufactured from recovered materials **and are not on EPA's list of designated recycled content items** (that list is attached in matrix form to this document)**.**
_____
_____

#8) Would you like to receive additional information regarding the Comprehensive Procurement Guidelines? ***yes*** _____ ***no*** _____

#9) Please list any items, issues or questions that are not part of this questionnaire that you feel should be included ?

**May 12, 1999**

**Attached to this document is a matrix listing each of the EPA designated recycled content items. Please complete the matrix by placing an x in the appropriate box beside each item on the matrix.**

EPA will be periodically updating this document and the guidance for inspectors. If you have additional suggestions or comments regarding this document, please add them to this page prior to returning it to EPA.

## Please complete the attached matrix and return it along with this questionnaire and any other supporting documentation to:

US Environmental Protection Agency
EO13101 Program Manager (mail code 2261A)
401 M Street SW
Washington, DC 20460

Facility personnel are encouraged to contact the RCRA hotline at 800-424-9346 or search the Internet at **http://www.epa.gov/cpg/products/htm** or **http://www.ofee.gov/** for further information about the Federal Government Buy-Recycled Program.

**May 12, 1999**

United States
Environmental Protection
Agency

Office of Solid Waste
and Emergency Response
(5104)

EPA 550-B-01-003
October 2001
www.epa.gov/ceppo

# LIST OF LISTS

## Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act

- EPCRA Section 302 Extremely Hazardous Substances
- CERCLA Hazardous Substances
- EPCRA Section 313 Toxic Chemicals
- CAA 112(r) Regulated Chemicals For Accidental Release Prevention

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## LIST OF LISTS
## Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112(r) of the Clean Air Act

This consolidated chemical list includes chemicals subject to reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA), also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)[1], and chemicals listed under section 112(r) of the Clean Air Act (CAA). This consolidated list has been prepared to help firms handling chemicals determine whether they need to submit reports under sections 302, 304, or 313 of EPCRA and, for a specific chemical, what reports may need to be submitted. It will also help firms determine whether they will be subject to accident prevention regulations under CAA section 112(r). Separate lists are also provided of Resource Conservation and Recovery Act (RCRA) waste streams and unlisted hazardous wastes, and of radionuclides reportable under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). These lists should be used as a reference tool, not as a definitive source of compliance information. Compliance information for EPCRA is published in the Code of Federal Regulations (CFR), 40 CFR Parts 302, 355, and 372. Compliance information for CAA section 112(r) is published in 40 CFR Part 68. This document is also available in a searchable database format at http://www.epa.gov/ceppo/ap-otgu.htm.

The chemicals on the consolidated list are ordered both by the Chemical Abstracts Service (CAS) registry number and alphabetically. For the list ordered by CAS number, categories of chemicals which generally do not have CAS registry numbers, but which are cited under CERCLA, are placed at the front of the list. EPCRA section 313 categories are placed at the end of the list with their 313 category code.

The lists include chemicals referenced under five federal statutory provisions, discussed below. More than one chemical name may be listed for one CAS number because the same chemical may appear on different lists under different names. For example, for CAS number 8001-35-2, the names toxaphene (from the section 313 list), camphechlor (from the section 302 list), and camphene, octachloro- (from the CERCLA list) all appear on this consolidated list. The chemical names on the consolidated lists generally are those names used in the regulatory programs developed under EPCRA, CERCLA, and CAA section 112(r), but each chemical may have other synonyms that do not appear on these lists.

### (1) **EPCRA Section 302 Extremely Hazardous Substances (EHSs)**

The presence of EHSs in quantities at or above the Threshold Planning Quantity (TPQ) requires certain emergency planning activities to be conducted. The extremely hazardous substances and their TPQs are listed in 40 CFR Part 355, Appendices A and B. For section 302 EHSs, Local Emergency Planning Committees (LEPCs) must develop emergency response plans and facilities must notify the State Emergency Response Commission (SERC) and LEPC if they receive or produce the substance on site at or above the EHS's TPQ. Additionally if the TPQ is met, facilities with a listed EHS are subject to the reporting requirements of EPCRA section 311 (provide material safety data sheet or a list of covered chemicals to the SERC, LEPC, and local fire department) and section 312 (submit inventory

[1] This consolidated list does not include all chemicals subject to the reporting requirements in EPCRA sections 311 and 312. These hazardous chemicals, for which material safety data sheets (MSDS) must be developed under the Hazard Communication Standard (29 CFR 1910.1200), are identified by broad criteria, rather than by enumeration. There are over 500,000 products that satisfy the criteria. See 40 CFR Part 370 for more information.

form - Tier I or Tier II). The minimum threshold for section 311-312 reporting for EHS substances is 500 pounds or the TPQ, whichever is less.

**TPQ**. The consolidated list presents the TPQ (in pounds) for section 302 chemicals in the column following the CAS number. For chemicals that are solids, there may be two TPQs given (e.g., 500/10,000). In these cases, the lower quantity applies for solids in powder form with particle size less than 100 microns, or if the substance is in solution or in molten form. Otherwise, the 10,000 pound TPQ applies.

**EHS RQ**. Releases of reportable quantities (RQ) of EHSs are subject to state and local reporting under section 304 of EPCRA. EPA has promulgated a rule (61 FR 20473, May 7, 1996) that adjusted RQs for EHSs without CERCLA RQs to levels equal to their TPQs. The EHS RQ column lists these adjusted RQs for EHSs not listed under CERCLA and the CERCLA RQs for those EHSs that are CERCLA hazardous substances (see the next section for a discussion of CERCLA Rqs).

Note that ammonium hydroxide is not covered under section 302; the EHS RQ is based on anhydrous ammonia. Ammonium hydroxide (which is also known as aqueous ammonia) is subject to CERCLA, with its own RQ.

(2) **CERCLA Hazardous Substances**

Releases of CERCLA hazardous substances, in quantities equal to or greater than their reportable quantity (RQ), are subject to reporting to the National Response Center under CERCLA. Such releases are also subject to state and local reporting under section 304 of EPCRA. CERCLA hazardous substances, and their reportable quantities, are listed in 40 CFR Part 302, Table 302.4. Radionuclides listed under CERCLA are provided in a separate list, with RQs in Curies.

**RQ**. The CERCLA RQ column in the consolidated list shows the RQs (in pounds) for chemicals that are CERCLA hazardous substances. Carbamate wastes under RCRA that have been added to the CERCLA list with statutory one-pound RQs are indicated by an asterisk ("*") following the RQ.

*Metals*. For metals listed under CERCLA (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc), no reporting of releases of the solid form is required if the mean diameter of the pieces of the solid metal released is greater than 100 micrometers (0.004 inches). The RQs shown on the consolidated list apply to smaller particles.

Note that the consolidated list does not include all CERCLA regulatory synonyms. See 40 CFR Part 302, Table 302.4 for a complete list.

There have been a few additions and deletions to Table 302.4 since this document was last updated (November 1998). Hazardous wastes K174 and K175 have been added to this list. Removed from Table 302.4 are caprolactam (CAS 105-60-2), 2,4,6-tribromophenol (CAS 118-79-6), and K140 floor sweepings, off-specification products and spent filtermedia from the production of 2,4,6-tribromophenol.

### (3) **CAA Section 112(r) List of Substances for Accidental Release Prevention**

Under the accident prevention provisions of section 112(r) of the CAA, EPA developed a list of 77 toxic substances and 63 flammable substances. Threshold quantities (TQs) were established for these substances. The list and TQs identify processes subject to accident prevention regulations. The list of substances and TQs and the requirements for risk management programs for accidental release prevention are found in 40 CFR Part 68. This consolidated list includes both the common name for each listed chemical under section 112(r) and the chemical name, if different from the common name, as separate listings.

The CAA section 112(r) list includes several substances in solution that are covered only in concentrations above a specified level. These substances include ammonia (concentration 20% or greater) (CAS number 7664-41-7); hydrochloric acid (37% or greater) (7647-01-0); hydrogen fluoride/hydrofluoric acid (50% or greater) (7664-39-3); and nitric acid (80% or greater) (7697-37-2). Hydrogen chloride (anhydrous) and ammonia (anhydrous) are listed, in addition to the solutions of these substances, with different TQs. Only the anhydrous form of sulfur dioxide (7446-09-5) is covered. These substances are presented on the consolidated list with the concentration limit or specified form (e.g., anhydrous), as they are listed under CAA section 112(r). Flammable fuels used as a fuel or held for sale as a fuel at a retail facility are not subject to the rule.

**TQ**. The CAA section 112(r) TQ column in the consolidated list shows the TQs (in pounds) for chemicals listed for accidental release prevention. The TQ applies to the quantity of substance in a process, not at the facility as a whole.

### (4) **EPCRA Section 313 Toxic Chemicals**

Emissions, transfers, and waste management data for chemicals listed under section 313 must be reported annually as part of the community right-to-know provisions of EPCRA (40 CFR Part 372).

**Section 313.** The notation "313" in the column for section 313 indicates that the chemical is subject to reporting under section 313 and section 6607 of the Pollution Prevention Act under the name listed. In cases where a chemical is listed under section 313 with a second name in parentheses or brackets, the second name is included on this consolidated list with an "X" in the section 313 column. An "X" in this column also may indicate that the same chemical with the same CAS number appears on another list with a different chemical name. Since the last updating of the list in November 1998, a number of reporting thresholds have changed. These include reporting thresholds for 18 chemicals that meet the EPCRA section 313 criteria for persistence and bioaccumulation, as well as lead and lead compounds (except lead contained in stainless steel, brass, and bronze alloys). Chemicals that have had reporting thresholds changed are marked with a “ ^ ” symbol on the list. The revised thresholds are listed at the end of this section.

*Diisocyanates, Dioxins and Dioxin-like Compounds, and PACs*. In the November 30, 1994, expansion of the section 313 list, 20 specific chemicals were added as members of the diisocyanate category, and 19 specific chemicals were added as members of the polycyclic aromatic compounds (PAC) category. In October 1999, EPA added a category of dioxin and dioxin-like compounds that includes 17 specific chemicals. These chemicals are included in the CAS order listing on this consolidated list. The symbol "#" following the "313" notation in the section 313 column identifies diisocyanates, the symbol “!” identifies the dioxin and dioxin-like compounds, and the symbol "+"

identifies PACs, as noted in the Summary of Codes. Chemicals belonging to these categories are reportable under section 313 by category, rather than by individual chemical name.

*Ammonium Salts*. The EPCRA section listing for ammonia includes the following qualifier "includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing". The qualifier for ammonia means that anhydrous forms of ammonia are 100% reportable and aqueous forms are limited to 10% of total aqueous ammonia. Therefore, when determining threshold and releases and other waste management quantities all anhydrous ammonia is included but only 10% of total aqueous ammonia is included. Any evaporation of ammonia from aqueous ammonia solutions is considered anhydrous ammonia and should be included in threshold determinations and release and other waste management calculations.

In this document ammonium salts are not specifically identified as being reportable EPCRA section 313 chemicals. However, water dissociable ammonia salts, such as ammonium chloride, are reportable if they are placed in water. When ammonium salts are placed in water, reportable aqueous ammonia is manufactured. As indicated in the ammonia qualifier, all aqueous ammonia solutions from water dissociable ammonium salts are covered by the ammonia listing. For example, ammonium chloride is a water dissociable ammonium salt and reportable aqueous ammonia will be manufactured when it is placed in water.

Unlike other ammonium salts, ammonium hydroxide is specifically identified as being a reportable EPCRA section 313 chemical. This is because the chemical ammonium hydroxide (NH4OH) is a misnomer. It is a common name used to describe a solution of ammonia in water (i.e., aqueous ammonia), typically a concentrated solution of 28 to 30 percent ammonia. EPA has consistently responded to questions regarding the reportability of these purported ammonium hydroxide solutions under the EPCRA Section 313 ammonia listing by stating that these are 28 to 30 percent solutions of ammonia in water and that the solutions are reportable under the EPCRA Section 313 ammonia listing. For a more detailed discussion, see page 34175 of the Federal Register final rule of June 30, 1995 (60 FR 34172). (See also EPA's EPCRA section 313, *Guidance for Reporting Aqueous Ammonia*, EPA 745-R-00-005, www.epa.gov/TRI)

*Additions*. Added to the list of toxic chemicals subject to reporting under EPCRA section 313 are seven chemicals and two chemical compound categories. These are:

Chemicals

| | **CAS** |
|---|---|
| 1) benzo(g,h,i)perylene | 191242 |
| 2) benzo(j,k)fluorine (as a member of the PACs category) | 206440 |
| 3) 3-methylcholanthrene (as a member of the PACs category) | 56495 |
| 4) octachlorostyrene | 29082744 |
| 5) pentachlorobenzene | 608935 |
| 6) tetrabromobisphenol A | 79947 |
| 7) vandium (except when contained in an alloy) | 7440622 |

Chemical Categories

| | **Category Code** |
|---|---|
| 1) vandium compounds | N770 |

2) dioxin and dioxin like compounds (Manufacturing; and the processing or otherwise use of dioxin and dioxin like compounds if the dioxin and dioxin-like compounds are present as contaminants in a chemical and if they were created during the manufacturing of that chemical) . . . . . N150

*Stayed Chemicals*. There are three EPRCA section 313 chemicals that are listed in the CFR but for which the Agency has issued an administrative stay that excludes them from reporting until the stays are lifted. These chemicals, identified by "313s" in the Sec. 313 table column, are methyl mercaptan (CAS number 74-93-1), hydrogen sulfide (CAS number 7783-06-4), and 2,2-dibromo-3-nitrilopropionamide (CAS number 10222-01-2). Check the TRI website (www.epa.gov/triexplorer) for updated regulatory information.

*TRI Thresholds*. Reporting under EPCRA section 313 is triggered by the quantity of a chemical that is manufactured, processed, or otherwise used during the calendar year. For most TRI chemicals, the thresholds are 25,000 pounds manufactured or processed or 10,000 pound otherwise used. EPA has recently lowered the reporting thresholds for certain chemicals and chemical categories that meet the criteria for persistence and bioaccumulation. The following list provides the thresholds for these chemicals( in pounds unless otherwise noted):

| **Chemical Name or Category** | **CAS Number** | **Threshold (lbs)** |
|---|---|---|
| Aldrin | 309-00-2 | 100 |
| Benzo(g,h,i)perylene | 191-24-2 | 10 |
| Chlordane | 57-74-9 | 10 |
| Dioxin and dioxin-like compound category (manufacturing; and processing or otherwise use of dioxin and dioxin-like compounds if they are present as contaminants in a chemical and if they were created during the manufacture of that chemical) | NA | 0.1 gram |
| Heptachlor | 76-44-8 | 10 |
| Hexachlorobenzene | 118-74-1 | 10 |
| Isodrin | 465-73-6 | 10 |
| Lead and lead compounds except lead contained in stainless steel, brass, and bronze alloys (applies to reporting for 2001(due July 2002) and later) | NA | 100 |
| Methoxychlor | 72-43-5 | 100 |
| Octachlorostyrene | 29082-74-4 | 10 |
| Pendimethalin | 40487-42-1 | 100 |
| Pentachlorobenzene | 608-93-5 | 10 |
| Polycyclic aromatic compounds category | NA | 100 |
| Polychlorinated biphenyls (PCBs) | 1336-36-3 | 10 |

| | | |
|---|---|---|
| Tetrabromobisphenol A | 79-94-7 | 100 |
| Toxaphene | 8001-35-2 | 10 |
| Trifluralin | 1582-09-8 | 100 |
| Mercury | 7439-97-6 | 10 |
| Mercury compounds | NA | 10 |

(5) **Chemical Categories**

The CERCLA and EPCRA section 313 lists include a number of chemical categories as well as specific chemicals. Categories appear on this consolidated list at the end of the CAS number listing. Specific chemicals listed as members of the diisocyanates, dioxin and dioxin-like compounds, and PAC categories under EPCRA section 313 (see section (4) above) are included in the list of specific chemicals by CAS number, not in the category listing. The chemicals on the consolidated list have not been systematically evaluated to determine whether they fall into any of the CERCLA listed categories, but EPA has attempted to identify those listed chemicals that are clearly reportable under one or more of the EPCRA section 313 categories.

Some chemicals not specifically listed under CERCLA may be subject to CERCLA reporting as part of a category. For example, strychnine sulfate (CAS number 60-41-3), listed under EPCRA section 302, is not individually listed on the CERCLA list, but is subject to CERCLA reporting under the listing for strychnine and salts (CAS number 57-24-9), with an RQ of 10 pounds. Similarly, nicotine sulfate (CAS number 65-30-5) is subject to CERCLA reporting under the listing for nicotine and salts (CAS number 54-11-5, RQ 100 pounds), and warfarin sodium (CAS number 129-06-6) is subject to CERCLA reporting under the listing for warfarin and salts, concentration >0.3% (CAS number 81-81-2, RQ 100 pounds). Note that some CERCLA listings, although they include CAS numbers, are for general categories and are not restricted to the specific CAS number (e.g., warfarin and salts). The CERCLA list also includes a number of generic categories that have not been assigned RQs; chemicals falling into these categories are considered CERCLA hazardous substances, but are not required to be reported under CERCLA unless otherwise listed under CERCLA with an RQ.

A number of chemical categories are subject to EPCRA section 313 reporting. Certain chemicals listed under EPCRA section 302, CERCLA, or CAA section 112(r) may belong to section 313 categories. For example, mercuric acetate (CAS number 1600-27-7), listed under section 302, is not specifically listed under section 313, but is reportable under the section 313 "Mercury Compounds" category (no CAS number). Listed chemicals that have been identified as being reportable under one or more EPCRA section 313 categories are identified by “313c” in the Sec. 313 table column.

(6) **RCRA Hazardous Wastes**

The consolidated list includes specific chemicals from the RCRA P and U lists only (40 CFR 261.33). This listing is provided as an indicator that companies may already have data on a specific chemical that may be useful for EPCRA reporting. It is not intended to be a comprehensive list of RCRA P and U chemicals. RCRA hazardous wastes consisting of waste streams on the F and K lists, and wastes exhibiting the characteristics of ignitability, corrosivity, reactivity, and toxicity, are provided in a

separate list. This list also includes carbamate wastes added to the CERCLA list with one-pound statutory RQs (indicated by an asterisk ("*") following the RQ). The descriptions of the F and K waste streams have been abbreviated; see 40 CFR Part 302, Table 302.4, or 40 CFR Part 261 for complete descriptions.

**RCRA Code**. The letter-and-digit code in the RCRA Code column is the chemical's RCRA hazardous waste code.

## Summary of Codes

^ Reporting threshold has changed since November 1998.
+ Member of PAC category.
# Member of diisocyanate category.
X Indicates that this is a second name for a chemical already included on this consolidated list. May also indicate that the same chemical with the same CAS number appears on another list with a different chemical name.
* RCRA carbamate waste; statutory one-pound RQ applies until RQs are adjusted.
** This chemical was identified from a Premanufacture Review Notice (PMN) submitted to EPA. The submitter has claimed certain information on the submission to be confidential, including specific chemical identity.
*** Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 *Federal Register* 13456 (April 4, 1985). Values in Section 313 column represent Category Codes for reporting under Section 313.
c Although not listed by name and CAS number, this chemical is reportable under one or more of the EPCRA section 313 chemical categories.
s Indicates that this chemical is currently under an administrative stay of the EPCRA section 313 reporting requirements, therefore, no Toxics Release Inventory reports are required until the stay is removed.
! Member of the dioxin and dioxin-like compounds category.

The list of chemicals that follows is too long to include in this Reference Book. We have left one page as an example of what the list looks like. The complete list can be downloaded at http://www.epa.ov/ceppo/pus/title3.pdf.

| NAME | CAS/ 313 Category Codes | Section 302 (EHS) TPQ | Section 304 EHS RQ | CERCLA RQ | Section 313 | RCRA CODE | CAA 112(r) TQ |
|---|---|---|---|---|---|---|---|
| Chlordane (Technical Mixture and Metabolites) | 0 | | | *** | | | |
| Chlorinated Benzenes | 0 | | | *** | | | |
| Chlorinated Ethanes | 0 | | | *** | | | |
| Chlorinated Naphthalene | 0 | | | *** | | | |
| Chloroalkyl Ethers | 0 | | | *** | | | |
| Coke Oven Emissions | 0 | | | 1 | | | |
| DDT and Metabolites | 0 | | | *** | | | |
| Dichlorobenzidine | 0 | | | *** | | | |
| Diphenylhydrazine | 0 | | | *** | | | |
| Endosulfan and Metabolites | 0 | | | *** | | | |
| Endrin and Metabolites | 0 | | | *** | | | |
| Fine mineral fibers | 0 | | | *** | | | |
| Haloethers | 0 | | | *** | | | |
| Halomethanes | 0 | | | *** | | | |
| Heptachlor and Metabolites | 0 | | | *** | | | |
| Nitrophenols | 0 | | | *** | | | |
| Nitrosamines | 0 | | | *** | | | |
| Organorhodium Complex (PMN-82-147) | 0 | 10/10,000 | 10 | ** | | | |
| Phthalate Esters | 0 | | | *** | | | |
| Polycyclic organic matter | 0 | | | *** | | | |
| Polynuclear Aromatic Hydrocarbons | 0 | | | *** | | | |
| Formaldehyde | 50-00-0 | 500 | 100 | 100 | 313 | U122 | 15,000 |
| Formaldehyde (solution) | 50-00-0 | 500 | 100 | 100 | X | U122 | 15,000 |
| Mitomycin C | 50-07-7 | 500/10,000 | 10 | 10 | | U010 | |
| Ergocalciferol | 50-14-6 | 1,000/10,000 | 1,000 | | | | |
| Cyclophosphamide | 50-18-0 | | | 10 | | U058 | |
| DDT | 50-29-3 | | | 1 | | U061 | |
| Benzo[a]pyrene | 50-32-8 | | | 1 | 313+^ | U022 | |
| Reserpine | 50-55-5 | | | 5,000 | | U200 | |
| Piperonyl butoxide | 51-03-6 | | | | 313 | | |
| 5-Fluorouracil | 51-21-8 | 500/10,000 | 500 | | X | | |
| Fluorouracil | 51-21-8 | 500/10,000 | 500 | | 313 | | |
| 2,4-Dinitrophenol | 51-28-5 | | | 10 | 313 | P048 | |
| Epinephrine | 51-43-4 | | | 1,000 | | P042 | |
| 2-Chloro-N-(2-chloroethyl)-N-methylethanamine | 51-75-2 | 10 | 10 | | X | | |
| Mechlorethamine | 51-75-2 | 10 | 10 | | X | | |
| Nitrogen mustard | 51-75-2 | 10 | 10 | | 313 | | |
| Carbamic acid, ethyl ester | 51-79-6 | | | 100 | X | U238 | |
| Ethyl carbamate | 51-79-6 | | | 100 | X | U238 | |
| Urethane | 51-79-6 | | | 100 | 313 | U238 | |
| Carbachol chloride | 51-83-2 | 500/10,000 | 500 | | | | |
| Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-,dimethyl ester | 52-68-6 | | | 100 | X | | |
| Trichlorfon | 52-68-6 | | | 100 | 313 | | |
| Famphur | 52-85-7 | | | 1,000 | 313 | P097 | |
| Dibenz[a,h]anthracene | 53-70-3 | | | 1 | 313+^ | U063 | |

# FEDERAL LEADERSHIP IN HIGH PERFORMANCE and SUSTAINABLE BUILDINGS
# MEMORANDUM OF UNDERSTANDING

**PURPOSE:** With this Memorandum of Understanding (MOU), signatory agencies commit to federal leadership in the design, construction, and operation of High-Performance and Sustainable Buildings. A major element of this strategy is the implementation of common strategies for planning, acquiring, siting, designing, building, operating, and maintaining High Performance and Sustainable Buildings. The signatory agencies will also coordinate with complementary efforts in the private and public sectors.

**BACKGROUND AND FEDERAL POLICY:** The Federal government owns approximately 445,000 buildings with total floor space of over 3.0 billion square feet, in addition to leasing an additional 57,000 buildings comprising 374 million square feet of floor space. These structures and their sites affect our natural environment, our economy, and the productivity and health of the workers and visitors that use these buildings.

Therefore, the Federal government is committed to designing, locating, constructing, maintaining, and operating its facilities in an energy efficient and sustainable manner that strives to achieve a balance that will realize high standards of living, wider sharing of life=s amenities, maximum attainable reuse and recycling of depletable resources, in an economically viable manner, consistent with Department and Agency missions. In doing so and where appropriate, we encourage the use of life cycle concepts, consensus-based standards, and performance measurement and verification methods that utilize good science, and lead to sustainable buildings.

**GOALS AND OBJECTIVES OF THIS MOU:** Consistent with and in addition to Federal policy, statutes, executive orders and supplemental agency policies and guidance, the Parties to this MOU collaboratively seek to establish and follow a common set of sustainable Guiding Principles (attached) for integrated design, energy performance, water conservation, indoor environmental quality, and materials aimed at helping Federal agencies and organizations:

- Reduce the total ownership cost of facilities;
- Improve energy efficiency and water conservation;
- Provide safe, healthy, and productive built environments; and,
- Promote sustainable environmental stewardship.

**OTHER LAWS AND MATTERS:** This MOU is for internal management purposes of the Parties involved. It is not legally enforceable and shall not be construed to create any legal obligation on the part of any of the signatories. This MOU shall not be construed to provide a private right or cause of action for or by any person or entity. This MOU in no way restricts the Parties from participating in any activity with other public or private agencies, organizations or individuals.

The Parties mutually recognize and acknowledge that MOU implementation will be subject to financial, technical, and other mission-related considerations. It is not intended to create any rights, benefits, or trust responsibilities, either substantive or procedural, nor is it enforceable in law by a party against the US, its agencies, its officers, or any other person.

Collaboration under this MOU will be in accordance with applicable statutes and regulations governing the respective Parties. Nothing in this MOU is intended to affect existing obligations or other agreements of the Parties.

**EFFECTIVE PERIOD:** This MOU will become effective upon signature. It shall remain in effect unless otherwise modified or terminated. Any Party may withdraw upon 30 days written notification to the others.

**MODIFICATIONS:** This MOU can be modified through mutual written agreement among the Parties.

**ADMINISTRATION:** Agencies will strive to incorporate and adopt, as appropriate and practical, the attached *Guiding Principles* into existing agency policy and guidance within 180 days of signature. To assist with this effort, the Interagency Sustainability Working Group (ISWG) will provide technical guidance and updates for the *Guiding Principles*.

The Office of the Federal Environmental Executive will work with the ISWG and Federal Green Building Council to develop methods of reporting on progress towards this MOU in a manner that is least burdensome to the agencies. This may include incorporating reporting into existing mechanisms, such as executive order reports; but in any case with a goal of avoiding a separate reporting process.

# GUIDING PRINCIPLES
# FOR
# FEDERAL LEADERSHIP IN HIGH PERFORMANCE AND SUSTAINABLE BUILDINGS

## I. Employ Integrated Design Principles

**Integrated Design.** Use a collaborative, integrated planning and design process that

- Initiates and maintains an integrated project team in all stages of a project=s planning and delivery;
- Establishes performance goals for siting, energy, water, materials, and indoor environmental quality along with other comprehensive design goals; and, ensures incorporation of these goals throughout the design and lifecycle of the building; and,
- Considers all stages of the building=s lifecycle, including deconstruction.

**Commissioning.** Employ total building commissioning practices tailored to the size and complexity of the building and its system components in order to verify performance of building components and systems and help ensure that design requirements are met. This should include a designated commissioning authority, inclusion of commissioning requirements in construction documents, a commissioning plan, verification of the installation and performance of systems to be commissioned, and a commissioning report.

## II. Optimize Energy Performance

**Energy Efficiency.** Establish a whole building performance target that takes into account the intended use, occupancy, operations, plug loads, other energy demands, and design to earn the Energy Star7 targets for new construction and major renovation where applicable. For new construction, reduce the energy cost budget by 30 percent compared to the baseline building performance rating per the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (ASHRAE) and the Illuminating Engineering Society of North America (IESNA) Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential. For major renovations, reduce the energy cost budget by 20 percent below pre-renovations 2003 baseline.

**Measurement and Verification.** In accordance with DOE guidelines issued under section 103 of the Energy Policy Act of 2005 (EPAct), install building level utility meters in new major construction and renovation projects to track and continuously optimize performance. Compare actual performance data from the first year of operation with the energy design target. After one year of occupancy, measure all new major installations using the Energy Star7 Benchmarking Tool for building and space types covered by Energy Star7. Enter data and lessons learned from sustainable buildings into the High Performance Buildings Database.
(www.eere.energy.gov/femp/highperformance/index.cfm)

## III. Protect and Conserve Water

**Indoor Water**. Employ strategies that in aggregate use a minimum of 20 percent less potable water than the indoor water use baseline calculated for the building, after meeting the Energy Policy Act of 1992 fixture performance requirements.

**Outdoor Water**. Use water efficient landscape and irrigation strategies, including water reuse and recycling, to reduce outdoor potable water consumption by a minimum of 50 percent over that consumed by conventional means (plant species and plant densities). Employ design and construction strategies that reduce storm water runoff and polluted site water runoff.

## IV. Enhance Indoor Environmental Quality

**Ventilation and Thermal Comfort.** Meet the current ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy, including continuous humidity control within established ranges per climate zone, and ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality.

**Moisture Control.** Establish and implement a moisture control strategy for controlling moisture flows and condensation to prevent building damage and mold contamination.

**Daylighting.** Achieve a minimum of daylight factor of 2 percent (excluding all direct sunlight penetration) in 75 percent of all space occupied for critical visual tasks. Provide automatic dimming controls or accessible manual lighting controls, and appropriate glare control.

**Low-Emitting Materials**. Specify materials and products with low pollutant emissions, including adhesives, sealants, paints, carpet systems, and furnishings.

**Protect Indoor Air Quality during Construction**. Follow the recommended approach of the Sheet Metal and Air Conditioning Contractor=s National Association Indoor Air Quality Guidelines for Occupied Buildings under Construction, 1995. After construction and prior to occupancy, conduct a minimum 72-hour flush-out with maximum outdoor air consistent with achieving relative humidity no greater than 60 percent. After occupancy, continue flush-out as necessary to minimize exposure to contaminants from new building materials.

## V. Reduce Environmental Impact of Materials

**Recycled Content.** For EPA-designated products, use products meeting or exceeding EPA=s recycled content recommendations. For other products, use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project.

**Biobased Content.** For USDA-designated products, use products meeting or exceeding USDA=s biobased content recommendations. For other products, use biobased products made from rapidly renewable resources and certified sustainable wood products.

**Construction Waste**. During a project=s planning stage, identify local recycling and salvage operations that could process site related waste. Program the design to recycle or salvage at least 50 percent construction, demolition and land clearing waste, excluding soil, where markets or on-site recycling opportunities exist.

**Ozone Depleting Compounds**. Eliminate the use of ozone depleting compounds during and after construction where alternative environmentally preferable products are available, consistent with either the Montreal Protocol and Title VI of the Clean Air Act Amendments of 1990, or equivalent overall air quality benefits that take into account life cycle impacts.

**SIGNATORIES**

The undersigned individuals hereby execute this MOU on behalf of their respective agencies. The Parties envision that other Federal agencies may wish to join this MOU. The Parties encourage all Federal agencies that support the MOU goals and objectives to do so by signing the MOU and applying the *Guiding Principles*.

**Philip W. Grone**
Deputy Under Secretary of Defense for Installations and Environment
Department of Defense

24 January 2006
Date

**Douglas L. Faulkner**
Acting Assistant Secretary for Energy Efficiency and Renewable Energy
Department of Energy

24 January 06
Date

**David L. Winstead**
Commissioner, Public Buildings Service
General Services Administration

24 January '06
Date

**Robert J. Henke**
Assistant Secretary for Management
Office of Management
Department of Veterans Affairs

2/28/06
Date

P Lynn Scarlett

1-25-06

**P. Lynn Scarlett**
Deputy Secretary
Department of the Interior

Date

Ronald Deacon

1-24-2006

**Ronald L. Deacon**
Director, Facilities and Administrative Services
Department of Justice

Date

Thomas C Dorr

1-23-2006

**Thomas C. Dorr**
Under Secretary for Rural Development
Department of Agriculture

Date

1/23/2006

**Olga M. Dominguez**
Deputy Assistant Administrator for Infrastructure
and Administration
National Aeronautics and Space Administration

Date

1/24/2006

**Donald Bathurst**
Chief Administrative Services Officer
Department of Homeland Security

Date

**William C. Stamper**
Deputy Assistant Secretary
Office for Facilities Management & Policy
Department of Health and Human Services

1/24/06
Date

**Linda J. Washington**
Deputy Assistant Secretary for Administration,
Department of Transportation

1/24/06
Date

**John E. Long, Jr.**
Executive Vice President, Administrative Services
Tennessee Valley Authority

2-6-06
Date

**Luis A. Luna**
Assistant Administrator
Administration And Resources Management
Environmental Protection Agency

1/24/06
Date

**Henrietta H. Fore**
Under Secretary of State for Management
Department of State

3.6.06
Date

**General Charles E. Williams**
Director/COO
Overseas Buildings Operations
Department of State

5/6/06
Date

**Frank J. Coulter, Jr.**
Deputy Assistant Secretary
Representing the Agency Environmental Executive
Department of State

1-24-06
Date

**Keith Nelson**
Assistant Secretary of Administration
Department of Housing and Urban Development

3/02/06
Date

**Ronald C. Flom**
Associate Director, Management Services Division
Office of Personnel Management

1/24/06
Date

**Bryan Hannegan**
Chief of Staff,
Council on Environmental Quality
Executive Office of the President

1/24/06
Date

2/2/06

Date

**Patrick Pizzella**
Assistant Secretary for Administration and Management,
Environmental Executive
Department of Labor

02.23.06

Date

**Otto J. Wolff**
Chief Financial Officer and
Assistant Secretary for Administration,
Department of Commerce

v. 4 8/27/09

# E.O. 13423 SUSTAINABLE PRACTICES: GREEN PURCHASING, WASTE MANAGEMENT, AND CHEMICALS MANAGEMENT

Agency Report for Fiscal Year 2009

**Date Due: XXX XX, 2010**
Date Prepared: _____

Agency or Department: _____
Agency Contact: _____
Contact Telephone Number: _____
Contact E-mail Address: _____

## PART I: GREEN PURCHASING

### A. Federal Procurement Data System (FPDS) Data

(1) Attach the Resource Conservation and Recovery Act (RCRA) Standard Report for FY 2009 data from FPDS ("Recycled Content Product Purchasing Data Report").

(2) Has your agency reviewed the FY 2009 FPDS data for compliance assessment and/or trend analyses? Yes ☐ No ☐

(3) Please describe the findings, changes, and/or actions that were a direct result of the assessments or analyses above.

### B. Indicator Items for Environmental Protection Agency (EPA)-Designated Recycled Content Products

NOTE: Section 6002 of RCRA, E.O. 13423, and Part 23 of the Federal Acquisition Regulation (FAR) require Federal agencies to purchase recycled content products designated by EPA. The General Services Administration (GSA) Stock and Special Order programs and the Defense Logistics Agency (DLA) will provide data for agency purchases made directly from them.

(1)(a) Which of the products listed on the table below does your agency purchase directly or as part of a support services contract, including purchases made from GSA's Multiple Award Schedule (MAS)[1] vendors? Please check all that apply, and complete the table using the following guidance.

For each product checked, provide the total dollar amount[2] of these products purchased[3] by your agency from sources *other than* direct purchases from GSA's Stock and Special Order programs or DLA in FY 2009. In addition, provide (1) the dollar amount of these products containing

[1] Also known as Federal Supply Schedule vendors
[2] "Total amount" equals the amount of product without recovered materials plus the amount of product with recovered materials.
[3] Within this document, the term "purchased" includes both direct government purchases, as well as procurement of products through government contracts, including products supplied or used in the performance of contracts.

recovered materials[4] purchased by your agency from sources *other than* direct purchases from GSA's Stock and Special Order programs or DLA in FY 2009 OR (2) the percentage of your agency's facilities that purchased the item containing recovered materials OR, (3) for janitorial services only, the number of janitorial services contracts that required the supply of tissue products containing recovered materials.

| **Product Purchased (check all that are purchased or used in services contracts)** | **Total FY 2009 $ Amount Spent on Product Purchases** | **Total FY 2009 $ Amount Spent on Products Containing Recovered Materials OR** | **Percentage of Facilities Purchasing the Product Containing Recovered Materials OR** | **# of Janitorial Services Contracts that Require Products Containing Recovered Materials** | **Agency Specification Requires Use of Recovered Materials (Yes, No, N/A)** |
|---|---|---|---|---|---|
| ☐ **Tissue products** | | | | | |
| ☐ **Toner cartridges** | | | | | |
| ☐ **Landscaping timbers** | | | | | |
| ☐ **Park benches or picnic tables** | | | | | |
| ☐ **Traffic barricades** | | | | | |
| ☐ **Engine lubricating oil** | | | | | |
| ☐ **Signage** | | | | | |

(1)(b) For each product checked in section (1)(a) above, describe any technical impediments to increasing the purchase of these products containing recovered materials by your agency. Identify the item and the impediment(s) reported for that item: _____

(2) For **construction products**, demonstrate how your agency complies with the requirement to purchase EPA-designated construction products containing recovered materials or U.S. Department of Agriculture (USDA)-designated biobased construction products to the maximum extent practicable. Examples include integrating specific recycled content or biobased content product requirements with the use of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED)-NC or LEED-EB, incorporating recycled content or biobased content product requirements into design specifications, and inserting recycled content or biobased content product requirements in design/build contracts:

[4] The products designated by EPA are commonly referred to as "CPG-items" or "recycled content products." RCRA refers to them as "products containing recovered materials," which is the term used in this reporting document unless a more specific term, such as re-refined oil or retread tires, is used.

## C. ENERGY STAR, Energy-Efficient, EPEAT-Registered, and Water Conserving Products

(1) The Energy Policy Act of 2005 (EPAct 2005), E.O. 13423, and Part 23 of the FAR require Federal agencies to purchase ENERGY STAR and Federal Energy Management Program (FEMP)-designated energy efficient products unless the head of the agency determines that the products are not life cycle cost effective or are not reasonably available.

(a) Describe what your agency has done in FY 2009, not already reported in your FY 2008 report, to eliminate the purchase of non-ENERGY STAR or non-FEMP-designated products in purchases of products and services related to the following: office electronics; materials and equipment used in building construction, renovation, and maintenance; lighting; other equipment. An example might be when the head of acquisition issued a policy directive requiring the purchase of energy efficient products.

(b) Describe any FY 2009 updates or revisions to your agency's plans to revise policies, procedures, specifications, contract writing systems, and education materials, not already reported in your FY 2008 report, to ensure that the EPAct 2005 and FAR requirements are met.

(2) E.O. 13423 and the FAR require that 95 percent of purchases of products covered by an Electronic Product Environmental Assessment Tool (EPEAT) standard be EPEAT-registered products.

(a) Which mechanisms did your agency use in FY 2009 to purchase personal computers, monitors, and laptops? Check all that apply.

☐ Direct purchases of equipment via electronics supplies contract
☐ Direct purchases via blanket purchase agreement
☐ Direct purchases of equipment via purchase card
☐ Leases or seat management contracts
☐ Purchases from governmentwide acquisition contracts. Specify which one(s). _____
☐ Other. Specify. _____

(b) Did your agency include requirements to supply EPEAT-registered computer products in FY 2009 solicitations, contracts, and leases for IT equipment? Yes ☐ No ☐

(c) If the answer to (b) is no, what are your agency's plans to revise existing contracts in FY 2010 to incorporate the EPEAT requirements? _____

(3) E.O. 13423 requires agencies to reduce water consumption intensity, and the E.O. Implementing Instructions recommend that agencies purchase WaterSense-labeled products.

(a) In FY 2009, did your agency purchase WaterSense-labeled water conserving products or other water efficient products? Yes ☐ No ☐ If yes, please specify what types of products were purchased. _____

(b) What steps did your agency take in FY 2009, not already reported in your FY 2008 report, to ensure that WaterSense-labeled products or other water-efficient products

will be specified in future solicitations? _____

**D. USDA-Designated Biobased Products**

The Farm Security and Rural Investment Act (FSRIA) of 2002, E.O. 13423, and Part 23 of the FAR require Federal agencies to purchase USDA-designated biobased products, also known as BioPreferred products.

(1) Indicate which of the following products your agency purchased directly or as part of a support services contract, including purchases made from GSA MAS vendors. Of the products checked, indicate which ones your agency purchased containing biobased materials in FY 2009. Please note that this list has been expanded and re-organized from the FY 2008 report to include the BioPreferred items designated in USDA's Rounds 2, 3, and 4 rules. Please check all that apply in both columns.

| Product | Purchased in FY 2009 | Purchased in FY 2009 Containing Biobased Materials |
|---|---|---|
| Mobile equip. hydraulic fluid | ☐ | ☐ |
| Stationary equip. hydraulic fluid | ☐ | ☐ |
| Diesel fuel additives | ☐ | ☐ |
| 2-cycle engine oils | ☐ | ☐ |
| Penetrating lubricants | ☐ | ☐ |
| Greases | ☐ | ☐ |
| Metalworking fluids | ☐ | ☐ |
| Fire arm lubricants | ☐ | ☐ |
| Sorbents | ☐ | ☐ |
| Roof coatings | ☐ | ☐ |
| Water tank coatings | ☐ | ☐ |
| Fluid-filled transformers | ☐ | ☐ |
| Adhesive and mastic removers | ☐ | ☐ |
| Grease and graffiti removers | ☐ | ☐ |
| Carpet and upholstery cleaners | ☐ | ☐ |
| Floor strippers | ☐ | ☐ |
| Bathroom and spa cleaners | ☐ | ☐ |
| Glass cleaners | ☐ | ☐ |
| Laundry products | ☐ | ☐ |
| Hand cleaners and sanitizers | ☐ | ☐ |
| Carpet | ☐ | ☐ |
| Bedding/bed linens/towels | ☐ | ☐ |
| Composite panels | ☐ | ☐ |
| Plastic insulating foam | ☐ | ☐ |
| Films | ☐ | ☐ |
| Disposable cutlery | ☐ | ☐ |
| Disposable containers | ☐ | ☐ |
| Dust suppressants | ☐ | ☐ |

| | | |
|---|---|---|
| **General purpose de-icers** | ☐ | ☐ |
| **Concrete and asphalt release fluids** | ☐ | ☐ |
| **Wood and concrete sealers** | ☐ | ☐ |
| **Lip care products** | ☐ | ☐ |
| **Fertilizers** | ☐ | ☐ |

(2) For each biobased product checked above, describe any technical impediments to increasing the purchase by your agency of these products containing biobased materials. Identify the item and the impediment(s) reported for that item: _____

(3) FSRIA section 9002(d) requires procuring agencies that have responsibility for drafting or reviewing specifications to ensure that such specifications require the use of biobased products consistent with the requirements of section 9002.

(a) Does your agency have responsibility for drafting or reviewing specifications?
Yes ☐ No ☐

(b) If yes, in FY 2009 did your agency review specifications for any of the biobased products designated by USDA? Yes ☐ No ☐

(c) If answer to (b) is no, when does your agency plan to review specifications? _____

(d) If the answer to (b) is yes:

(i) List products for which specification review was completed in FY 2009. _____

(ii) List product specifications currently under review. _____

(iii) Identify applicable product specifications not yet under review. _____

(4) In FY 2009, did your agency purchase or test any biobased products, other than biobased fuels or the products designated by the USDA? Yes ☐ No ☐ Please provide details for your response. _____

**E. <u>Environmentally Preferable Products and Services</u>**

E.O. 13423 and Part 23 of the FAR require Federal agencies to purchase environmentally preferable products and services.

(1) In FY 2009, did your agency purchase any of the following environmentally preferable products and/or services, including those used at facilities managed by GSA and leased facilities? Check all that apply.

☐ Green janitorial products or services
☐ Green conference or meeting services

☐ Carpet with multiple attributes (e.g., recycled or biobased content, recyclable materials, low or no VOC-emitting adhesives, vendor take-back programs[5])
☐ Low or no volatile organic compound (VOC) paints
☐ Other, please elaborate. _____

(2) In FY 2009, did your agency initiate or participate in an agency or multi-agency pilot for purchasing any of the products or services falling within the Federal green purchasing program? Yes ☐ No ☐ If yes, please elaborate. _____

(3) Would your agency be willing to serve as the lead agency for a multi-agency pilot during FY 2010? Yes ☐ No ☐ If yes, what type of pilot project are you considering? _____

**F. <u>Management Controls</u>**

**(1) Green Purchasing Plans, Policies, and Procedures**

(a) All agencies must have formal, written, documented green purchasing plans, policies and/or procedures for the implementation of the statutory and executive order requirements to purchase green products and services. Indicate which components of the Federal green purchasing requirements your plans, policies, or procedures address, understanding that some of the requirements will be addressed in your agency's Sustainable Buildings Implementation Plans, Electronics Stewardship Plans, or other documents, policies, and procedures:

☐ EPA-designated recycled content products
☐ ENERGY STAR and energy efficient products, and low standby devices
☐ Biobased and USDA-designated BioPreferred products
☐ Environmentally preferable products and services
☐ Renewable energy
☐ WaterSense and other water-efficient products
☐ EPEAT-registered products
☐ Non-ozone depleting substances (ODSs) and/or those covered by EPA's Significant New Alternatives Policy (SNAP) program (chemicals and/or equipment)
☐ Alternative fuel vehicles and alternative fuels

(b) Does the agency policy or green purchasing plan define responsibility for:

Conducting awareness training? Yes ☐ No ☐

Incorporating green purchasing requirements into specification and contracts[6]? Yes ☐ No ☐

Establishing and measuring progress toward green purchasing objectives? Yes ☐ No ☐

[5] Under vendor take-back programs, the vendor takes back used carpet at the end of its useful life or when it will otherwise be replaced.
[6] "Contracts" includes concession contracts, referring to non-FAR regulated business contracts authorized through applicable agency legislation.

Reporting progress? Yes ☐ No ☐

Management review? Yes ☐ No ☐

Routinely updating the green purchasing plan, policies, or procedure?
Yes ☐ No ☐

If the answer to any question is no, please explain. _____

(c) What is the date of your current green purchasing plan? _____

(d) Please attach a copy of, or provide the URL(s) for, the website(s) for your agency green purchasing plan, policies, or procedure if any of them have changed since the FY 2007 and 2008 reports. _____

(e) Did your agency use acquisition forecasts in FY 2009 to promote its preference for green products? Yes ☐ No ☐ N/A

(f) Is your agency using, or planning to use, model solicitation and/or contract language to promote its preference for green products? Yes ☐ No ☐ N/A ☐

(g) If applicable, what other policies, procedures, or tools is your agency using or planning to use to promote its preference for green products? _____

**(2) Implementation**

(a)(i) Is your agency using its formal facility or organizational environmental management systems (EMS) to meet the statutory and executive order requirements to purchase green products and services? Yes ☐ No ☐ N/A ☐ If yes, please elaborate and provide at least one example, if not previously reported in the FY 2008 report. _____

(ii) Does your agency formally promote incorporating green purchasing into EMSs?
Yes ☐ No ☐ N/A ☐ If yes, how is this accomplished, if not previously described in the FY 2008 report? _____

(b) Does your agency have an on-line or manual system for tracking purchases of green products and services? Yes ☐ No ☐

(d) Was your agency contract writing system or enterprise asset management system revised in FY 2009 to incorporate the supply and use of green products?
Yes ☐ No ☐ N/A ☐

(e) In addition to including required clauses from FAR Part 23 in solicitations, does your agency require the description in FedBizOpps, at FAR Subpart 5.207(a)(16), to highlight for potential offerors or bidders that the acquisition includes a requirement for green products or services? Yes ☐ No ☐ N/A ☐

**(3) Training**

(a) Who is responsible for conducting training of agency personnel with respect to the green purchasing requirements? _____

(b) Has green purchasing training been added to all appropriate training, including training provided by contractors? _____

(c) What percentage of acquisition personnel received documented[7] green purchasing training (new or refresher) within the past fiscal year?[8] _____ of _____ personnel, which is _____ percent.

(d) Is training provided by agency personnel, an outside source (e.g., Defense Acquisition University's contracting officer training courses, GSA SmartPay, OFEE), or both? _____

(e) What percentage of purchase cardholders received documented green purchasing training (new or refresher) within the past fiscal year?[9] _____ of _____ personnel, which is _____ percent.

(f) Who provides the training to purchase cardholders? _____

(g) How is training of purchase cardholders documented? _____

(h) Indicate whether the green purchasing program components listed in the table below are covered in training for acquisition personnel and purchase cardholders, respectively:

| Component | Acquisition Training (Y/N) | Purchase Card Holders (Y/N) |
|---|---|---|
| EPA-designated recycled content products | | |
| ENERGY STAR, energy efficient products, and low standby power products | | |
| Biobased and USDA-designated BioPreferred products | | |
| Environmentally preferable products and services | | |
| Renewable energy | | |

[7] Documented training other than the Green Purchasing course available through the Office of Personnel Management's USALearning web site. OPM will provide data on use of this course to OMB and OFEE.
[8] Contracting officials and contracting officer technical representatives are required to earn continuous learning points each year, which can include green purchasing training.
[9] According to OMB Circular A-123, Appendix B, "Improving the Management of Government-Issued Charge Card Programs," issued August 2005 and updated April 2006, purchase cardholders, charge card mangers, and approving officials must receive training, and they must receive refresher training, at a minimum, every 3 years. Training "must familiarize the cardholders with Federal procurement laws and regulations, agency policies, and proper card use."

| | | |
|---|---|---|
| WaterSense and other water-efficient products | | |
| EPEAT-registered products | | |
| Non-ODSs and/or those covered by EPA's SNAP program (chemicals and/or equipment) | | |
| Alternative fuel vehicles/alternative fuels | | |

**(4) Program Management Review**[10]

(a) What approach does your agency use for reviewing facility and agency-wide compliance with the green purchasing requirements? Examples include reviewing a representative sample of contracting actions, on-site audits, and the use of the TEAM Guide or CP Track. _____

(b) What percentage of agency facilities conducted and documented contracting and/or environmental reviews for green purchasing compliance during this reporting period? _____ percent.

(c) Are findings reported to senior facility or agency management, as appropriate?
Yes ☐ No ☐

(d) Does your agency conduct trend analysis of program management reviews, training, and FPDS data to assess green purchasing program effectiveness? Yes ☐ No ☐

(e) What types of trends are realized as a result of findings from these audits? _____

(f) Are trends analyses reported to senior facility or agency management, as appropriate?
Yes ☐ No ☐

(g) Does senior facility management track corrective actions from these findings?
Yes ☐ No ☐

[10] Agencies may also refer to these activities as compliance monitoring, auditing, and compliance assessments.

## PART II: SOLID WASTE MANAGEMENT

### A. Solid Waste Prevention

(1) Did your agency institute new, substantially improved, or updated solid waste prevention practices in FY 2009? Yes ☐ No ☐ Please provide an explanation of your response.

(2)(a) Does your agency have sites or facilities with composting programs?
Yes ☐ No ☐

(b) If yes, how many facilities or sites? _____ Estimate the total weight of materials diverted to composting: _____ tons.

### B. Recycling

(1) What percentage of offices/sites operated by your agency has an active recycling program? _____ of _____ offices/sites, which is _____ percent.

(2) If applicable, what percentage of residential housing operated by your agency has an active household products recycling program? _____ of _____ sites, which is _____ percent of sites. Not applicable ☐

(3)(a) What percentage of total solid waste[11] generated by your agency was diverted in FY 2009? _____ of _____ tons, which is _____ percent.

(b) For agencies with offices in multi-tenant buildings, approximately what percentage of those buildings has a recycling program? _____

### C. Electronics Management

(1) What steps did your agency take in FY 2009, not already reported in FY 2008, to increase the life span of electronics to four years or greater and to decrease life spans shorter than 4 years? _____

(2) Describe how your agency addressed computer equipment power management in FY 2009, including enabling the ENERGY STAR features on computers and monitors. This information can be repeated from your 2009 OMB environmental stewardship progress reports. _____

(3)(a) Describe your agency's management of electronics equipment in an environmentally responsible manner at the end of the equipment's useful life, not previously reported on your FY 2008 report. _____

(b) Describe any new steps your agency took in FY 2009 to eliminate unsound electronics disposal practices. _____

[11] "Solid waste" refers to municipal solid waste as defined by EPA. Please indicate if your agency is including other materials, such as construction and demolition debris.

## PART III: TOXICS AND HAZARDOUS CHEMICALS MANAGEMENT

Briefly describe what your agency has done to implement its toxic and hazardous chemical management plan during FY 2009, specifically addressing any FY 2009 milestones identified in the plan. Do not report quantitative information (volume or dollars) on chemicals or chemical-containing products purchased or reduced.

## Subpart 4.3—Paper Documents

**4.300 Scope of subpart.**

This subpart provides policies and procedures on contractor-submitted paper documents.

**4.301 Definition.**

"Printed or copied double-sided," as used in this subpart, means printing or reproducing a document so that information is on both sides of a sheet of paper.

**4.302 Policy.**

When electronic commerce methods (see 4.502) are not being used, a contractor should submit paper documents to the Government relating to an acquisition printed or copied double-sided on recycled paper whenever practicable. If the contractor cannot print or copy double-sided, it should print or copy single-sided on recycled paper.

**4.303 Contract clause.**

Insert the clause at 52.204-4, Printed or Copied Double-Sided on Recycled Paper, in solicitations and contracts that exceed the simplified acquisition threshold.

**7.000 Scope of part.**

This part prescribes policies and procedures for—

(a) Developing acquisition plans;

(b) Determining whether to use commercial or Government resources for acquisition of supplies or services;

(c) Deciding whether it is more economical to lease equipment rather than purchase it; and

(d) Determining whether functions are inherently governmental.

## Subpart 7.1—Acquisition Plans

**7.101 Definitions.**

As used in this subpart—

"Acquisition streamlining" means any effort that results in more efficient and effective use of resources to design and develop, or produce quality systems. This includes ensuring that only necessary and cost-effective requirements are included, at the most appropriate time in the acquisition cycle, in solicitations and resulting contracts for the design, development, and production of new systems, or for modifications to existing systems that involve redesign of systems or subsystems.

"Life-cycle cost" means the total cost to the Government of acquiring, operating, supporting, and (if applicable) disposing of the items being acquired.

"Order" means an order placed under a—

(1) Federal Supply Schedule contract; or

(2) Task-order contract or delivery-order contract awarded by another agency, (*i.e.,* Governmentwide acquisition contract or multi-agency contract).

"Planner" means the designated person or office responsible for developing and maintaining a written plan, or for the planning function in those acquisitions not requiring a written plan.

**7.102 Policy.**

(a) Agencies shall perform acquisition planning and conduct market research (see Part 10) for all acquisitions in order to promote and provide for—

(1) Acquisition of commercial items or, to the extent that commercial items suitable to meet the agency's needs are not available, nondevelopmental items, to the maximum extent practicable (10 U.S.C. 2377 and 41 U.S.C. 251, *et seq*.); and

(2) Full and open competition (see Part 6) or, when full and open competition is not required in accordance with Part 6, to obtain competition to the maximum extent practicable, with due regard to the nature of the supplies or services to be acquired (10 U.S.C. 2301(a)(5) and 41 U.S.C. 253a(a)(1)).

(b) This planning shall integrate the efforts of all personnel responsible for significant aspects of the acquisition. The purpose of this planning is to ensure that the Government meets its needs in the most effective, economical, and timely manner. Agencies that have a detailed acquisition planning system in place that generally meets the requirements of 7.104 and 7.105 need not revise their system to specifically meet all of these requirements.

**7.103 Agency-head responsibilities.**

The agency head or a designee shall prescribe procedures for—

(a) Promoting and providing for full and open competition (see Part 6) or, when full and open competition is not required in accordance with Part 6, for obtaining competition to the maximum extent practicable, with due regard to the nature of the supplies and services to be acquired (10 U.S.C. 2301(a)(5) and 41 U.S.C. 253a(a)(1)).

(b) Encouraging offerors to supply commercial items, or to the extent that commercial items suitable to meet the agency needs are not available, nondevelopmental items in response to agency solicitations (10 U.S.C. 2377 and 41 U.S.C. 251, *et seq*.); and

(c) Ensuring that acquisition planners address the requirement to specify needs, develop specifications, and to solicit offers in such a manner to promote and provide for full and open competition with due regard to the nature of the supplies and services to be acquired (10 U.S.C. 2305(a)(1)(A) and 41 U.S.C. 253a(a)(1)). (See Part 6 and 10.002.)

(d) Establishing criteria and thresholds at which increasingly greater detail and formality in the planning process is required as the acquisition becomes more complex and costly, specifying those cases in which a written plan shall be prepared.

(e) Writing plans either on a systems basis, on an individual contract basis, or on an individual order basis, depending upon the acquisition.

(f) Ensuring that the principles of this subpart are used, as appropriate, for those acquisitions that do not require a written plan as well as for those that do.

(g) Designating planners for acquisitions.

(h) Reviewing and approving acquisition plans and revisions to these plans.

(i) Establishing criteria and thresholds at which design-to-cost and life-cycle-cost techniques will be used.

(j) Establishing standard acquisition plan formats, if desired, suitable to agency needs; and

(k) Waiving requirements of detail and formality, as necessary, in planning for acquisitions having compressed delivery or performance schedules because of the urgency of the need.

(l) Assuring that the contracting officer, prior to contracting, reviews:

(1) The acquisition history of the supplies and services; and

(2) A description of the supplies, including, when necessary for adequate description, a picture, drawing, diagram, or other graphic representation.

(m) Ensuring that agency planners include use of the metric system of measurement in proposed acquisitions in accordance with 15 U.S.C. 205b (see 11.002(b)) and agency metric plans and guidelines.

(n) Ensuring that agency planners—

(1) Specify needs for printing and writing paper consistent with the minimum content standards specified in section 505 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition (see 11.303); and

(2) Comply with the policy in 11.002(d) regarding procurement of biobased products, products containing recovered materials, and environmentally preferable and energy-efficient products and services.

(o) Ensuring that acquisition planners specify needs and develop plans, drawings, work statements, specifications, or other product descriptions that address Electronic and Information Technology Accessibility Standards (see 36 CFR Part 1194) in proposed acquisitions (see 11.002(e)) and that these standards are included in requirements planning, as appropriate (see Subpart 39.2).

(p) Making a determination, prior to issuance of a solicitation for advisory and assistance services involving the analysis and evaluation of proposals submitted in response to a solicitation, that a sufficient number of covered personnel with the training and capability to perform an evaluation and analysis of proposals submitted in response to a solicitation are not readily available within the agency or from another Federal agency in accordance with the guidelines at 37.204.

(q) Ensuring that no purchase request is initiated or contract entered into that would result in the performance of an inherently governmental function by a contractor and that all contracts or orders are adequately managed so as to ensure effective official control over contract or order performance.

(r) Ensuring that knowledge gained from prior acquisitions is used to further refine requirements and acquisition strategies. For services, greater use of performance-based acquisition methods should occur for follow-on acquisitions.

(s) Ensuring that acquisition planners, to the maximum extent practicable—

(1) Structure contract requirements to facilitate competition by and among small business concerns; and

(2) Avoid unnecessary and unjustified bundling that precludes small business participation as contractors (see 7.107) (15 U.S.C. 631(j)).

(t) Ensuring that agency planners on information technology acquisitions comply with the capital planning and investment control requirements in 40 U.S.C. 11312 and OMB Circular A-130.

(u) Ensuring that agency planners on information technology acquisitions comply with the information technology security requirements in the Federal Information Security Management Act (44 U.S.C. 3544), OMB's implementing policies including Appendix III of OMB Circular A-130, and guidance and standards from the Department of Commerce's National Institute of Standards and Technology.

(v) Encouraging agency planners to consider the use of a project labor agreement (see subpart 22.5).

(w) Ensuring that contracting officers consult the Disaster Response Registry at *www.ccr.gov* as a part of acquisition planning for debris removal, distribution of supplies, reconstruction, and other disaster or emergency relief activities inside the United States and outlying areas. (See 26.205).

**7.104 General procedures.**

(a) Acquisition planning should begin as soon as the agency need is identified, preferably well in advance of the fiscal year in which contract award or order placement is necessary. In developing the plan, the planner shall form a team consisting of all those who will be responsible for significant aspects of the acquisition, such as contracting, fiscal, legal, and technical personnel. If contract performance is to be in a designated operational area or supporting a diplomatic or consular mission, the planner shall also consider inclusion of the combatant commander or chief of mission, as appropriate. The planner should review previous plans for similar acquisitions and discuss them with the key personnel involved in those acquisitions. At key dates specified in the plan or whenever significant changes occur, and no less often than annually, the planner shall review the plan and, if appropriate, revise it.

(b) Requirements and logistics personnel should avoid issuing requirements on an urgent basis or with unrealistic delivery or performance schedules, since it generally restricts competition and increases prices. Early in the planning process, the planner should consult with requirements and logistics personnel who determine type, quality, quantity, and delivery requirements.

(c) The planner shall coordinate with and secure the concurrence of the contracting officer in all acquisition planning. If the plan proposes using other than full and open competition when awarding a contract, the plan shall also be coordinated with the cognizant competition advocate.

(d)(1) The planner shall coordinate the acquisition plan or strategy with the cognizant small business specialist when the strategy contemplates an acquisition meeting the dollar amounts in paragraph (d)(2) of this section unless the contract or order is entirely reserved or set-aside for small business under Part 19. The small business specialist shall notify the agency Office of Small and Disadvantaged Business Utilization if the strategy involves contract bundling that is unnecessary, unjustified, or not identified as bundled by the agency. If the strategy involves substantial bundling, the small business specialist shall assist in identifying alternative strategies that would reduce or minimize the scope of the bundling.

(2)(i) The strategy shall be coordinated with the cognizant small business specialist in accordance with paragraph (d)(1) of this section if the estimated contract or order value is—

(A) $8 million or more for the Department of Defense;

(B) $6 million or more for the National Aeronautics and Space Administration, the General Services Administration, and the Department of Energy; and

(C) $2.5 million or more for all other agencies.

(ii) If the strategy contemplates the award of multiple contracts or orders, the thresholds in paragraph (d)(2)(i) of this section apply to the cumulative maximum potential value, including options, of the contracts and orders.

**7.105 Contents of written acquisition plans.**

In order to facilitate attainment of the acquisition objectives, the plan must identify those milestones at which decisions should be made (see paragraph (b)(18) of this section). The plan must address all the technical, business, management, and other significant considerations that will control the acquisition. The specific content of plans will vary, depending on the nature, circumstances, and stage of the acquisition. In preparing the plan, the planner must follow the applicable instructions in paragraphs (a) and (b) of this section, together with the agency's implementing procedures. Acquisition plans for service contracts or orders must describe the strategies for implementing performance-based acquisition methods or must provide rationale for not using those methods (see Subpart 37.6).

(a) *Acquisition background and objectives*— (1) *Statement of need*. Introduce the plan by a brief statement of need. Summarize the technical and contractual history of the acquisition. Discuss feasible acquisition alternatives, the impact of prior acquisitions on those alternatives, and any related in-house effort.

(2) *Applicable conditions*. State all significant conditions affecting the acquisition, such as—

(i) Requirements for compatibility with existing or future systems or programs; and

(ii) Any known cost, schedule, and capability or performance constraints.

(3) *Cost.* Set forth the established cost goals for the acquisition and the rationale supporting them, and discuss related cost concepts to be employed, including, as appropriate, the following items:

(i) *Life-cycle cost*. Discuss how life-cycle cost will be considered. If it is not used, explain why. If appropriate, discuss the cost model used to develop life-cycle-cost estimates.

(ii) *Design-to-cost*. Describe the design-to-cost objective(s) and underlying assumptions, including the rationale for quantity, learning-curve, and economic adjustment factors. Describe how objectives are to be applied, tracked, and enforced. Indicate specific related solicitation and contractual requirements to be imposed.

(iii) *Application of should-cost*. Describe the application of should-cost analysis to the acquisition (see 15.407-4).

(4) *Capability or performance*. Specify the required capabilities or performance characteristics of the supplies or the performance standards of the services being acquired and state how they are related to the need.

(5) *Delivery or performance-period requirements*. Describe the basis for establishing delivery or performance-period requirements (see Subpart 11.4). Explain and provide reasons for any urgency if it results in concurrency of development and production or constitutes justification for not providing for full and open competition.

(6) *Trade-offs*. Discuss the expected consequences of trade-offs among the various cost, capability or performance, and schedule goals.

(7) *Risks*. Discuss technical, cost, and schedule risks and describe what efforts are planned or underway to reduce risk and the consequences of failure to achieve goals. If concurrency of development and production is planned, discuss its effects on cost and schedule risks.

(8) *Acquisition streamlining*. If specifically designated by the requiring agency as a program subject to acquisition streamlining, discuss plans and procedures to—

(i) Encourage industry participation by using draft solicitations, presolicitation conferences, and other means of stimulating industry involvement during design and development in recommending the most appropriate application and tailoring of contract requirements;

(ii) Select and tailor only the necessary and cost-effective requirements; and

(iii) State the timeframe for identifying which of those specifications and standards, originally provided for guidance only, shall become mandatory.

(b) *Plan of action*— (1) *Sources*. Indicate the prospective sources of supplies or services that can meet the need. Consider required sources of supplies or services (see Part 8) and sources identifiable through databases including the Governmentwide database of contracts and other procurement instruments intended for use by multiple agencies available at *www.contractdirectory.gov/contractdirectory/*. Include consideration of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns (see Part 19), and the impact of any bundling that might affect their participation in the acquisition (see 7.107) (15 U.S.C. 644(e)). When the proposed acquisition strategy involves bundling, identify the incumbent contractors and contracts affected by the bundling. Address the extent and results of the market research and indicate their impact on the various elements of the plan (see Part 10).

(2) *Competition.* (i) Describe how competition will be sought, promoted, and sustained throughout the course of the

acquisition. If full and open competition is not contemplated, cite the authority in 6.302, discuss the basis for the application of that authority, identify the source(s), and discuss why full and open competition cannot be obtained.

(ii) Identify the major components or subsystems. Discuss component breakout plans relative to these major components or subsystems. Describe how competition will be sought, promoted, and sustained for these components or subsystems.

(iii) Describe how competition will be sought, promoted, and sustained for spares and repair parts. Identify the key logistic milestones, such as technical data delivery schedules and acquisition method coding conferences, that affect competition.

(iv) When effective subcontract competition is both feasible and desirable, describe how such subcontract competition will be sought, promoted, and sustained throughout the course of the acquisition. Identify any known barriers to increasing subcontract competition and address how to overcome them.

(3) *Source-selection procedures.* Discuss the source-selection procedures for the acquisition, including the timing for submission and evaluation of proposals, and the relationship of evaluation factors to the attainment of the acquisition objectives (see Subpart 15.3). When an EVMS is required (see FAR 34.202(a)) and a pre-award IBR is contemplated, the acquisition plan must discuss—

(i) How the pre-award IBR will be considered in the source selection decision;

(ii) How it will be conducted in the source selection process (see FAR 15.306); and

(iii) Whether offerors will be directly compensated for the costs of participating in a pre-award IBR.

(4) *Acquisition considerations.*(i) For each contract contemplated, discuss contract type selection (see Part 16); use of multiyear contracting, options, or other special contracting methods (see Part 17); any special clauses, special solicitation provisions, or FAR deviations required (see Subpart 1.4); whether sealed bidding or negotiation will be used and why; whether equipment will be acquired by lease or purchase (see Subpart 7.4) and why; and any other contracting considerations. Provide rationale if a performance-based acquisition will not be used or if a performance-based acquisition for services is contemplated on other than a firm-fixed-price basis (see 37.102(a), 16.103(d), and 16.505(a)(3)).

(ii) For each order contemplated, discuss—

(A) For information technology acquisitions, how the capital planning and investment control requirements of 40 U.S.C. 11312 and OMB Circular A-130 will be met (see 7.103(t) and Part 39); and

(B) Why this action benefits the Government, such as when—

*(1)* The agency can accomplish its mission more efficiently and effectively (*e.g.,* take advantage of the servicing agency's specialized expertise; or gain access to contractors with needed expertise); or

*(2)* Ordering through an indefinite delivery contract facilitates access to small business concerns, including small disadvantaged business concerns, 8(a) contractors, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns, or service-disabled veteran-owned small business concerns.

(iii) For information technology acquisitions using Internet Protocol, discuss whether the requirements documents include the Internet Protocol compliance requirements specified in 11.002(g) or a waiver of these requirements has been granted by the agency's Chief Information Officer.

(5) *Budgeting and funding.* Include budget estimates, explain how they were derived, and discuss the schedule for obtaining adequate funds at the time they are required (see Subpart 32.7).

(6) *Product or service descriptions.* Explain the choice of product or service description types (including performance-based acquisition descriptions) to be used in the acquisition.

(7) *Priorities, allocations, and allotments*. When urgency of the requirement dictates a particularly short delivery or performance schedule, certain priorities may apply. If so, specify the method for obtaining and using priorities, allocations, and allotments, and the reasons for them (see Subpart 11.6).

(8) *Contractor versus Government performance*. Address the consideration given to OMB Circular No. A-76 (see Subpart 7.3).

(9) *Inherently governmental functions*. Address the consideration given to Subpart 7.5.

(10) *Management information requirements*. Discuss, as appropriate, what management system will be used by the Government to monitor the contractor's effort. If an Earned Value Management System is to be used, discuss the methodology the Government will employ to analyze and use the earned value data to assess and monitor contract performance. In addition, discuss how the offeror's/contractor's EVMS will be verified for compliance with the American National Standards Institute/Electronics Industries Alliance (ANSI/EIA) Standard-748, Earned Value Management Systems, and the timing and conduct of integrated baseline reviews (whether prior to or post award). (See 34.202.)

(11) *Make or buy.* Discuss any consideration given to make-or-buy programs (see 15.407-2).

(12) *Test and evaluation.* To the extent applicable, describe the test program of the contractor and the Government. Describe the test program for each major phase of a major system acquisition. If concurrency is planned, discuss the extent of testing to be accomplished before production release.

(13) *Logistics considerations*. Describe—

(i) The assumptions determining contractor or agency support, both initially and over the life of the acquisition, including consideration of contractor or agency mainte-

nance and servicing (see Subpart 7.3), support for contracts to be performed in a designated operational area or supporting a diplomatic or consular mission (see 25.301-3); and distribution of commercial items;

(ii) The reliability, maintainability, and quality assurance requirements, including any planned use of warranties (see Part 46);

(iii) The requirements for contractor data (including repurchase data) and data rights, their estimated cost, and the use to be made of the data (see Part 27); and

(iv) Standardization concepts, including the necessity to designate, in accordance with agency procedures, technical equipment as "standard" so that future purchases of the equipment can be made from the same manufacturing source.

(14) *Government-furnished property.* Indicate any Government property to be furnished to contractors, and discuss any associated considerations, such as its availability or the schedule for its acquisition (see 45.102).

(15) *Government-furnished information.* Discuss any Government information, such as manuals, drawings, and test data, to be provided to prospective offerors and contractors. Indicate which information that requires additional controls to monitor access and distribution (*e.g.*, technical specifications, maps, building designs, schedules, etc.), as determined by the agency, is to be posted via the enhanced controls of the GPE at http://www.fedbizopps.gov (see 5.102(a)).

(16) *Environmental and energy conservation objectives*. Discuss all applicable environmental and energy conservation objectives associated with the acquisition (see Part 23), the applicability of an environmental assessment or environmental impact statement (see 40 CFR 1502), the proposed resolution of environmental issues, and any environmentally-related requirements to be included in solicitations and contracts.

(17) *Security considerations*. For acquisitions dealing with classified matters, discuss how adequate security will be established, maintained, and monitored (see Subpart 4.4). For information technology acquisitions, discuss how agency information security requirements will be met. For acquisitions requiring routine contractor physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system, discuss how agency requirements for personal identity verification of contractors will be met (see Subpart 4.13).

(18) *Contract administration*. Describe how the contract will be administered. In contracts for services, include how inspection and acceptance corresponding to the work statement's performance criteria will be enforced.

(19) *Other considerations.* Discuss, as applicable:

(i) Standardization concepts;

(ii) The industrial readiness program;

(iii) The Defense Production Act;

(iv) The Occupational Safety and Health Act;

(v) Support Anti-terrorism by Fostering Effective Technologies Act of 2002 (SAFETY Act) (see Subpart 50.2);

(vi) Foreign sales implications;

(vii) Special requirements for contracts to be performed in a designated operational area or supporting a diplomatic or consular mission; and

(viii) Any other matters germane to the plan not covered elsewhere.

(20) *Milestones for the acquisition cycle*. Address the following steps and any others appropriate:

Acquisition plan approval.
Statement of work.
Specifications.
Data requirements.
Completion of acquisition-package preparation.
Purchase request.
Justification and approval for other than full and open competition where applicable and/or any required D&F approval.
Issuance of synopsis.
Issuance of solicitation.
Evaluation of proposals, audits, and field reports.
Beginning and completion of negotiations.
Contract preparation, review, and clearance.
Contract award.

(21) *Identification of participants in acquisition plan preparation*. List the individuals who participated in preparing the acquisition plan, giving contact information for each.

**7.106 Additional requirements for major systems.**

(a) In planning for the solicitation of a major system (see Part 34) development contract, planners shall consider requiring offerors to include, in their offers, proposals to incorporate in the design of a major system—

(1) Items which are currently available within the supply system of the agency responsible for the major system, available elsewhere in the national supply system, or commercially available from more than one source; and

(2) Items which the Government will be able to acquire competitively in the future if they are likely to be needed in substantial quantities during the system's service life.

(b) In planning for the solicitation of a major system (see Part 34) production contract, planners shall consider requiring offerors to include, in their offers, proposals identifying opportunities to assure that the Government will be able to obtain, on a competitive basis, items acquired in connection with the system that are likely to be acquired in substantial quantities during the service life of the system. Proposals submitted in response to such requirements may include the following:

(1) Proposals to provide the Government the right to use technical data to be provided under the contract for competitive future acquisitions, together with the cost to the Govern-

**10.000 Scope of part.**

This part prescribes policies and procedures for conducting market research to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services. This part implements the requirements of 41 U.S.C. 253a(a)(1), 41 U.S.C. 264b, 10 U.S.C. 2377, and 6 U.S.C. 796.

**10.001 Policy.**

(a) Agencies must—

(1) Ensure that legitimate needs are identified and trade-offs evaluated to acquire items that meet those needs;

(2) Conduct market research appropriate to the circumstances—

(i) Before developing new requirements documents for an acquisition by that agency;

(ii) Before soliciting offers for acquisitions with an estimated value in excess of the simplified acquisition threshold;

(iii) Before soliciting offers for acquisitions with an estimated value less than the simplified acquisition threshold when adequate information is not available and the circumstances justify its cost;

(iv) Before soliciting offers for acquisitions that could lead to a bundled contract (15 U.S.C. 644(e)(2)(A));

(v) Before awarding a task or delivery order under an indefinite-delivery/indefinite-quantity (ID/IQ) contract (*e.g.*, GWACs, MACs) for a noncommercial item in excess of the simplified acquisition threshold (10 U.S.C. 2377(c)); and

(vi) On an ongoing basis, take advantage (to the maximum extent practicable) of commercially available market research methods in order to effectively identify the capabilities of small businesses and new entrants into Federal contracting that are available in the marketplace for meeting the requirements of the agency in furtherance of—

(A) A contingency operation or defense against or recovery from nuclear, biological, chemical, or radiological attack; and

(B) Disaster relief to include debris removal, distribution of supplies, reconstruction, and other disaster or emergency relief activities. (See 26.205).

(3) Use the results of market research to—

(i) Determine if sources capable of satisfying the agency's requirements exist;

(ii) Determine if commercial items or, to the extent commercial items suitable to meet the agency's needs are not available, nondevelopmental items are available that—

(A) Meet the agency's requirements;

(B) Could be modified to meet the agency's requirements; or

(C) Could meet the agency's requirements if those requirements were modified to a reasonable extent;

(iii) Determine the extent to which commercial items or nondevelopmental items could be incorporated at the component level;

(iv) Determine the practices of firms engaged in producing, distributing, and supporting commercial items, such as type of contract, terms for warranties, buyer financing, maintenance and packaging, and marking;

(v) Ensure maximum practicable use of recovered materials (see Subpart 23.4) and promote energy conservation and efficiency; and

(vi) Determine whether bundling is necessary and justified (see 7.107) (15 U.S.C. 644(e)(2)(A)).

(vii) Assess the availability of electronic and information technology that meets all or part of the applicable accessibility standards issued by the Architectural and Transportation Barriers Compliance Board at 36 CFR Part 1194 (see Subpart 39.2).

(b) When conducting market research, agencies should not request potential sources to submit more than the minimum information necessary.

(c) If an agency contemplates awarding a bundled contract, the agency—

(1) When performing market research, should consult with the local Small Business Administration procurement center representative (PCR). If a PCR is not assigned, see 19.402(a); and

(2) At least 30 days before release of the solicitation or 30 days prior to placing an order without a solicitation—

(i) Must notify any affected incumbent small business concerns of the Government's intention to bundle the requirement; and

(ii) Should notify any affected incumbent small business concerns of how the concerns may contact the appropriate Small Business Administration representative.

(d) See 44.402(a)(2) and 52.244-6 (Alternate I) for the requirement for a prime contractor to perform market research in contracts in excess of $5 million for the procurement of items other than commercial items.

**10.002 Procedures.**

(a) Acquisitions begin with a description of the Government's needs stated in terms sufficient to allow conduct of market research.

(b) Market research is then conducted to determine if commercial items or nondevelopmental items are available to meet the Government's needs or could be modified to meet the Government's needs.

(1) The extent of market research will vary, depending on such factors as urgency, estimated dollar value, complexity, and past experience. The contracting officer may use market research conducted within 18 months before the award of any task or delivery order if the information is still current, accurate, and relevant. Market research involves obtaining

**11.000 Scope of part.**

This part prescribes policies and procedures for describing agency needs.

**11.001 Definitions.**

As used in this part—

"Reconditioned" means restored to the original normal operating condition by readjustments and material replacement.

"Remanufactured" means factory rebuilt to original specifications.

**11.002 Policy.**

(a) In fulfilling requirements of 10 U.S.C. 2305(a)(1), 10 U.S.C. 2377, 41 U.S.C. 253a(a), and 41 U.S.C. 264b, agencies shall—

(1) Specify needs using market research in a manner designed to—

(i) Promote full and open competition (see Part 6), or maximum practicable competition when using simplified acquisition procedures, with due regard to the nature of the supplies or services to be acquired; and

(ii) Only include restrictive provisions or conditions to the extent necessary to satisfy the needs of the agency or as authorized by law.

(2) To the maximum extent practicable, ensure that acquisition officials—

(i) State requirements with respect to an acquisition of supplies or services in terms of—

(A) Functions to be performed;

(B) Performance required; or

(C) Essential physical characteristics;

(ii) Define requirements in terms that enable and encourage offerors to supply commercial items, or, to the extent that commercial items suitable to meet the agency's needs are not available, nondevelopmental items, in response to the agency solicitations;

(iii) Provide offerors of commercial items and nondevelopmental items an opportunity to compete in any acquisition to fill such requirements;

(iv) Require prime contractors and subcontractors at all tiers under the agency contracts to incorporate commercial items or nondevelopmental items as components of items supplied to the agency; and

(v) Modify requirements in appropriate cases to ensure that the requirements can be met by commercial items or, to the extent that commercial items suitable to meet the agency's needs are not available, nondevelopmental items.

(b) The Metric Conversion Act of 1975, as amended by the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 205a, *et seq.*), designates the metric system of measurement as the preferred system of weights and measures for United States trade and commerce, and it requires that each agency use the metric system of measurement in its acquisitions, except to the extent that such use is impracticable or is likely to cause significant inefficiencies or loss of markets to United States firms. Requiring activities are responsible for establishing guidance implementing this policy in formulating their requirements for acquisitions.

(c) To the extent practicable and consistent with Subpart 9.5, potential offerors should be given an opportunity to comment on agency requirements or to recommend application and tailoring of requirements documents and alternative approaches. Requiring agencies should apply specifications, standards, and related documents initially for guidance only, making final decisions on the application and tailoring of these documents as a product of the design and development process. Requiring agencies should not dictate detailed design solutions prematurely (see 7.101 and 7.105(a)(8)).

(d)(1) When agencies acquire products and services, various statutes and executive orders (identified in Part 23) require consideration of—

(i) Energy-efficient products and services (Subpart 23.2);

(ii) Products and services that utilize renewable energy technologies (Subpart 23.2);

(iii) Products containing energy-efficient standby power devices (Subpart 23.2);

(iv) Products containing recovered materials (Subpart 23.4);

(v) Biobased products (Subpart 23.4); and

(vi) Environmentally preferable products and services (Subpart 23.7).

(2) Executive agencies shall consider maximum practicable use of products and services listed in paragraph (d)(1) of this section when—

(i) Developing, reviewing, or revising Federal and military specifications, product descriptions (including commercial item descriptions) and standards;

(ii) Describing Government requirements for products and services; and

(iii) Developing source-selection factors.

(e) Some or all of the performance levels or performance specifications in a solicitation may be identified as targets rather than as fixed or minimum requirements.

(f) In accordance with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d), requiring activities must prepare requirements documents for electronic and information technology that comply with the applicable accessibility standards issued by the Architectural and Transportation Barriers Compliance Board at 36 CFR Part 1194 (see Subpart 39.2).

(g) Unless the agency Chief Information Officer waives the requirement, when acquiring information technology using Internet Protocol, the requirements documents must include reference to the appropriate technical capabilities defined in

the USGv6 Profile (NIST Special Publication 500-267) and the corresponding declarations of conformance defined in the USGv6 Test Program. The applicability of IPv6 to agency networks, infrastructure, and applications specific to individual acquisitions will be in accordance with the agency's Enterprise Architecture (see OMB Memorandum M-05-22 dated August 2, 2005).

(h) Agencies shall not include in a solicitation a requirement that prohibits an offeror from permitting its employees to telecommute unless the contracting officer executes a written determination in accordance with FAR 7.108(a).

## Subpart 11.1—Selecting and Developing Requirements Documents

### 11.101 Order of precedence for requirements documents.

(a) Agencies may select from existing requirements documents, modify or combine existing requirements documents, or create new requirements documents to meet agency needs, consistent with the following order of precedence:

(1) Documents mandated for use by law.

(2) Performance-oriented documents (*e.g.,* a PWS or SOO). (See 2.101.)

(3) Detailed design-oriented documents.

(4) Standards, specifications and related publications issued by the Government outside the Defense or Federal series for the non-repetitive acquisition of items.

(b) In accordance with OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities," and Section 12(d) of the National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113 (15 U.S.C. 272 note), agencies must use voluntary consensus standards, when they exist, in lieu of Government-unique standards, except where inconsistent with law or otherwise impractical. The private sector manages and administers voluntary consensus standards. Such standards are not mandated by law (*e.g.*, industry standards such as ISO 9000, and IEEE 1680).

### 11.102 Standardization program.

Agencies shall select existing requirements documents or develop new requirements documents that meet the needs of the agency in accordance with the guidance contained in the Federal Standardization Manual, FSPM-0001; for DoD components, DoD 4120.24-M, Defense Standardization Program Policies and Procedures; and for IT standards and guidance, the Federal Information Processing Standards Publications (FIPS PUBS). The Federal Standardization Manual may be obtained from the General Services Administration (see address in 11.201(d)(1)). DoD 4120.24-M may be obtained from DoD (see 11.201(d)(2) or 11.201(d)(3)). FIPS PUBS may be obtained from the Government Printing Office (GPO), or the Department of Commerce's National Technical Information Service (NTIS) (see address in 11.201(d)(4)).

### 11.103 Market acceptance.

(a) Section 8002(c) of Pub. L. 103-355 provides that, in accordance with agency procedures, the head of an agency may, under appropriate circumstances, require offerors to demonstrate that the items offered—

(1) Have either—

(i) Achieved commercial market acceptance; or

(ii) Been satisfactorily supplied to an agency under current or recent contracts for the same or similar requirements; and

(2) Otherwise meet the item description, specifications, or other criteria prescribed in the public notice and solicitation.

(b) Appropriate circumstances may, for example, include situations where the agency's minimum need is for an item that has a demonstrated reliability, performance or product support record in a specified environment. Use of market acceptance is inappropriate when new or evolving items may meet the agency's needs.

(c) In developing criteria for demonstrating that an item has achieved commercial market acceptance, the contracting officer shall ensure the criteria in the solicitation—

(1) Reflect the minimum need of the agency and are reasonably related to the demonstration of an item's acceptability to meet the agency's minimum need;

(2) Relate to an item's performance and intended use, not an offeror's capability;

(3) Are supported by market research;

(4) Include consideration of items supplied satisfactorily under recent or current Government contracts, for the same or similar items; and

(5) Consider the entire relevant commercial market, including small business concerns.

(d) Commercial market acceptance shall not be used as a sole criterion to evaluate whether an item meets the Government's requirements.

(e) When commercial market acceptance is used, the contracting officer shall document the file to—

(1) Describe the circumstances justifying the use of commercial market acceptance criteria; and

(2) Support the specific criteria being used.

### 11.104 Use of brand name or equal purchase descriptions.

(a) While the use of performance specifications is preferred to encourage offerors to propose innovative solutions, the use of brand name or equal purchase descriptions may be advantageous under certain circumstances.

(b) Brand name or equal purchase descriptions must include, in addition to the brand name, a general description of those salient physical, functional, or performance charac-

## Subpart 11.3—Acceptable Material

**11.301 Definitions.**

As used in this subpart—

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as—

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

"Recovered material" for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

(1) Postconsumer fiber.

(2) Manufacturing wastes such as—

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

**11.302 Policy.**

(a) Agencies must not require virgin material or supplies composed of or manufactured using virgin material unless compelled by law or regulation or unless virgin material is vital for safety or meeting performance requirements of the contract.

(b)(1) When acquiring other than commercial items, agencies must require offerors to identify used, reconditioned, or remanufactured supplies; or unused former Government surplus property proposed for use under the contract. These supplies or property may not be used in contract performance unless authorized by the contracting officer.

(2) When acquiring commercial items, the contracting officer must consider the customary practices in the industry for the item being acquired. The contracting officer may require offerors to provide information on used, reconditioned, or remanufactured supplies, or unused former Government surplus property proposed for use under the contract. The request for the information must be included in the solicitation, and to the maximum extent practicable must be limited to information or standards consistent with normal commercial practices.

(c)(1) When the contracting officer needs additional information to determine whether supplies meet minimum recovered material or biobased standards stated in the solicitation, the contracting officer may require offerors to submit additional information on the recycled or biobased content or related standards. The request for the information must be included in the solicitation. When acquiring commercial items, limit the information to the maximum extent practicable to that available under normal commercial practices.

(2) For biobased products, the contracting officer may require vendors to provide information on life cycle costs and environmental and health benefits in accordance with 7 CFR 2902.8.

**11.303 Special requirements for printing and writing paper.**

(a) Section 505 of Executive Order 13101, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, establishes minimum recovered material content standards for agency purchases of printing and writing paper. Section 505 requires that 100 percent of an agency's purchases of printing and writing paper must meet or exceed one of the minimum content standards specified in paragraph (b) of this section.

(b) For high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock, the minimum content standard must be no less than 30 percent postconsumer materials. If paper containing 30 percent postconsumer material is not reasonably available, does not meet reasonable performance requirements, or is only available at an unreasonable price, then the agency must purchase paper containing no less than 20 percent postconsumer material.

**11.304 Contract clause.**

Insert the clause at 52.211-5, Material Requirements, in solicitations and contracts for supplies that are not commercial items.

cable provision of law not included on the list set forth in paragraph (a) of this section unless the FAR Council has already determined in writing that the law is applicable. The Administrator, OFPP, will include the law on the list in paragraph (a) of this section unless the FAR Council makes a determination that it is applicable within 60 days of receiving the petition.

**13.006 Inapplicable provisions and clauses.**

While certain statutes still apply, pursuant to Public Law 103-355, the following provisions and clauses are inapplicable to contracts and subcontracts at or below the simplified acquisition threshold:

(a) 52.203-5, Covenant Against Contingent Fees.

(b) 52.203-6, Restrictions on Subcontractor Sales to the Government.

(c) 52.203-7, Anti-Kickback Procedures.

(d) 52.215-2, Audits and Records—Negotiation, except as used with its Alternate I, when using funds appropriated or otherwise made available by the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5).

(e) 52.222-4, Contract Work Hours and Safety Standards Act—Overtime Compensation.

(f) 52.223-6, Drug-Free Workplace, except for individuals.

(g) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Items.

## Subpart 13.1—Procedures

**13.101 General.**

(a) In making purchases, contracting officers shall—

(1) Comply with the policy in 7.202 relating to economic purchase quantities, when practicable;

(2) Satisfy the procedures described in Subpart 19.6 with respect to Certificates of Competency before rejecting a quotation, oral or written, from a small business concern determined to be nonresponsible (see Subpart 9.1); and

(3) Provide for the inspection of supplies or services as prescribed in 46.404.

(b) In making purchases, contracting officers should—

(1) Include related items (such as small hardware items or spare parts for vehicles) in one solicitation and make award on an "all-or-none" or "multiple award" basis provided suppliers are so advised when quotations or offers are requested;

(2) Incorporate provisions and clauses by reference in solicitations and in awards under requests for quotations, provided the requirements in 52.102 are satisfied;

(3) Make maximum effort to obtain trade and prompt payment discounts (see 14.408-3). Prompt payment discounts shall not be considered in the evaluation of quotations; and

(4) Use bulk funding to the maximum extent practicable. Bulk funding is a system whereby the contracting officer receives authorization from a fiscal and accounting officer to obligate funds on purchase documents against a specified lump sum of funds reserved for the purpose for a specified period of time rather than obtaining individual obligational authority on each purchase document. Bulk funding is particularly appropriate if numerous purchases using the same type of funds are to be made during a given period.

**13.102 Source list.**

(a) Contracting officers should use the Central Contractor Registration database (see Subpart 4.11) at *http://www.ccr.gov* as their primary sources of vendor information. Offices maintaining additional vendor source files or listings should identify the status of each source (when the status is made known to the contracting office) in the following categories:

(1) Small business.

(2) Small disadvantaged business.

(3) Women-owned small business.

(4) HUBZone small business.

(5) Service-disabled veteran-owned small business.

(6) Veteran-owned small business.

(b) The status information may be used as the basis to ensure that small business concerns are provided the maximum practicable opportunities to respond to solicitations issued using simplified acquisition procedures.

**13.103 Use of standing price quotations.**

Authorized individuals do not have to obtain individual quotations for each purchase. Standing price quotations may be used if—

(a) The pricing information is current; and

(b) The Government obtains the benefit of maximum discounts before award.

**13.104 Promoting competition.**

The contracting officer must promote competition to the maximum extent practicable to obtain supplies and services from the source whose offer is the most advantageous to the Government, considering the administrative cost of the purchase.

(a) The contracting officer must not—

(1) Solicit quotations based on personal preference; or

(2) Restrict solicitation to suppliers of well-known and widely distributed makes or brands.

(b) If using simplified acquisition procedures and not providing access to the notice of proposed contract action and solicitation information through the Governmentwide point of entry (GPE), maximum practicable competition ordinarily can be obtained by soliciting quotations or offers from sources within the local trade area. Unless the contract action requires synopsis pursuant to 5.101 and an exception under 5.202 is not applicable, consider solicitation of at least three sources to promote competition to the maximum extent practicable.

# PART 23—ENVIRONMENT, ENERGY AND WATER EFFICIENCY, RENEWABLE ENERGY TECHNOLOGIES, OCCUPATIONAL SAFETY, AND DRUG-FREE WORKPLACE

*Sec.*


23.000 Scope.
23.001 Definition.

**Subpart 23.1—[Reserved]**

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23.203 Energy-efficient products.
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23.300 Scope of subpart.
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**Subpart 23.11—Encouraging Contractor Policies to Ban Text Messaging While Driving**

23.1101 Purpose.
23.1102 Applicability.
23.1103 Definitions.
23.1104 Policy.
23.1105 Contract clause.

**23.000 Scope.**

This part prescribes acquisition policies and procedures supporting the Government's program for ensuring a drug-free workplace, for protecting and improving the quality of the environment, and encouraging the safe operation of vehicles by—

(a) Controlling pollution;

(b) Managing energy and water use in Government facilities efficiently;

(c) Using renewable energy and renewable energy technologies;

(d) Acquiring energy-efficient and water-efficient products and services, environmentally preferable products, products containing recovered materials, and biobased products; and

(e) Requiring contractors to identify hazardous materials; and

(f) Encouraging contractors to adopt and enforce policies that ban text messaging while driving.

**23.001 Definition.**

"Toxic chemical," as used in this part, means a chemical or chemical category listed in 40 CFR 372.65.

## Subpart 23.1—[Reserved]

## Subpart 23.2—Energy and Water Efficiency and Renewable Energy

**23.200 Scope.**

(a) This subpart prescribes policies and procedures for—

(1) Acquiring energy- and water-efficient products and services, and products that use renewable energy technology; and

(2) Using an energy-savings performance contract to obtain energy-efficient technologies at Government facilities without Government capital expense.

(b) This subpart applies to acquisitions in the United States and its outlying areas. Agencies conducting acquisitions outside of theses areas must use their best efforts to comply with this subpart.

**23.201 Authorities.**

(a) Energy Policy and Conservation Act (42 U.S.C. 6361(a)(1)) and Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901, *et seq*.).

(b) National Energy Conservation Policy Act (42 U.S.C. 8253, 8259b, 8262g, and 8287).

(c) Executive Order 11912 of April 13, 1976, Delegations of Authority under the Energy Policy and Conservation Act.

(d) Executive Order 13123 of June 3, 1999, Greening the Government through Efficient Energy Management.

(e) Executive Order 13221 of July 31, 2001, Energy-Efficient Standby Power Devices.

**23.202 Policy.**

The Government's policy is to acquire supplies and services that promote energy and water efficiency, advance the use of renewable energy products, and help foster markets for emerging technologies. This policy extends to all acquisitions, including those below the simplified acquisition threshold.

**23.203 Energy-efficient products.**

(a) Unless exempt as provided at 23.204—

(1) When acquiring energy-consuming products listed in the ENERGY STAR® Program or Federal Energy Management Program (FEMP)—

(i) Agencies shall purchase ENERGY STAR® or FEMP-designated products; and

(ii) For products that consume power in a standby mode and are listed on FEMP's Low Standby Power Devices product listing, agencies shall—

(A) Purchase items which meet FEMP's standby power wattage recommendation or document the reason for not purchasing such items; or

(B) If FEMP has listed a product without a corresponding wattage recommendation, purchase items which use no more than one watt in their standby power consuming mode. When it is impracticable to meet the one watt requirement, agencies shall purchase items with the lowest standby wattage practicable; and

(2) When contracting for services or construction that will include the provision of energy-consuming products, agencies shall specify products that comply with the applicable requirements in paragraph (a)(1) of this section.

(b) Information is available via the Internet about—

(1) ENERGY STAR® at *http://www.energystar.gov/products*; and

(2) FEMP at *http://www1.eere.energy.gov/femp/procurement/eep_requirements.html*.

**23.204 Procurement exemptions.**

An agency is not required to procure an ENERGY STAR® or FEMP-designated product if the head of the agency determines in writing that—

(a) No ENERGY STAR® or FEMP-designated product is reasonably available that meets the functional requirements of the agency; or

(b) No ENERGY STAR® or FEMP-designated product is cost effective over the life of the product taking energy cost savings into account.

**23.205 Energy-savings performance contracts.**

(a) Section 403 of Executive Order 13123 of June 3, 1999, Greening the Government through Efficient Energy Management, requires an agency to make maximum use of the authority provided in the National Energy Conservation Policy Act (42 U.S.C. 8287) to use an energy-savings performance contract (ESPC), when life-cycle cost-effective, to reduce energy use and cost in the agency's facilities and operations.

(b)(1) Under an ESPC, an agency can contract with an energy service company for a period not to exceed 25 years to improve energy efficiency in one or more agency facilities at no direct capital cost to the United States Treasury. The energy service company finances the capital costs of implementing energy conservation measures and receives, in return, a contractually determined share of the cost savings that result.

(2) Except as provided in 10 CFR 436.34, ESPC's are subject to Subpart 17.1.

(c) To solicit and award an ESPC, the contracting officer—

(1) Must use the procedures, selection method, and terms and conditions provided in 10 CFR Part 436, Subpart B; at *http://www.eren.doe.gov/femp/resources/legislation.html*; and

(2) May use the "Qualified List" of energy service companies established by the Department of Energy and other agencies.

**23.206 Contract clause.**

Unless exempt pursuant to 23.204, insert the clause at 52.223-15, Energy Efficiency in Energy-Consuming Products, in solicitations and contracts when energy-consuming products listed in the ENERGY STAR® Program or FEMP will be—

(a) Delivered;

(b) Acquired by the contractor for use in performing services at a Federally-controlled facility;

(c) Furnished by the contractor for use by the Government; or

(d) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.

## Subpart 23.3—Hazardous Material Identification and Material Safety Data

**23.300 Scope of subpart.**

This subpart prescribes policies and procedures for acquiring deliverable items, other than ammunition and explosives, that require the furnishing of data involving hazardous materials. Agencies may prescribe special procedures for ammunition and explosives.

**23.301 Definition.**

"Hazardous material" is defined in the latest version of Federal Standard No. 313 (Federal Standards are sold to the public and Federal agencies through—

General Services Administration
Specifications Unit (3FBP-W)
7th & D Sts. SW
Washington, DC 20407.

**23.302 Policy.**

(a) The Occupational Safety and Health Administration (OSHA) is responsible for issuing and administering regulations that require Government activities to apprise their employees of—

(1) All hazards to which they may be exposed;

(2) Relative symptoms and appropriate emergency treatment; and

(3) Proper conditions and precautions for safe use and exposure.

(b) To accomplish this objective, it is necessary to obtain certain information relative to the hazards which may be introduced into the workplace by the supplies being acquired. Accordingly, offerors and contractors are required to submit hazardous materials data whenever the supplies being acquired are identified as hazardous materials. The latest version of Federal Standard No. 313 (Material Safety Data Sheet, Preparation and Submission of) includes criteria for identification of hazardous materials.

(c) Hazardous material data (Material Safety Data Sheets (MSDS)) are required—

(1) As specified in the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract);

(2) For any other material designated by a Government technical representative as potentially hazardous and requiring safety controls.

(d) MSDS's must be submitted—

(1) By the apparent successful offeror prior to contract award if hazardous materials are expected to be used during contract performance.

(2) For agencies other than the Department of Defense, again by the contractor with the supplies at the time of delivery.

(e) The contracting officer shall provide a copy of all MSDS's received to the safety officer or other designated individual.

**23.303 Contract clause.**

(a) The contracting officer shall insert the clause at 52.223-3, Hazardous Material Identification and Material Safety Data, in solicitations and contracts if the contract will require the delivery of hazardous materials as defined in 23.301.

(b) If the contract is awarded by an agency other than the Department of Defense, the contracting officer shall use the clause at 52.223-3 with its Alternate I.

## Subpart 23.4—Use of Recovered Materials and Biobased Products

**23.400 Scope of subpart.**

(a) The procedures in this subpart apply to all agency acquisitions of an Environmental Protection Agency (EPA) or United States Department of Agriculture (USDA)-designated item, if—

(1) The price of the designated item exceeds $10,000; or

(2) The aggregate amount paid for designated items, or for functionally equivalent designated items, in the preceding fiscal year was $10,000 or more.

(b) While micro-purchases are included in determining the aggregate amount paid under paragraph (a)(2) of this section, it is not recommended that an agency track micro-purchases when—

(1) The agency anticipates the aggregate amount paid will exceed $10,000; or

(2) The agency intends to establish or continue an affirmative procurement program in the following fiscal year.

**23.401 Definitions.**

As used in this subpart—

(a) "EPA-designated item" means a product that is or can be made with recovered material—

(1) That is listed by EPA in a procurement guideline (40 CFR part 247); and

(2) For which EPA has provided purchasing recommendations in a related Recovered Materials Advisory Notice (RMAN) (available at *http://www.epa.gov/epaoswer/non-hw/procure/backgrnd.htm*).

(b) "USDA-designated item" means a generic grouping of products that are or can be made with biobased materials—

(1) That is listed by USDA in a procurement guideline (7 CFR part 2902, subpart B); and

(2) For which USDA has provided purchasing recommendations.

**23.402 Authorities.**

(a) The Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6962.

(b) The Farm Security and Rural Investment Act of 2002 (FSRIA), 7 U.S.C. 8102.

(c) Executive Order 13101 of September 14, 1998, Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition.

(d) The Energy Policy Act of 2005, Public Law 109-58.

**23.403 Policy.**

Government policy on the use of products containing recovered materials and biobased products considers cost, availability of competition, and performance. Agencies shall assure the use of products containing recovered materials and biobased products to the maximum extent practicable without jeopardizing the intended use of the product while maintaining a satisfactory level of competition at a reasonable price. Such products shall meet the reasonable performance standards of the agency and be acquired competitively, in a cost-effective manner. Except as provided at FAR 23.404(b), virgin material shall not be required by the solicitation (see 11.302).

**23.404 Agency affirmative procurement programs.**

(a) An agency must establish an affirmative procurement program for EPA and USDA-designated items if the agency's purchases of designated items exceed the threshold set forth in 23.400.

(1) Agencies have a period of 1 year to revise their procurement program(s) after the designation of any new item by EPA or USDA.

(2) Technical or requirements personnel and procurement personnel are responsible for the preparation, implementation, and monitoring of affirmative procurement programs.

(3) Agency affirmative procurement programs must include—

(i) A recovered materials and biobased products preference program;

(ii) An agency promotion program;

(iii) For EPA-designated items only, a program for requiring reasonable estimates, certification, and verification of recovered material used in the performance of contracts. Both the recovered material content and biobased programs require preaward certification that the products meet EPA or USDA recommendations. A second certification is required at contract completion for recovered material content; and

(iv) Annual review and monitoring of the effectiveness of the program.

(b) *"Exemptions"*. (1) Agency affirmative procurement programs must require that 100 percent of purchases of EPA or USDA-designated items contain recovered material or biobased content, respectively, unless the item cannot be acquired—

(i) Competitively within a reasonable time frame;

(ii) Meeting reasonable performance standards; or

(iii) At a reasonable price.

(2) EPA and USDA may provide categorical exemptions for items that they designate, when procured for a specific purpose. For example, some USDA-designated items such as mobile equipment hydraulic fluids, diesel fuel additives, and penetrating lubricants (see 7 CFR 2902.10 *et seq.*) are excluded from the preferred procurement requirement for the application of the USDA-designated item to one or both of the following:

(i) Spacecraft system and launch support equipment.

(ii) Military equipment, *i.e.*, a product or system designed or procured for combat or combat-related missions.

(c) Agency affirmative procurement programs must provide guidance for purchases of EPA-designated items at or below the micro-purchase threshold.

(d) Agencies may use their own specifications or commercial product descriptions when procuring products containing recovered materials or biobased products. When using either, the contract should specify—

(1) For products containing recovered materials, that the product is composed of the—

(i) Highest percent of recovered materials practicable; or

(ii) Minimum content standards in accordance with EPA's Recovered Materials Advisory Notices; and

(2) For biobased products, that the product is composed of—

(i) The highest percentage of biobased material practicable; or

(ii) USDA's recommended minimum contents standards.

(e) Agencies shall treat as eligible for the preference for biobased products, products from "designated countries," as defined in 25.003, provided that those products—

(1) Meet the criteria for the definition of biobased product, except that the products need not meet the requirement that renewable agricultural materials (including plant, animal, and marine materials) or forestry materials in such product must be domestic; and

(2) Otherwise meet all requirements for participation in the preference program.

**23.405 Procedures.**

(a) *Designated items and procurement guidelines.* (1) *Recovered Materials.* Contracting officers should refer to EPA's list of EPA-designated items (available via the Internet at *http://www.epa.gov/cpg/products.htm*) and to their agencies' affirmative procurement program when purchasing products that contain recovered material, or services that could include the use of products that contain recovered material.

(2) *Biobased products.* Contracting officers should refer to USDA's list of USDA-designated items (available through the Internet at *http://www.usda.gov/biopreferred*) and to their agencies affirmative procurement program when purchasing supplies that contain biobased material or when purchasing services that could include supplies that contain biobased material.

(b) *Procurement exemptions.* (1) Once an item has been designated by either EPA or USDA, agencies shall purchase conforming products unless an exemption applies (see 23.404(b)).

(2) When an exemption is used for an EPA-designated item or the procurement of a product containing recovered material does not meet or exceed the EPA recovered material content guidelines, the contracting officer shall place a written justification in the contract file.

(c) *Program priorities.* When both the USDA-designated item and the EPA-designated item will be used for the same purposes, and both meet the agency's needs, the agency shall purchase the EPA-designated item.

**23.406 Solicitation provisions and contract clauses.**

(a) Insert the provision at 52.223-1, Biobased Product Certification, in solicitations that—

(1) Require the delivery or specify the use of USDA-designated items; or

(2) Include the clause at 52.223-2.

(b) Insert the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts, in service or construction solicitations and contracts unless the contract will not involve the use of USDA-designated items at *http://www.usda.gov/biopreferred* or 7 CFR Part 2902.

(c) Except for the acquisition of commercially available off-the-shelf items, insert the provision at 52.223-4, Recovered Material Certification, in solicitations that—

(1) Require the delivery or specify the use of EPA-designated items; or

(2) Include the clause at 52.223-17, Affirmative Procurement of EPA-designated Items in Service and Construction Contracts.

(d) Except for the acquisition of commercially available off-the-shelf items, insert the clause at 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-designated Items, in solicitations and contracts exceeding $150,000 that are for, or specify the use of, EPA-designated items containing recovered materials. If technical personnel advise that estimates can be verified, use the clause with its Alternate I.

(e) Insert the clause at 52.223-17, Affirmative Procurement of EPA-designated Items in Service and Construction Contracts, in service or construction solicitations and contracts unless the contract will not involve the use of EPA-designated items.

## Subpart 23.5—Drug-Free Workplace

**23.500 Scope of subpart.**

This subpart implements the Drug-Free Workplace Act of 1988 (Pub. L. 100-690).

**23.501 Applicability.**

This subpart applies to contracts, including contracts with 8(a) contractors under FAR Subpart 19.8 and modifications that require a justification and approval (see Subpart 6.3), except contracts—

(a) At or below the simplified acquisition threshold; however, the requirements of this subpart apply to all contracts of any value awarded to an individual;

(b) For the acquisition of commercial items (see Part 12);

(c) Performed outside the United States and its outlying areas or any part of a contract performed outside the United States and its outlying areas;

(d) By law enforcement agencies, if the head of the law enforcement agency or designee involved determines that application of this subpart would be inappropriate in connection with the law enforcement agency's undercover operations; or

(e) Where application would be inconsistent with the international obligations of the United States or with the laws and regulations of a foreign country.

**23.502 Authority.**

Drug-Free Workplace Act of 1988 (Pub. L. 100-690).

**23.503 Definitions.**

As used in this subpart—

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812), and as further defined in regulation at 21 CFR 1308.11–1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Employee" means an employee of a contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other contract employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

**23.504 Policy.**

(a) No offeror other than an individual shall be considered a responsible source (see 9.104-1(g) and 19.602-1(a)(2)(i)) for a contract that exceeds the simplified acquisition threshold, unless it agrees that it will provide a drug-free workplace by—

(1) Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the contractor's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establishing an ongoing drug-free awareness program to inform its employees about—

(i) The dangers of drug abuse in the workplace;

(ii) The contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Providing all employees engaged in performance of the contract with a copy of the statement required by paragraph (a)(1) of this section;

(4) Notifying all employees in writing in the statement required by paragraph (a)(1) of this section, that as a condition of employment on a covered contract, the employee will—

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notifying the contracting officer in writing within 10 days after receiving notice under subdivision (a)(4)(ii) of this section, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under paragraph (a)(4) of this section of a conviction, taking one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Making a good faith effort to maintain a drug-free workplace through implementation of paragraphs (a)(1) through (a)(6) of this section.

(b) No individual shall be awarded a contract of any dollar value unless that individual agrees not to engage in the unlaw-

ful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing the contract.

(c) For a contract of 30 days or more performance duration, the contractor shall comply with the provisions of paragraph (a) of this section within 30 days after contract award, unless the contracting officer agrees in writing that circumstances warrant a longer period of time to comply. Before granting such an extension, the contracting officer shall consider such factors as the number of contractor employees at the worksite, whether the contractor has or must develop a drug-free workplace program, and the number of contractor worksites. For contracts of less than 30 days performance duration, the contractor shall comply with the provisions of paragraph (a) of this section as soon as possible, but in any case, by a date prior to when performance is expected to be completed.

**23.505 Contract clause.**

Except as provided in 23.501, insert the clause at 52.223-6, Drug-Free Workplace, in solicitations and contracts.

**23.506 Suspension of payments, termination of contract, and debarment and suspension actions.**

(a) After determining in writing that adequate evidence to suspect any of the causes at paragraph (d) of this section exists, the contracting officer may suspend contract payments in accordance with the procedures at 32.503-6(a)(1).

(b) After determining in writing that any of the causes at paragraph (d) of this section exist, the contracting officer may terminate the contract for default.

(c) Upon initiating action under paragraph (a) or (b) of this section, the contracting officer shall refer the case to the agency suspension and debarment official, in accordance with agency procedures, pursuant to Subpart 9.4.

(d) The specific causes for suspension of contract payments, termination of a contract for default, or suspension and debarment are—

(1) The contractor has failed to comply with the requirements of the clause at 52.223-6, Drug-Free Workplace; or

(2) The number of contractor employees convicted of violations of criminal drug statutes occurring in the workplace indicates that the contractor has failed to make a good faith effort to provide a drug-free workplace.

(e) A determination under this section to suspend contract payments, terminate a contract for default, or debar or suspend a contractor may be waived by the agency head for a particular contract, in accordance with agency procedures, only if such waiver is necessary to prevent a severe disruption of the agency operation to the detriment of the Federal Government or the general public (see Subpart 9.4). The waiver authority of the agency head cannot be delegated.

## Subpart 23.6—Notice of Radioactive Material

**23.601 Requirements.**

(a) The clause at 52.223-7, Notice of Radioactive Materials, requires the contractor to notify the contracting officer prior to delivery of radioactive material.

(b) Upon receipt of the notice, the contracting officer shall notify receiving activities so that appropriate safeguards can be taken.

(c) The clause permits the contracting officer to waive the notification if the contractor states that the notification on prior deliveries is still current. The contracting officer may waive the notice only after consultation with cognizant technical representatives.

(d) The contracting officer is required to specify in the clause at 52.223-7, the number of days in advance of delivery that the contractor will provide notification. The determination of the number of days should be done in coordination with the installation/facility radiation protection officer (RPO). The RPO is responsible for insuring the proper license, authorization or permit is obtained prior to receipt of the radioactive material.

**23.602 Contract clause.**

The contracting officer shall insert the clause at 52.223-7, Notice of Radioactive Materials, in solicitations and contracts for supplies which are, or which contain—(a) radioactive material requiring specific licensing under regulations issued pursuant to the Atomic Energy Act of 1954; or (b) radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such supplies include, but are not limited to, aircraft, ammunition, missiles, vehicles, electronic tubes, instrument panel gauges, compasses and identification markers.

## Subpart 23.7—Contracting for Environmentally Preferable Products and Services

**23.700 Scope.**

This subpart prescribes policies for acquiring environmentally preferable products and services.

**23.701 Definitions.**

As used in this subpart—

"Computer monitor" means a video display unit used with a computer.

"Desktop computer" means a computer designed for use on a desk or table.

"Notebook computer" means a portable-style or laptop-style computer system.

"Personal computer product" means a notebook computer, a desktop computer, or a computer monitor, and any peripheral equipment that is integral to the operation of such items. For example, the desktop computer together with the keyboard, the mouse, and the power cord would be a personal computer product. Printers, copiers, and fax machines are not included in peripheral equipment, as used in this definition.

**23.702 Authorities.**

(a) Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6901, *et seq*.).

(b) National Energy Conservation Policy Act (42 U.S.C. 8262g).

(c) Pollution Prevention Act of 1990 (42 U.S.C. 13101, *et seq*.).

(d) Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

(e) Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition.

(f) Executive Order 13123 of June 3, 1999, Greening the Government through Efficient Energy Management.

(g) Farm Security and Rural Investment Act of 2002 (FSRIA) (7 U.S.C. 8102).

(h) Executive Order 13221 of July 31, 2001, Energy Efficient Standby Power Devices.

(i) Executive Order 13423 of January 24, 2007, Strengthening Federal Environmental, Energy, and Transportation Management.

**23.703 Policy.**

Agencies must—

(a) Implement cost-effective contracting preference programs promoting energy-efficiency, water conservation, and the acquisition of environmentally preferable products and services; and

(b) Employ acquisition strategies that affirmatively implement the following environmental objectives:

(1) Maximize the utilization of environmentally preferable products and services (based on EPA-issued guidance).

(2) Promote energy-efficiency and water conservation.

(3) Eliminate or reduce the generation of hazardous waste and the need for special material processing (including special handling, storage, treatment, and disposal).

(4) Promote the use of nonhazardous and recovered materials.

(5) Realize life-cycle cost savings.

(6) Promote cost-effective waste reduction when creating plans, drawings, specifications, standards, and other product descriptions authorizing material substitutions, extensions of shelf-life, and process improvements.

(7) Promote the use of biobased products.

(8) Purchase only plastic ring carriers that are degradable (7 USC 8102(c)(1), 40 CFR part 238).

**23.704 Application to Government-owned or -leased facilities.**

Executive Order 13101, Section 701, requires that contracts for contractor operation of a Government-owned or -leased facility and contracts for support services at a Government-owned or -operated facility include provisions that obligate the contractor to comply with the requirements of the order. Compliance includes developing programs to promote and implement cost-effective waste reduction and affirmative procurement programs required by 42 U.S.C. 6962 for all products designated in EPA's Comprehensive Procurement Guideline (40 CFR Part 247).

**23.705 Electronic products environmental assessment tool.**

(a) *General*. As required by E.O. 13423, agencies must ensure that they meet at least 95 percent of their annual acquisition requirement for electronic products with Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic products, unless there is no EPEAT standard for such products. This policy applies to contracts performed in the United States, unless otherwise provided by agency procedures.

(b) *Personal computer products*. Personal computer products is a category of EPEAT-registered electronic products.

(1) The IEEE 1680 standard for personal computer products—

(i) Was issued by the Institute of Electrical and Electronics Engineers on April 28, 2006;

(ii) Is a voluntary consensus standard consistent with Section 12(d) of Pub. L. 104-113, the "National Technology Transfer and Advancement Act of 1995", (see 11.102(c));

(iii) Meets EPA-issued guidance on environmentally preferable products and services; and

(iv) Is described in more detail at *www.epeat.net*.

(2) A list of EPEAT-registered products that meet the IEEE 1680 standard can be found at *www.epeat.net*.

(3) The IEEE 1680 standard sets forth required and optional criteria. EPEAT "Bronze" registered products must meet all required criteria. EPEAT "Silver" registered products meet all required criteria and 50 percent of the optional criteria. EPEAT "Gold" registered products meet all required criteria and 75 percent of the optional criteria. These are the levels discussed in clause 1.4 of the IEEE 1680 Standard. The clause at 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products, makes EPEAT Bronze registration the standard that contractors must meet. In accordance with guidance from the Office of the Federal Environmental Executive encouraging agencies to procure EPEAT Silver registered products, Alternate I of the clause makes EPEAT Silver registration the standard that contractors must meet. Agencies also may use EPEAT Silver or Gold registration in the evaluation of proposals.

(c) The agency shall establish procedures for granting exceptions to the requirement in paragraph (a) of this section, with the goal that the dollar value of exceptions granted will not exceed 5 percent of the total dollar value of electronic products acquired by the agency, for which EPEAT-registered products are available. For example, agencies may grant an exception if the agency determines that no EPEAT-registered product meets agency requirements, or that the EPEAT-registered product will not be cost effective over the life of the product.

**23.706 Contract clauses.**

(a) Insert the clause at 52.223-10, Waste Reduction Program, in all solicitations and contracts for contractor operation of Government-owned or -leased facilities and all solicitations and contracts for support services at Government-owned or -operated facilities.

(b)(1) Unless an exception has been approved in accordance with 23.705(c), insert the clause at 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products, in all solicitations and contracts for—

(i) Personal computer products;

(ii) Services that require furnishing of personal computer products for use by the Government; or

(iii) Contractor operation of Government-owned facilities.

(2) Agencies may use the clause with its Alternate I when there are sufficient EPEAT Silver registered products available to meet agency needs.

## Subpart 23.8—Ozone-Depleting Substances

**23.800 Scope of subpart.**

This subpart sets forth policies and procedures for the acquisition of items which contain, use, or are manufactured with ozone-depleting substances.

**23.801 Authorities.**

(a) Title VI of the Clean Air Act (42 U.S.C. 7671, *et seq.*).

(b) Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

(c) Environmental Protection Agency (EPA) regulations, Protection of Stratospheric Ozone (40 CFR Part 82).

**23.802 [Reserved]**

**23.803 Policy.**

(a) It is the policy of the Federal Government that Federal agencies—

(1) Implement cost-effective programs to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and

(2) Give preference to the procurement of alternative chemicals, products, and manufacturing processes that reduce overall risks to human health and the environment by lessening the depletion of ozone in the upper atmosphere.

(b) In preparing specifications and purchase descriptions, and in the acquisition of supplies and services, agencies shall—

(1) Comply with the requirements of Title VI of the Clean Air Act, Executive Order 13148, and 40 CFR 82.84(a)(2), (3), (4), and (5); and

(2) Substitute safe alternatives to ozone-depleting substances, as identified under 42 U.S.C. 7671k, to the maximum extent practicable, as provided in 40 CFR 82.84(a)(1), except in the case of Class I substances being used for specified essential uses, as identified under 40 CFR 82.4(r).

**23.804 Contract clauses.**

Except for contracts that will be performed outside the United States and its outlying areas, insert the clause at:

(a) 52.223-11, Ozone-Depleting Substances, in solicitations and contracts for ozone-depleting substances or for supplies that may contain or be manufactured with ozone-depleting substances.

(b) 52.223-12, Refrigeration Equipment and Air Conditioners, in solicitations and contracts for services when the contract includes the maintenance, repair, or disposal of any equipment or appliance using ozone-depleting substances as a refrigerant, such as air conditioners, including motor vehicles, refrigerators, chillers, or freezers.

## Subpart 23.9—Contractor Compliance with Toxic Chemical Release Reporting

**23.901 Purpose.**

This subpart implements the requirements of Executive Order (E.O.) 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

**23.902 General.**

(a) The Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and the Pollution Prevention Act of 1990 (PPA) established programs to protect public health and the environment by providing the public with important information on the toxic chemicals being released by manufacturing facilities into the air, land, and water in its communities.

(b) Under EPCRA section 313 (42 U.S.C. 11023), and PPA section 6607 (42 U.S.C. 13106), the owner or operator of certain manufacturing facilities is required to submit annual reports on toxic chemical releases and waste management activities to the Environmental Protection Agency (EPA) and the States. See EPA's website at *http://www.epa.gov/tri* for guidance.

**23.903 Applicability.**

(a) This subpart applies to all competitive contracts expected to exceed $100,000 and competitive 8(a) contracts.

(b) This subpart does not apply to—

(1) Acquisitions of commercial items as defined in Part 2; or

(2) Contractor facilities located outside the United States and its outlying areas.

**23.904 Policy.**

(a) It is the policy of the Government to purchase supplies and services that have been produced with a minimum adverse impact on community health and the environment.

(b) Federal agencies, to the greatest extent practicable, shall contract with companies that report in a public manner on toxic chemicals released to the environment.

**23.905 Requirements.**

(a) E.O. 13148 requires that solicitations for competitive contracts expected to exceed $100,000 include, to the maximum extent practicable, as an award eligibility criterion, a certification by an offeror that, if awarded a contract, either—

(1) As the owner or operator of facilities to be used in the performance of the contract that are subject to Form R filing and reporting requirements, the offeror will file, and will continue to file throughout the life of the contract, for such facilities, the Toxic Chemical Release Inventory Form (Form R) as described in EPCRA sections 313(a) and (g) and PPA section 6607; or

(2) Facilities to be used in the performance of the contract are exempt from Form R filing and reporting requirements because the facilities—

(i) Do not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(ii) Do not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(iii) Do not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) Do not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:

(A) Major group code 10 (except 1011, 1081, and 1094.

(B) Major group code 12 (except 1241).

(C) Major group codes 20 through 39.

(D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).

(E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, *et seq*.), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

(v) Are not located in the United States and its outlying areas.

(b) A determination that it is not practicable to include the solicitation provision at 52.223-13, Certification of Toxic Chemical Release Reporting, in a solicitation or class of solicitations shall be approved by a procurement official at a level no lower than the head of the contracting activity. Prior to making such a determination for a solicitation or class of solicitations with an estimated value in excess of $500,000 (including all options), the agency shall consult with the Environmental Protection Agency, Director, Environmental Assistance Division, Office of Pollution Prevention and Toxic Substances (Mail Code 7408), Washington, DC 20460.

(c) Award shall not be made to offerors who do not certify in accordance with paragraph (a) of this section when the provision at 52.223-13, Certification of Toxic Chemical Release Reporting, is included in the solicitation. If facilities to be used by the offeror in the performance of the contract are not subject to Form R filing and reporting requirements and the offeror fails to check the appropriate box(es) in 52.223-13, Certification of Toxic Chemical Release Reporting, such failure shall be considered a minor informality or irregularity.

(d) The contracting officer shall cooperate with EPA representatives and provide such advice and assistance as may be

required to aid EPA in the performance of its responsibilities under E.O. 13148.

(e) EPA, upon determining that a contractor is not filing the necessary forms or is filing incomplete information, may recommend to the head of the contracting activity that the contract be terminated for convenience. The head of the contracting activity shall consider the EPA recommendation and determine if termination or some other action is appropriate.

**23.906 Solicitation provision and contract clause.**

Except for acquisitions of commercial items as defined in Part 2, the contracting officer shall—

(a) Insert the provision at 52.223-13, Certification of Toxic Chemical Release Reporting, in all solicitations for competitive contracts expected to exceed $100,000 and competitive 8(a) contracts, unless it has been determined in accordance with 23.905(b) that to do so is not practicable; and

(b) Insert the clause at 52.223-14, Toxic Chemical Release Reporting, in competitively awarded contracts exceeding $100,000 and competitively awarded 8(a) contracts, except when the determination at 23.905(b) has been made.

## Subpart 23.10—Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements

**23.1000 Scope.**

This subpart prescribes policies and procedures for obtaining information needed for Government—

(a) Compliance with right-to-know laws and pollution prevention requirements;

(b) Implementation of an environmental management system (EMS) at a Federal facility; and

(c) Completion of facility compliance audits (FCAs) at a Federal facility.

**23.1001 Authorities.**

(a) Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. 11001-11050 (EPCRA).

(b) Pollution Prevention Act of 1990, 42 U.S.C. 13101-13109 (PPA).

(c) Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

**23.1002 Applicability.**

The requirements of this subpart apply to facilities owned or operated by an agency in the customs territory of the United States.

**23.1003 Definitions.**

As used in this subpart—

"Federal agency" means an executive agency (see 2.101).

"Priority chemical" means a chemical identified by the Interagency Environmental Leadership Workgroup or, alternatively, by an agency pursuant to Section 503 of Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

**23.1004 Requirements.**

(a) E.O. 13148 requires Federal facilities to comply with the provisions of EPCRA and PPA.

(b) Pursuant to E.O. 13148, and any agency implementing procedures, every new contract that provides for performance on a Federal facility shall require the contractor to provide information necessary for the Federal agency to comply with the—

(1) Emergency planning and toxic release reporting requirements in EPCRA, PPA, and E.O. 13148;

(2) Toxic chemical, priority chemical, and hazardous substance release and use reduction goals of Sections 502 and 503 of Executive Order 13148; and

(3) Requirements for EMSs and FCAs if the place of performance is at a Federal facility designated by the agency.

**23.1005 Contract clause.**

(a) Insert the clause at 52.223-5, Pollution Prevention and Right-to-Know Information, in solicitations and contracts that provide for performance, in whole or in part, on a Federal facility.

(b) Use the clause with its Alternate I if the contract provides for contractor—

(1) Operation or maintenance of a Federal facility at which the agency has implemented or plans to implement an EMS; or

(2) Activities and operations—

(i) To be performed at a Government-operated Federal facility that has implemented or plans to implement an EMS; and

(ii) That the agency has determined are covered within the EMS.

(c) Use the clause with its Alternate II if—

(1) The contract provides for contractor activities on a Federal facility; and

(2) The agency has determined that the contractor activities should be included within the FCA or an environmental management system audit.

* * * * * *

## Subpart 36.6—Architect-Engineer Services

**36.600 Scope of subpart.**

This subpart prescribes policies and procedures applicable to the acquisition of architect-engineer services, including orders for architect-engineer services under multi-agency contracts (see 16.505(a)(8)).

**36.601 Policy.**

**36.601-1 Public announcement.**

The Government shall publicly announce all requirements for architect-engineer services and negotiate contracts for these services based on the demonstrated competence and qualifications of prospective contractors to perform the services at fair and reasonable prices. (See 40 U.S.C. 1101 *et seq*.)

**36.601-2 Competition.**

Acquisition of architect-engineer services in accordance with the procedures in this subpart will constitute a competitive procedure. (See 6.102(d)(1).)

**36.601-3 Applicable contracting procedures.**

(a)(1) For facility design contracts, the statement of work shall require that the architect-engineer specify, in the construction design specifications, use of the maximum practicable amount of recovered materials consistent with the performance requirements, availability, price reasonableness, and cost-effectiveness. Where appropriate, the statement of work also shall require the architect-engineer to consider energy conservation, pollution prevention, and waste reduction to the maximum extent practicable in developing the construction design specifications.

(2) Facility design solicitations and contracts that include the specification of energy-consuming products must comply with the requirements at Subpart 23.2.

(b) Sources for contracts for architect-engineer services shall be selected in accordance with the procedures in this subpart rather than the solicitation or source selection procedures prescribed in Parts 13, 14, and 15 of this regulation.

(c) When the contract statement of work includes both architect-engineer services and other services, the contracting officer shall follow the procedures in this subpart if the statement of work, substantially or to a dominant extent, specifies performance or approval by a registered or licensed architect or engineer. If the statement of work does not specify such performance or approval, the contracting officer shall follow the procedures in Parts 13, 14, or 15.

(d) Other than "incidental services" as specified in the definition of architect-engineer services in 2.101 and in 36.601-4(a)(3), services that do not require performance by a registered or licensed architect or engineer, notwithstanding the fact that architect-engineers also may perform those services, should be acquired pursuant to Parts 13, 14, and 15.

**36.601-4 Implementation.**

(a) Contracting officers should consider the following services to be "architect-engineer services" subject to the procedures of this subpart:

(1) Professional services of an architectural or engineering nature, as defined by applicable State law, which the State law requires to be performed or approved by a registered architect or engineer.

(2) Professional services of an architectural or engineering nature associated with design or construction of real property.

(3) Other professional services of an architectural or engineering nature or services incidental thereto (including studies, investigations, surveying and mapping, tests, evaluations, consultations, comprehensive planning, program management, conceptual designs, plans and specifications, value engineering, construction phase services, soils engineering, drawing reviews, preparation of operating and maintenance manuals and other related services) that logically or justifiably require performance by registered architects or engineers or their employees.

(4) Professional surveying and mapping services of an architectural or engineering nature. Surveying is considered to be an architectural and engineering service and shall be procured pursuant to section 36.601 from registered surveyors or architects and engineers. Mapping associated with the research, planning, development, design, construction, or alteration of real property is considered to be an architectural and engineering service and is to be procured pursuant to section 36.601. However, mapping services that are not connected to traditionally understood or accepted architectural and engineering activities, are not incidental to such architectural and engineering activities or have not in themselves traditionally been considered architectural and engineering services shall be procured pursuant to provisions in Parts 13, 14, and 15.

(b) Contracting officers may award contracts for architect-engineer services to any firm permitted by law to practice the professions of architecture or engineering.

**36.602 Selection of firms for architect-engineer contracts.**

**36.602-1 Selection criteria.**

(a) Agencies shall evaluate each potential contractor in terms of its—

(1) Professional qualifications necessary for satisfactory performance of required services;

(2) Specialized experience and technical competence in the type of work required, including, where appropriate, expe-

rience in energy conservation, pollution prevention, waste reduction, and the use of recovered materials;

(3) Capacity to accomplish the work in the required time;

(4) Past performance on contracts with Government agencies and private industry in terms of cost control, quality of work, and compliance with performance schedules;

(5) Location in the general geographical area of the project and knowledge of the locality of the project; provided, that application of this criterion leaves an appropriate number of qualified firms, given the nature and size of the project; and

(6) Acceptability under other appropriate evaluation criteria.

(b) When the use of design competition is approved by the agency head or a designee, agencies may evaluate firms on the basis of their conceptual design of the project. Design competition may be used when—

(1) Unique situations exist involving prestige projects, such as the design of memorials and structures of unusual national significance;

(2) Sufficient time is available for the production and evaluation of conceptual designs; and

(3) The design competition, with its costs, will substantially benefit the project.

(c) Hold discussions with at least three of the most highly qualified firms regarding concepts, the relative utility of alternative methods and feasible ways to prescribe the use of recovered materials and achieve waste reduction and energy-efficiency in facility design (see Part 23).

**36.602-2 Evaluation boards.**

(a) When acquiring architect-engineer services, an agency shall provide for one or more permanent or ad hoc architect-engineer evaluation boards (which may include preselection boards when authorized by agency regulations) to be composed of members who, collectively, have experience in architecture, engineering, construction, and Government and related acquisition matters. Members shall be appointed from among highly qualified professional employees of the agency or other agencies, and if authorized by agency procedure, private practitioners of architecture, engineering, or related professions. One Government member of each board shall be designated as the chairperson.

(b) No firm shall be eligible for award of an architect-engineer contract during the period in which any of its principals or associates are participating as members of the awarding agency's evaluation board.

**36.602-3 Evaluation board functions.**

Under the general direction of the head of the contracting activity, an evaluation board shall perform the following functions:

(a) Review the current data files on eligible firms and responses to a public notice concerning the particular project (see 36.603).

(b) Evaluate the firms in accordance with the criteria in 36.602-1.

(c) Hold discussions with at least three of the most highly qualified firms regarding concepts and the relative utility of alternative methods of furnishing the required services.

(d) Prepare a selection report for the agency head or other designated selection authority recommending, in order of preference, at least three firms that are considered to be the most highly qualified to perform the required services. The report shall include a description of the discussions and evaluation conducted by the board to allow the selection authority to review the considerations upon which the recommendations are based.

**36.602-4 Selection authority.**

(a) The final selection decision shall be made by the agency head or a designated selection authority.

(b) The selection authority shall review the recommendations of the evaluation board and shall, with the advice of appropriate technical and staff representatives, make the final selection. This final selection shall be a listing, in order of preference, of the firms considered most highly qualified to perform the work. If the firm listed as the most preferred is not the firm recommended as the most highly qualified by the evaluation board, the selection authority shall provide for the contract file a written explanation of the reason for the preference. All firms on the final selection list are considered "selected firms" with which the contracting officer may negotiate in accordance with 36.606.

(c) The selection authority shall not add firms to the selection report. If the firms recommended in the report are not deemed to be qualified or the report is considered inadequate for any reason, the selection authority shall record the reasons and return the report through channels to the evaluation board for appropriate revision.

(d) The board shall be promptly informed of the final selection.

**36.602-5 Short selection process for contracts not to exceed the simplified acquisition threshold.**

When authorized by the agency, either or both of the short processes described in this subsection may be used to select firms for contracts not expected to exceed the simplified acquisition threshold. Otherwise, the procedures prescribed in 36.602-3 and 36.602-4 shall be followed.

(a) *Selection by the board.* The board shall review and evaluate architect-engineer firms in accordance with 36.602-3, except that the selection report shall serve as the final selection list and shall be provided directly to the contracting officer. The report shall serve as an authorization for the con-

## Subpart 42.3—Contract Administration Office Functions

### 42.301 General.

When a contract is assigned for administration under Subpart 42.2, the contract administration office (CAO) shall perform contract administration functions in accordance with 48 CFR Chapter 1, the contract terms, and, unless otherwise agreed to in an interagency agreement (see 42.002), the applicable regulations of the servicing agency.

### 42.302 Contract administration functions.

(a) The contracting officer normally delegates the following contract administration functions to a CAO. The contracting officer may retain any of these functions, except those in paragraphs (a)(5), (a)(9), and (a)(11) of this section, unless the cognizant Federal agency (see 2.101) has designated the contracting officer to perform these functions.

(1) Review the contractor's compensation structure.

(2) Review the contractor's insurance plans.

(3) Conduct post-award orientation conferences.

(4) Review and evaluate contractors' proposals under Subpart 15.4 and, when negotiation will be accomplished by the contracting officer, furnish comments and recommendations to that officer.

(5) Negotiate forward pricing rate agreements (see 15.407-3).

(6) Negotiate advance agreements applicable to treatment of costs under contracts currently assigned for administration (see 31.109).

(7) Determine the allowability of costs suspended or disapproved as required (see Subpart 42.8), direct the suspension or disapproval of costs when there is reason to believe they should be suspended or disapproved, and approve final vouchers.

(8) Issue Notices of Intent to Disallow or not Recognize Costs (see Subpart 42.8).

(9) Establish final indirect cost rates and billing rates for those contractors meeting the criteria for contracting officer determination in Subpart 42.7.

(10) Attempt to resolve issues in controversy, using ADR procedures when appropriate (see Subpart 33.2); prepare findings of fact and issue decisions under the Disputes clause on matters in which the administrative contracting officer (ACO) has the authority to take definitive action.

(11) In connection with Cost Accounting Standards (see 30.601 and 48 CFR Chapter 99 (FAR Appendix))—

(i) Determine the adequacy of the contractor's disclosure statements;

(ii) Determine whether disclosure statements are in compliance with Cost Accounting Standards and Part 31;

(iii) Determine the contractor's compliance with Cost Accounting Standards and disclosure statements, if applicable; and

(iv) Negotiate price adjustments and execute supplemental agreements under the Cost Accounting Standards clauses at 52.230-2, 52.230-3, 52.230-4, 52.230-5, and 52.230-6.

(12) Review and approve or disapprove the contractor's requests for payments under the progress payments or performance-based payments clauses.

(13) Make payments on assigned contracts when prescribed in agency acquisition regulations.

(14) Manage special bank accounts.

(15) Ensure timely notification by the contractor of any anticipated overrun or underrun of the estimated cost under cost-reimbursement contracts.

(16) Monitor the contractor's financial condition and advise the contracting officer when it jeopardizes contract performance.

(17) Analyze quarterly limitation on payments statements and take action in accordance with Subpart 32.6 to recover overpayments from the contractor.

(18) Issue tax exemption forms.

(19) Ensure processing and execution of duty-free entry certificates.

(20) For classified contracts, administer those portions of the applicable industrial security program delegated to the CAO (see Subpart 4.4).

(21) Issue work requests under maintenance, overhaul, and modification contracts.

(22) Negotiate prices and execute supplemental agreements for spare parts and other items selected through provisioning procedures when prescribed by agency acquisition regulations.

(23) Negotiate and execute contractual documents for settlement of partial and complete contract terminations for convenience, except as otherwise prescribed by Part 49.

(24) Negotiate and execute contractual documents settling cancellation charges under multiyear contracts.

(25) Process and execute novation and change of name agreements under Subpart 42.12.

(26) Perform property administration (see Part 45).

(27) [Reserved]

(28) Perform necessary screening, redistribution, and disposal of contractor inventory.

(29) Issue contract modifications requiring the contractor to provide packing, crating, and handling services on excess Government property. When the ACO determines it to be in the Government's interests, the services may be secured from a contractor other than the contractor in possession of the property.

(30) When contractors request Government property—

(i) Evaluate the contractor's requests for Government property and for changes to existing Government prop-

erty and provide appropriate recommendations to the contracting officer;

(ii) Ensure required screening of Government property before acquisition by the contractor;

(iii) Evaluate the use of Government property on a non-interference basis in accordance with the clause at 52.245-9, Use and Charges;

(iv) Ensure payment by the contractor of any rental due; and

(v) Modify contracts to reflect the addition of Government-furnished property and ensure appropriate consideration.

(31) Perform production support, surveillance, and status reporting, including timely reporting of potential and actual slippages in contract delivery schedules.

(32) Perform preaward surveys (see Subpart 9.1).

(33) Advise and assist contractors regarding their priorities and allocations responsibilities and assist contracting offices in processing requests for special assistance and for priority ratings for privately owned capital equipment.

(34) Monitor contractor industrial labor relations matters under the contract; apprise the contracting officer and, if designated by the agency, the cognizant labor relations advisor, of actual or potential labor disputes; and coordinate the removal of urgently required material from the strikebound contractor's plant upon instruction from, and authorization of, the contracting officer.

(35) Perform traffic management services, including issuance and control of Government bills of lading and other transportation documents.

(36) Review the adequacy of the contractor's traffic operations.

(37) Review and evaluate preservation, packaging, and packing.

(38) Ensure contractor compliance with contractual quality assurance requirements (see Part 46).

(39) Ensure contractor compliance with contractual safety requirements.

(40) Perform engineering surveillance to assess compliance with contractual terms for schedule, cost, and technical performance in the areas of design, development, and production.

(41) Evaluate for adequacy and perform surveillance of contractor engineering efforts and management systems that relate to design, development, production, engineering changes, subcontractors, tests, management of engineering resources, reliability and maintainability, data control systems, configuration management, and independent research and development.

(42) Review and evaluate for technical adequacy the contractor's logistics support, maintenance, and modification programs.

(43) Report to the contracting office any inadequacies noted in specifications.

(44) Perform engineering analyses of contractor cost proposals.

(45) Review and analyze contractor-proposed engineering and design studies and submit comments and recommendations to the contracting office, as required.

(46) Review engineering change proposals for proper classification, and when required, for need, technical adequacy of design, producibility, and impact on quality, reliability, schedule, and cost; submit comments to the contracting office.

(47) Assist in evaluating and make recommendations for acceptance or rejection of waivers and deviations.

(48) Evaluate and monitor the contractor's procedures for complying with procedures regarding restrictive markings on data.

(49) Monitor the contractor's value engineering program.

(50) Review, approve or disapprove, and maintain surveillance of the contractor's purchasing system (see Part 44).

(51) Consent to the placement of subcontracts.

(52) Review, evaluate, and approve plant or division-wide small, small disadvantaged, women-owned, veteran-owned, HUBZone, and service-disabled veteran-owned small business master subcontracting plans.

(53) Obtain the contractor's currently approved company- or division-wide plans for small, small disadvantaged, women-owned, veteran-owned, HUBZone, and service-disabled veteran-owned small business subcontracting for its commercial products, or, if there is no currently approved plan, assist the contracting officer in evaluating the plans for those products.

(54) Assist the contracting officer, upon request, in evaluating an offeror's proposed small, small disadvantaged women-owned, veteran-owned, HUBZone, and service-disabled veteran-owned small business subcontracting plans, including documentation of compliance with similar plans under prior contracts.

(55) By periodic surveillance, ensure the contractor's compliance with small, small disadvantaged, women-owned, veteran-owned, HUBZone, and service-disabled veteran-owned small business subcontracting plans and any labor surplus area contractual requirements; maintain documentation of the contractor's performance under and compliance with these plans and requirements; and provide advice and assistance to the firms involved, as appropriate.

(56) Maintain surveillance of flight operations.

(57) Assign and perform supporting contract administration.

(58) Ensure timely submission of required reports.

(59) Issue administrative changes, correcting errors or omissions in typing, contractor address, facility or activity code, remittance address, computations which do not require additional contract funds, and other such changes (see 43.101).

(60) Cause release of shipments from contractor's plants according to the shipping instructions. When applicable, the order of assigned priority shall be followed; shipments within the same priority shall be determined by date of the instruction.

(61) Obtain contractor proposals for any contract price adjustments resulting from amended shipping instructions. Review all amended shipping instructions on a periodic, consolidated basis to ensure that adjustments are timely made. Except when the ACO has settlement authority, the ACO shall forward the proposal to the contracting officer for contract modification. The ACO shall not delay shipments pending completion and formalization of negotiations of revised shipping instructions.

(62) Negotiate and/or execute supplemental agreements, as required, making changes in packaging subcontractors or contract shipping points.

(63) Cancel unilateral purchase orders when notified of nonacceptance by the contractor. The CAO shall notify the contracting officer when the purchase order is canceled.

(64) Negotiate and execute one-time supplemental agreements providing for the extension of contract delivery schedules up to 90 days on contracts with an assigned Criticality Designator of C (see 42.1105). Notification that the contract delivery schedule is being extended shall be provided to the contracting office. Subsequent extensions on any individual contract shall be authorized only upon concurrence of the contracting office.

(65) Accomplish administrative closeout procedures (see 4.804-5).

(66) Determine that the contractor has a drug-free workplace program and drug-free awareness program (see Subpart 23.5).

(67) Support the program, product, and project offices regarding program reviews, program status, program performance and actual or anticipated program problems.

(68) Monitor the contractor's environmental practices for adverse impact on contract performance or contract cost, and for compliance with environmental requirements specified in the contract. ACO responsibilities include—

(i) Requesting environmental technical assistance, if needed;

(ii) Monitoring contractor compliance with specifications or other contractual requirements requiring the delivery or use of environmentally preferable products, energy-efficient products, products containing recovered materials, and biobased products. This must occur as part of the quality assurance procedures set forth in Part 46; and

(iii) As required in the contract, ensuring that the contractor complies with the reporting requirements relating to recovered material content utilized in contract performance (see Subpart 23.4).

(69) Administer commercial financing provisions and monitor contractor security to ensure its continued adequacy to cover outstanding payments, when on-site review is required.

(70) Deobligate excess funds after final price determination.

(b) The CAO shall perform the following functions only when and to the extent specifically authorized by the contracting office:

(1) Negotiate or negotiate and execute supplemental agreements incorporating contractor proposals resulting from change orders issued under the Changes clause. Before completing negotiations, coordinate any delivery schedule change with the contracting office.

(2) Negotiate prices and execute priced exhibits for unpriced orders issued by the contracting officer under basic ordering agreements.

(3) Negotiate or negotiate and execute supplemental agreements changing contract delivery schedules.

(4) Negotiate or negotiate and execute supplemental agreements providing for the deobligation of unexpended dollar balances considered excess to known contract requirements.

(5) Issue amended shipping instructions and, when necessary, negotiate and execute supplemental agreements incorporating contractor proposals resulting from these instructions.

(6) Negotiate changes to interim billing prices.

(7) Negotiate and definitize adjustments to contract prices resulting from exercise of an economic price adjustment clause (see Subpart 16.2).

(8) Issue change orders and negotiate and execute resulting supplemental agreements under contracts for ship construction, conversion, and repair.

(9) Execute supplemental agreements on firm-fixed-price supply contracts to reduce required contract line item quantities and deobligate excess funds when notified by the contractor of an inconsequential delivery shortage, and it is determined that such action is in the best interests of the Government, notwithstanding the default provisions of the contract. Such action will be taken only upon the written request of the contractor and, in no event, shall the total downward contract price adjustment resulting from an inconsequential delivery shortage exceed $250.00 or 5 percent of the contract price, whichever is less.

(10) Execute supplemental agreements to permit a change in place of inspection at origin specified in firm-fixed-price supply contracts awarded to nonmanufacturers, as deemed necessary to protect the Government's interests.

(11) Prepare evaluations of contractor performance in accordance with Subpart 42.15.

(c) Any additional contract administration functions not listed in 42.302(a) and (b), or not otherwise delegated, remain the responsibility of the contracting office.

**52.204-4 Printed or Copied Double-Sided on Recycled Paper.**

As prescribed in 4.303, insert the following clause:

PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) *Definitions*. As used in this clause—

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as—

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

"Printed or copied double-sided" means printing or reproducing a document so that information is on both sides of a sheet of paper.

"Recovered material," for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as—

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

**52.204-5 Women-Owned Business (Other Than Small Business).**

As prescribed in 4.607(b), insert the following provision:

WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

(a) *Definition.* "Women-owned business concern," as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) *Representation*. [*Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation*.] The offeror represents that it ❑ is a women-owned business concern.

(End of provision)

**52.204-6 Data Universal Numbering System (DUNS) Number.**

As prescribed in 4.607(a), insert the following provision:

DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (APR 2008)

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same concern.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the Internet at *http://fedgov.dnb.com/webform* or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and ZIP Code.

(iv) Company mailing address, city, state and ZIP Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(End of provision)

**52.204-7 Central Contractor Registration.**

As prescribed in 4.1105, use the following clause:

CENTRAL CONTRACTOR REGISTRATION (APR 2008)

(a) Definitions. As used in this clause—

"Central Contractor Registration (CCR) database" means the primary Government repository for Contractor information required for the conduct of business with the Government.

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System +4 (DUNS+4) number" means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern.

(Activity) _____

(Complete address) _____
_____
_____

(Telephone number) _____

(Person to be contacted) _____

The request should identify the solicitation number and the specification requested by date, title, and number, as cited in the solicitation.

(End of provision)

**52.211-4 Availability for Examination of Specifications Not Listed in the GSA Index of Federal Specifications, Standards and Commercial Item Descriptions.**

As prescribed in 11.204(d), insert a provision substantially the same as the following:

AVAILABILITY FOR EXAMINATION OF SPECIFICATIONS NOT LISTED IN THE GSA INDEX OF FEDERAL SPECIFICATIONS, STANDARDS AND COMMERCIAL ITEM DESCRIPTIONS (JUNE 1988)

(Activity) _____

(Complete address) _____
_____
_____

(Telephone number) _____

(Person to be contacted) _____

(Time(s) for viewing) _____

(End of provision)

**52.211-5 Material Requirements.**

As prescribed in 11.304, insert the following clause:

MATERIAL REQUIREMENTS (AUG 2000)

(a) *Definitions*.

As used in this clause—

"New" means composed of previously unused components, whether manufactured from virgin material, recovered material in the form of raw material, or materials and by-products generated from, and reused within, an original manufacturing process; *provided* that the supplies meet contract requirements, including but not limited to, performance, reliability, and life expectancy.

"Reconditioned" means restored to the original normal operating condition by readjustments and material replacement.

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

"Remanufactured" means factory rebuilt to original specifications.

"Virgin material" means—

(1) Previously unused raw material, including previously unused copper, aluminum, lead, zinc, iron, other metal or metal ore; or

(2) Any undeveloped resource that is, or with new technology will become, a source of raw materials.

(b) Unless this contract otherwise requires virgin material or supplies composed of or manufactured from virgin material, the Contractor shall provide supplies that are new, reconditioned, or remanufactured, as defined in this clause.

(c) A proposal to provide unused former Government surplus property shall include a complete description of the material, the quantity, the name of the Government agency from which acquired, and the date of acquisition.

(d) A proposal to provide used, reconditioned, or remanufactured supplies shall include a detailed description of such supplies and shall be submitted to the Contracting Officer for approval.

(e) Used, reconditioned, or remanufactured supplies, or unused former Government surplus property, may be used in contract performance if the Contractor has proposed the use of such supplies, and the Contracting Officer has authorized their use.

(End of clause)

**52.211-6 Brand Name or Equal.**

As prescribed in 11.107(a), insert the following provision:

BRAND NAME OR EQUAL (AUG 1999)

(a) If an item in this solicitation is identified as "brand name or equal," the purchase description reflects the characteristics and level of quality that will satisfy the Government's needs. The salient physical, functional, or performance characteristics that "equal" products must meet are specified in the solicitation.

(b) To be considered for award, offers of "equal" products, including "equal" products of the brand name manufacturer, must—

(1) Meet the salient physical, functional, or performance characteristic specified in this solicitation;

(2) Clearly identify the item by—

(i) Brand name, if any; and

(ii) Make or model number;

(3) Include descriptive literature such as illustrations, drawings, or a clear reference to previously furnished descriptive data or information available to the Contracting Officer; and

(4) Clearly describe any modifications the offeror plans to make in a product to make it conform to the solicitation

**52.223-1 Biobased Product Certification.**

As prescribed in 23.406(a), insert the following provision:

BIOBASED PRODUCT CERTIFICATION (DEC 2007)

As required by the Farm Security and Rural Investment Act of 2002 and the Energy Policy Act of 2005 (7 U.S.C. 8102(c)(3)), the offeror certifies, by signing this offer, that biobased products (within categories of products listed by the United States Department of Agriculture in 7 CFR part 2902, subpart B) to be used or delivered in the performance of the contract, other than biobased products that are not purchased by the offeror as a direct result of this contract, will comply with the applicable specifications or other contractual requirements.

(End of provision)

**52.223-2 Affirmative Procurement of Biobased Products Under Service and Construction Contracts.**

As prescribed in 23.406(b), insert the following clause:

AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (DEC 2007)

(a) In the performance of this contract, the contractor shall make maximum use of biobased products that are United States Department of Agriculture (USDA)-designated items unless—

(1) The product cannot be acquired—

(i) Competitively within a time frame providing for compliance with the contract performance schedule;

(ii) Meeting contract performance requirements; or

(iii) At a reasonable price.

(2) The product is to be used in an application covered by a USDA categorical exemption (see 7 CFR 2902.10 *et seq*.). For example, some USDA-designated items such as mobile equipment hydraulic fluids, diesel fuel additives, and penetrating lubricants are excluded from the preferred procurement requirement for the application of the USDA-designated item to one or both of the following:

(i) Spacecraft system and launch support equipment.

(ii) Military equipment, *i.e*., a product or system designed or procured for combat or combat-related missions.

(b) Information about this requirement and these products is available at *http://www.usda.gov/biopreferred*.

(End of clause)

**52.223-3 Hazardous Material Identification and Material Safety Data.**

As prescribed in 23.303, insert the following clause:

HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)

(a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

| Material (*If none, insert "None"*) | Identification No. |
|---|---|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to—

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

*Alternate I (July 1995)*. If the contract is awarded by an agency other than the Department of Defense, add the following paragraph (i) to the basic clause:

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

**52.223-4 Recovered Material Certification.**

As prescribed in 23.406(c), insert the following provision:

RECOVERED MATERIAL CERTIFICATION (MAY 2008)

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(c)(3)(A)(i)), the offeror certifies, by signing this offer, that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the contract will be at least the amount required by the applicable contract specifications or other contractual requirements.

(End of provision)

**52.223-5 Pollution Prevention and Right-to-Know Information.**

As prescribed in 23.1005, insert the following clause:

POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003)

(a) *Definitions*. As used in this clause—

"Priority chemical" means a chemical identified by the Interagency Environmental Leadership Workgroup or, alternatively, by an agency pursuant to Section 503 of Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

"Toxic chemical" means a chemical or chemical category listed in 40 CFR 372.65.

(b) Executive Order 13148 requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

(1) The emergency planning reporting requirements of Section 302 of EPCRA.

(2) The emergency notice requirements of Section 304 of EPCRA.

(3) The list of Material Safety Data Sheets, required by Section 311 of EPCRA.

(4) The emergency and hazardous chemical inventory forms of Section 312 of EPCRA.

(5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA.

(6) The toxic chemical, priority chemical, and hazardous substance release and use reduction goals of Sections 502 and 503 of Executive Order 13148.

(End of clause)

*Alternate I (Aug 2003)*. As prescribed in 23.1005(b), add the following paragraph (c)(7) to the basic clause:

(c)(7) The environmental management system as described in Section 401 of E.O. 13148.

*Alternate II (Aug 2003)*. As prescribed in 23.1005(c), add the following paragraph (c)(7) to the basic clause. If Alternate I is also prescribed, renumber paragraph (c)(7) as paragraph (c)(8).

(c)(7) The facility compliance audits as described in Section 402 of E.O. 13148.

**52.223-6 Drug-Free Workplace.**

As prescribed in 23.505, insert the following clause:

DRUG-FREE WORKPLACE (MAY 2001)

(a) *Definitions*. As used in this clause—

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of *nolo contendere*) or imposition of sentence, or both, by any

judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall—within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration—

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about—

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by paragraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by paragraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will—

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of paragraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract or default, and suspension or debarment.

(End of clause)

**52.223-7 Notice of Radioactive Materials.**

As prescribed in 23.602, insert the following clause:

NOTICE OF RADIOACTIVE MATERIALS (JAN 1997)

(a) The Contractor shall notify the Contracting Officer or designee, in writing, _____* days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either (1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the *Code of Federal Regulations*, in effect on the date of this contract, or (2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

* The Contracting Officer shall insert the number of days required in advance of delivery of the item or completion of the servicing to assure that required licenses are obtained and appropriate personnel are notified to institute any necessary safety and health precautions. See FAR 23.601(d).

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall—

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

(End of clause)

**52.223-8 [Reserved]**

**52.223-9 Estimate of Percentage of Recovered Material Content for EPA-Designated Items.**

As prescribed in 23.406(d), insert the following clause:

ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED ITEMS (MAY 2008)

(a) *Definitions*. As used in this clause—

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and

(2) Submit this estimate to _____ [*Contracting Officer complete in accordance with agency procedures*].

(End of clause)

*Alternate I (May 2008)*. As prescribed in 23.406(d), redesignate paragraph (b) of the basic clause as paragraph (c) and add the following paragraph (b) to the basic clause:

(b) The Contractor shall execute the following certification required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(i)(2)(C)):

CERTIFICATION

I, _____ (name of certifier), am an officer or employee responsible for the performance of this contract and hereby certify that the percentage of recovered material content for EPA-designated items met the applicable contract specifications or other contractual requirements.

_____
[*Signature of the Officer or Employee*]

_____
[*Typed Name of the Officer or Employee*]

_____
[*Title*]

_____
[*Name of Company, Firm, or Organization*]

_____
[*Date*]

(End of certification)

**52.223-10 Waste Reduction Program.**

As prescribed in 23.706(a), insert the following clause:

WASTE REDUCTION PROGRAM (AUG 2000)

(a) *Definitions*. As used in this clause—

"Recycling" means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of products other than fuel for producing heat or power by combustion.

"Waste prevention" means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

"Waste reduction" means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of Section 701 of Executive Order 13101, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor's programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, *et seq*.) and implementing regulations (40 CFR Part 247).

(End of clause)

**52.223-11 Ozone-Depleting Substances.**

As prescribed in 23.804(a), insert the following clause:

OZONE-DEPLETING SUBSTANCES (MAY 2001)

(a) *Definition*. "Ozone-depleting substance," as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as—

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

WARNING

Contains (or manufactured with, if applicable) *_____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

(End of clause)

**52.223-12 Refrigeration Equipment and Air Conditioners.**

As prescribed in 23.804(b), insert the following clause:

REFRIGERATION EQUIPMENT AND AIR CONDITIONERS (MAY 1995)

The Contractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

(End of clause)

**52.223-13 Certification of Toxic Chemical Release Reporting.**

As prescribed in 23.906(a), insert the following provision:

CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

(a) Executive Order 13148, of April 21, 2000, Greening the Government through Leadership in Environmental Management, requires submission of this certification as a prerequisite for contract award.

(b) By signing this offer, the offeror certifies that—

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [*Check each block that is applicable.*]

[ ] (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;

[ ] (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

[ ] (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

[ ] (iv) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:

(A) Major group code 10 (except 1011, 1081, and 1094.

(B) Major group code 12 (except 1241).

(C) Major group codes 20 through 39.

(D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).

(E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, *et seq.*), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

[ ] (v) The facility is not located in the United States or its outlying areas..

(End of provision)

**52.223-14 Toxic Chemical Release Reporting.**

As prescribed in 23.906(b), insert the following clause:

TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor-owned or -operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if—

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:

(i) Major group code 10 (except 1011, 1081, and 1094.

(ii) Major group code 12 (except 1241).

(iii) Major group codes 20 through 39.

(iv) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).

(v) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, *et seq.*)), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

(5) The facility is not located in the United States or its outlying areas.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change

so that any of its owned or operated facilities used in the performance of this contract is no longer exempt—

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall—

(i) Submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and

(ii) Continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items as defined in FAR Part 2, the Contractor shall—

(1) For competitive subcontracts expected to exceed $100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding $100,000 (including all options), the substance of this clause, except this paragraph (e).

(End of clause)

**52.223-15 Energy Efficiency in Energy-Consuming Products.**

As prescribed in 23.206, insert the following clause:

ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS
(DEC 2007)

(a) *Definition.* As used in this clause—

"Energy-efficient product"— (1) Means a product that—

(i) Meets Department of Energy and Environmental Protection Agency criteria for use of the Energy Star trademark label; or

(ii) Is in the upper 25 percent of efficiency for all similar products as designated by the Department of Energy's Federal Energy Management Program.

(2) The term "product" does not include any energy-consuming product or system designed or procured for combat or combat-related missions (42 U.S.C. 8259b).

(b) The Contractor shall ensure that energy-consuming products are energy efficient products (*i.e.*, ENERGY STAR® products or FEMP-designated products) at the time of contract award, for products that are—

(1) Delivered;

(2) Acquired by the Contractor for use in performing services at a Federally-controlled facility;

(3) Furnished by the Contractor for use by the Government; or

(4) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.

(c) The requirements of paragraph (b) apply to the Contractor (including any subcontractor) unless—

(1) The energy-consuming product is not listed in the ENERGY STAR® Program or FEMP; or

(2) Otherwise approved in writing by the Contracting Officer.

(d) Information about these products is available for—

(1) ENERGY STAR® at *http://www.energystar.gov/products*; and

(2) FEMP at *http://www1.eere.energy.gov/femp/procurement/eep_requirements.html*.

(End of clause)

**52.223-16 IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.**

As prescribed in 23.706(b)(1), insert the following clause:

IEEE 1680 STANDARD FOR THE ENVIRONMENTAL ASSESSMENT OF PERSONAL COMPUTER PRODUCTS
(DEC 2007)

(a) *Definitions*. As used in this clause—

"Computer monitor" means a video display unit used with a computer.

"Desktop computer" means a computer designed for use on a desk or table.

"Notebook computer" means a portable-style or laptop-style computer system.

"Personal computer product" means a notebook computer, a desktop computer, or a computer monitor, and any peripheral equipment that is integral to the operation of such items. For example, the desktop computer together with the keyboard, the mouse, and the power cord would be a personal computer product. Printers, copiers, and fax machines are not included in peripheral equipment, as used in this definition.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for contractor use at a Government-owned facility, only personal computer products that at the time of submission of proposals were EPEAT Bronze registered or higher. Bronze is the first level discussed in clause 1.4 of the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.

(c) For information about the standard, see *www.epeat.net*.

(End of clause)

*Alternate I (DEC 2007)*. As prescribed in 23.706(b)(2), substitute the following paragraph (b) for paragraph (b) of the basic clause:

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for contractor use at a Gov-

ernment-owned facility, only personal computer products that at the time of submission of proposals were EPEAT Silver registered or higher. Silver is the second level discussed in clause 1.4 of the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.

**52.223-17 Affirmative Procurement of EPA-designated Items in Service and Construction Contracts.**

As prescribed in 23.406(e), insert the following clause:

AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008)

(a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

(1) Competitively within a timeframe providing for compliance with the contract performance schedule;

(2) Meeting contract performance requirements; or

(3) At a reasonable price.

(b) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, *http://www.epa.gov/cpg/*. The list of EPA-designated items is available at *http://www.epa.gov/cpg/products.htm*.

(End of clause)

**52.223-18 Contractor Policy to Ban Text Messaging While Driving.**

As prescribed in 23.1105, insert the following clause:

CONTRACTOR POLICY TO BAN TEXT MESSAGING WHILE DRIVING (SEP 2010)

(a) *Definitions*. As used in this clause—

"Driving"– (1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

"Text messaging" means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, dated October 1, 2009.

(c) The Contractor should—

(1) Adopt and enforce policies that ban text messaging while driving—

(i) Company-owned or -rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as—

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold.

(End of clause)

**52.224-1 Privacy Act Notification.**

As prescribed in 24.104, insert the following clause in solicitations and contracts, when the design, development, or operation of a system of records on individuals is required to accomplish an agency function:

PRIVACY ACT NOTIFICATION (APR 1984)

The Contractor will be required to design, develop, or operate a system of records on individuals, to accomplish an agency function subject to the Privacy Act of 1974, Public Law 93-579, December 31, 1974 (5 U.S.C. 552a) and applicable agency regulations. Violation of the Act may involve the imposition of criminal penalties.

(End of clause)

**52.224-2 Privacy Act.**

As prescribed in 24.104, insert the following clause in solicitations and contracts, when the design, development, or operation of a system of records on individuals is required to accomplish an agency function:

PRIVACY ACT (APR 1984)

(a) The Contractor agrees to—

(1) Comply with the Privacy Act of 1974 (the Act) and the agency rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies—

that the petition and/or request should be granted and/or the contentions should be admitted, based on a balancing of the factors specified in 10 CFR 2.309(c)(1)(i)–(viii). To be timely, filings must be submitted no later than 11:59 p.m. Eastern Time on the due date.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket which is available to the public at *http://ehd.nrc.gov/EHD_Proceeding/home.asp*, unless excluded pursuant to an order of the Commission, an Atomic Safety and Licensing Board, or a Presiding Officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their submission.

*Entergy Gulf States, Inc., and Entergy Operations, Inc., Docket No. 50–458, River Bend Station, Unit 1, West Feliciana Parish, Louisiana*

*Date of amendment request:* December 17, 2007.

*Brief description of amendment:* The amendment added a license condition to the Facility Operating License, for a one-time extension of Reactor Protection System Instrumentation Surveillance Requirement (SR) 3.3.1.1.8 concerning the calibration of Local Power Range Monitors. This license condition also includes actions to ensure continued compliance with the associated safety analysis and resolution of this condition as soon as possible. This extension will allow operation until Refuel Outage -14 and establishment of the necessary conditions following the outage to allow the calibration to be performed.

*Date of issuance:* December 21, 2007.

*Effective date:* As of the date of issuance and shall be implemented prior to the required due date for the SR 3.3.1.1.8.

*Amendment No.:* 157.

*Facility Operating License No. NPF–47:* The amendment revised the Facility Operating License. *Public comments requested as to proposed no significant hazards consideration (NSHC):*

No. The Commission's related evaluation of the amendment, finding of emergency circumstances, state consultation, and final NSHC determination are contained in a safety evaluation dated December 21, 2007.

*Attorney for licensee:* Terence A. Burke, Associate General Council—Nuclear Entergy Services, Inc., 1340 Echelon Parkway, Jackson, Mississippi 39213.

*NRC Branch Chief:* Thomas G. Hiltz.

Dated at Rockville, Maryland, this 7th day of January 2008.

For the Nuclear Regulatory Commission.

**Catherine Haney,**

*Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.*

[FR Doc. E8–421 Filed 1–11–08; 8:45 am]

BILLING CODE 7590–01–P

## NUCLEAR REGULATORY COMMISSION

### Sunshine Act Meetings Notice

**AGENCY HOLDING THE MEETINGS:** Nuclear Regulatory Commission.

**DATE:** Weeks of January 14, 21, 28; February 4, 11, 18, 2008.

**PLACE:** Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

**STATUS:** Public and Closed.

**MATTERS TO BE CONSIDERED:**

**Week of January 14, 2008**

*Monday, January 14, 2008*

10 a.m.
Discussion of Adjudicatory Issues (Closed—Ex. 10).

*Tuesday, January 15, 2008*

9:25 a.m.
Affirmation Session (Public Meeting).
a. PG&E Co. (Diablo Canyon ISFSI), Docket No. 72–26–ISFSI, San Luis Obispo Mothers for Peace's Contention and Request for Hearing Re Diablo Canyon Environmental Assessment Supplement (Tentative).
b. Pilgrim Nuclear Power Station License Renewal Pilgrim Watch's Appeal of Interlocutory Board Order Summarily Disposing of Contention 3 (SAMAs) (LBP–07–13).

**Week of January 21, 2008—Tentative**

There are no meetings scheduled for the Week of January 21, 2008.

**Week of January 28, 2008—Tentative**

There are no meetings scheduled for the Week of January 28, 2008.

**Week of February 4, 2008—Tentative**

There are no meetings scheduled for the Week of February 4, 2008.

**Week of February 11, 2008—Tentative**

There are no meetings scheduled for the Week of February 11, 2008.

**Week of February 18, 2008—Tentative**

*Wednesday, February 20, 2008*

9:30 a.m.
Periodic Meeting on New Reactor Issues, Part 1 (Public Meeting). (Contact: Donna Williams, 301–415–1322.)

1:30 p.m.
Periodic Meeting on New Reactor Issues, Part 2 (Public Meeting). (Contact: Donna Williams, 301–415–1322).

This meeting, parts 1 and 2, will be webcast live at the Web address—*http://www.nrc.gov*.

*The schedule for Commission meetings is subject to change on short notice. To verify the status of meetings, call (recording)—(301) 415–1292. Contact person for more information: Michelle Schroll, (301) 415–1662.

The NRC Commission Meeting Schedule can be found on the Internet at: *http://www.nrc.gov/about-nrc/policy-making/schedule.html*.

The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If you need a reasonable accommodation to participate in these public meetings, or need this meeting notice or the transcript or other information from the public meetings in another format (e.g., braille, large print), please notify the NRC's Disability Program Coordinator, Rohn Brown, at 301–492–2279, TDD: 301–415–2100, or by e-mail at *REB3@nrc.gov*. Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

This notice is distributed by mail to several hundred subscribers; if you no longer wish to receive it, or would like to be added to the distribution, please contact the Office of the Secretary, Washington, DC 20555 (301–415–1969). In addition, distribution of this meeting notice over the Internet system is available. If you are interested in receiving this Commission meeting schedule electronically, please send an electronic message to *dkw@nrc.gov*.

Dated: January 10, 2008.

**R. Michelle Schroll,**

*Office of the Secretary.*

[FR Doc. 08–114 Filed 1–11–08; 10:43 am]

BILLING CODE 7590–01–P

## OFFICE OF MANAGEMENT AND BUDGET

### Office of Federal Procurement Policy; Acquisition of Green Products and Services

**AGENCY:** Office of Management and Budget.

**ACTION:** Notice; correction.

**SUMMARY:** The Office of Management and Budget, Office of Federal Procurement Policy (OFPP) published a document in the **Federal Register** of December 28, 2007, concerning a proposed OFPP policy letter on the acquisition of green products and services. The document erroneously contained an effective date.

**FOR FURTHER INFORMATION CONTACT:** Jim Daumit, 202–395–1052.

### Correction

In the **Federal Register** of December 28, 2007, in FR Doc. E7–25211, on page 73909, in the first column, remove item 13, ''Effective date'', in its entirety.

The publication is not effective as of December 28, 2007. The proposed OFPP policy letter published on December 28, 2007 is for public comment purposes only.

Dated: January 8, 2008.

**Paul A. Denett,**

*Administrator.*

[FR Doc. E8–521 Filed 1–14–08; 8:45 am]

BILLING CODE 3110–01–P

## OVERSEAS PRIVATE INVESTMENT CORPORATION

### January 31, 2008 Board of Directors Meeting

*Time and Date:* Thursday, January 31, 2008, 10 a.m. (Open Portion) 10:15 a.m. (Closed Portion).

*Place:* Offices of the Corporation, Twelfth Floor Board Room, 1100 New York Avenue, NW., Washington, DC.

*Status:* Meeting Open to the Public from 10 a.m. to 10:15 a.m. Closed portion will commence at 10:15 a.m. (approx.).

*Matters To Be Considered:*

1. President's Report.
2. Tribute—Ambassador Karan K. Bhatia.
3. Tribute—Ambassador Ned L. Siegel.
4. Tribute—Edith P. Quintrell.
5. Approval of September 20, 2007 Minutes (Open Portion).

*Further Matters To Be Considered:* (Closed to the Public 10:15 a.m.)

1. Report from Audit Committee.
2. Report from Office of Chief Financial Officer.
3. Finance Project—Lebanon.
4. Finance Project—Global.
5. Finance Project—Mexico.
6. Finance Project—Nicaragua.
7. Finance Project—Sub-Saharan and North Africa.
8. Finance Project—Sub-Saharan Africa.
9. Finance Project—East Africa.
10. Finance Project—Africa.
11. Finance Project—Sub-Saharan Africa.
12. Finance Project—Middle East, North Africa.
13. Pending Major Projects.
14. Approval of September 20, 2007 Minutes (Closed Portion).

*Contact Person for Information:* Information on the meeting may be obtained from Connie M. Downs at (202) 336–8438.

Dated: January 11, 2008.

**Connie M. Downs,**

*Corporate Secretary, Overseas Private Investment Corporation.*

[FR Doc. 08–117 Filed 1–11–08; 1:17 pm]

BILLING CODE 3210–01–M

## OVERSEAS PRIVATE INVESTMENT CORPORATION

### January 29, 2008 Public Hearing

*Time and Date:* 3 p.m., Tuesday, January 29, 2008.

*Place:* Offices of the Corporation, Twelfth Floor Board Room, 1100 New York Avenue, NW., Washington, DC.

*Status:* Hearing OPEN to the Public at 3 p.m.

*Purpose:* Public Hearing in conjunction with each meeting of OPIC's Board of Directors, to afford an opportunity for any person to present views regarding the activities of the Corporation.

### Procedures

Individuals wishing to address the hearing orally must provide advance notice to OPIC's Corporate Secretary no later than 5 p.m., Wednesday, January 23, 2008. The notice must include the individual's name, title, organization, address, and telephone number, and a concise summary of the subject matter to be presented.

Oral presentations may not exceed ten (10) minutes. The time for individual presentations may be reduced proportionately, if necessary, to afford all participants who have submitted a timely request to participate an opportunity to be heard.

Participants wishing to submit a written statement for the record must submit a copy of such statement to OPIC's Corporate Secretary no later than 5 p.m., Wednesday, January 23, 2008. Such statements must be typewritten, double-spaced, and may not exceed twenty-five (25) pages.

Upon receipt of the required notice, OPIC will prepare an agenda for the hearing identifying speakers, setting forth the subject on which each participant will speak, and the time allotted for each presentation. The agenda will be available at the hearing.

A written summary of the hearing will be compiled, and such summary will be made available, upon written request to OPIC's Corporate Secretary, at the cost of reproduction.

*Contact Person for Information:* Information on the hearing may be obtained from Connie M. Downs at (202) 336–8438, via facsimile at (202) 218–0136, or via e-mail at *cdown@opic.gov.*

Dated: January 10, 2008.

**Connie M. Downs,**

*OPIC Corporate Secretary.*

[FR Doc. 08–118 Filed 1–11–08; 1:17 pm]

BILLING CODE 3210–01–M

## OVERSEAS PRIVATE INVESTMENT CORPORATION

### January 29, 2008 Annual Public Hearing

*Time and Date:* Tuesday, January 29, 2008, 2 p.m.

*Place:* Offices of the Corporation, Twelfth Floor Board Room, 1100 New York Avenue, NW., Washington, DC.

*Status:* Hearing OPEN to the Public at 2 p.m.

*Purpose:* Annual Public Hearing to afford an opportunity for any person to present views regarding the activities of the Corporation.

### Procedures

Individuals wishing to address the hearing orally must provide advance notice to OPIC's Corporate Secretary no later than 5 p.m., Wednesday, January 23, 2008. The notice must include the individual's name, organization, address and telephone number, and a concise summary of the subject matter to be presented.

Oral presentations may not exceed ten (10) minutes. The time for individual presentations may be reduced proportionately, if necessary, to afford all participants who have submitted a timely request to participate, an opportunity to be heard.

Participants wishing to submit a written statement for the record must submit a copy of such statement to OPIC's Corporate Secretary no later than 5 p.m., Wednesday, January 23, 2008. Such statements must be typewritten, double-spaced and may not exceed twenty-five (25) pages.

Upon receipt of the required notice, OPIC will prepare an agenda for the hearing identifying speakers, setting forth the subject on which each participant will speak, and the time allotted for each presentation. The agenda will be available at the hearing.

Act pursuant to 5 U.S.C. 552a(k)(1) and (k)(2) as claimed by ODNI or by the originator of the records, provided the reason for the exemption remains valid and necessary.

[FR Doc. E7–25273 Filed 12–27–07; 8:45 am]

BILLING CODE 3910–A7–P–P

## OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE

### Procurement Thresholds for Implementation of the Trade Agreements Act of 1979; Correction

**AGENCY:** Office of the United States Trade Representative.

**ACTION:** Correction of certain procurement thresholds under the World Trade Organization Agreement on Government Procurement, the United States-Australia Free Trade Agreement, the United States-Bahrain Free Trade Agreement, the United States-Chile Free Trade Agreement, the Dominican Republic-Central American-United States Free Trade Agreement, the United States-Morocco Free Trade Agreement, and the United States-Singapore Free Trade Agreement.

**FOR FURTHER INFORMATION CONTACT:** Jean Heilman Grier, Senior Procurement Negotiator, Office of the United States Trade Representative, (202) 395–9476 or *Jean_Grier@ustr.eop.gov*.

**SUMMARY:** On December 14, 2007, the Office of the United States Trade Representative (USTR) published notice of the Procurement Thresholds for Implementation of the Trade Agreements Act of 1979 (72 FR 71166). That Notice included three incorrect procurement threshold values due to inadvertent calculation errors. This notice provides the corrected thresholds.

Now, therefore, I, Susan C. Schwab, United States Trade Representative, in conformity with the provisions of Executive Order 12260, and in order to carry out the trade agreement obligations of the United States under the World Trade Organization Agreement on Government Procurement (WTO/GPA), Chapter 15 of the United States-Australia Free Trade Agreement (U.S.-Australia FTA), Chapter 9 of the United States-Bahrain Free Trade Agreement (U.S.-Bahrain FTA), Chapter 9 of the United States-Chile Free Trade Agreement (U.S.-Chile FTA), Chapter 9 of the Dominican Republic-Central American-United States (DR–CAFTA), Chapter 9 of the United States-Morocco Free Trade Agreement (U.S.-Morocco FTA), and Chapter 13 of the United States-Singapore Free Trade Agreement (U.S.-Singapore FTA), do hereby determine, effective on January 1, 2008, for the calendar years 2008–2009, the following thresholds shall apply and replace those set out in the Determination published on December 14, 2007 (72 FR 71166):

*$7,443,000*—for the procurement of construction services by all entities listed in the WTO/GPA, U.S.–Australia FTA, U.S.–Chile FTA, DR–CAFTA, U.S.–Morocco FTA, and the U.S.–Singapore FTA.

*$528,000*—for the procurement of goods and services by sub-central entities listed in the WTO/GPA, U.S.–Australia FTA, U.S.–Chile FTA, DR–CAFTA, U.S.–Morocco FTA, and the U.S.–Singapore FTA.

*$595,000*—for the procurement of goods and services by entities listed in U.S. Annex 3 of the WTO/GPA; List B in Annex 15–A of the U.S.–Australia FTA; List B in Annex 9–A, Section 3 of the U.S.–Bahrain FTA; List B in Annex 9.1, Section C of the U.S.–Chile FTA; List B in Annex 9.1, Section C of the DR–CAFTA; List B in Annex 9.1, Section C of the U.S.–Morocco FTA; and Annex 13A, Section C of the U.S.–Singapore FTA.

**Susan C. Schwab,**

*United States Trade Representative.*

[FR Doc. E7–25330 Filed 12–27–07; 8:45 am]

BILLING CODE 3190–W8–P

## OFFICE OF MANAGEMENT AND BUDGET

### Office of Federal Procurement Policy; Acquisition of Green Products and Services

**AGENCY:** Office of Federal Procurement Policy (OFPP), OMB.

**ACTION:** Proposed policy letter on the acquisition of green products and services.

**SUMMARY:** OFPP is proposing to issue a policy letter on green procurement policies and strategies. The policy letter would address: (1) General responsibilities of agencies for the procurement of green products and services; (2) the relationship of green products and services to other socio-economic programs; (3) automatic substitution policies; (4) listing of green products in Federal catalogues and online ordering systems; (5) green requirements for paper and printing; (6) application of green requirements in service contracting; and (7) energy efficiency. The proposed policy letter would implement specific provisions of Executive Order (E.O.) 13423, *Strengthening Federal Environmental, Energy, and Transportation Management,* Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962), the Energy Policy Act of 1992 (42 U.S.C. 6903), the Energy Policy Act of 2005 (42 U.S.C. 6361), and Section 9002 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8102). The proposed policy letter, when finalized, would supersede OFPP Policy Letter 92–4, *Procurement of Environmentally-Sound and Energy-Efficient Products and Services,* dated November 2, 1992.

*Comment Date:* Comments must be received in writing on or before February 26, 2008 to be considered in the formulation of the final policy letter.

**ADDRESSES:** Submit comments by any of the following methods:

- *E-mail: OFPPGreen@omb.eop.gov.*
- *Facsimile:* (202) 395–5105.
- *Mail:* Office of Federal Procurement Policy, Office of Management and Budget, Room 9013, 725 17th Street, NW., Washington, DC 20503.

*Instructions:* Please submit comments only and cite ''Proposed OFPP Policy Letter'' in all correspondence. All comments will be posted without change to *http://www.whitehouse.gov/omb/procurement/green/green_comments.html*, including any personal and/or business confidential information provided.

**FOR FURTHER INFORMATION CONTACT:** Mr. Jim Daumit, Policy Analyst, at (202) 395–1052, for clarification of content.

**SUPPLEMENTARY INFORMATION:** The proposed policy letter provides guidance on green purchasing policies and strategies. It requires agencies to identify opportunities and give preference to the acquisition of green products and services, including but not limited to: (1) Alternative fuels and alternative fuel vehicles and hybrids; (2) biobased products; (3) Energy Star® and Federal Energy Management Program (FEMP)-designated products; (4) environmentally-preferable products and services; (5) electronics registered on the Electronic Product Environmental Assessment Tool; (6) low or no toxic or hazardous chemicals or materials or products; (7) non-ozone depleting substances; (8) recycled-content and/or remanufactured products; (9) renewable energy; and (10) water-efficient products.

In addition, the proposed policy letter:

- Requires agencies to first consider mandatory and preferred sources to obtain green products and services that meet their performance needs, and

where these sources are unable to meet their needs, to purchase green products and services from other sources.

• Requires agencies to implement automatic substitution policies for the purchase of functionally equivalent green products and services in place of non-green products and services ordered through central supply agencies.

• Requires GSA, DLA, and other central supply agencies to supply designated green products and phase out any competing non-green products from their catalogs and on-line ordering systems. Agencies are encouraged in their comments to identify anticipated needs for non-green products listed in Federal catalogs and on-line ordering systems that may extend beyond January 1, 2010 where green products are currently available.

• Requires agencies to include requirements and preferences for the use of green products in all new service contracts and other existing service contracts as they are recompeted and encourages agencies to incorporate these requirements and preferences into existing contracts as they are modified or extended through options.

• Discusses agencies' responsibilities for accurate, complete, and timely reporting.

Reference information on green acquisition polices and green purchasing programs may be found on OFPP's homepage at *http://www.whitehouse.gov/omb/procurement/index_green.html*.

**Paul A. Denett,**

*Administrator.*

*Policy Letter No. 07–XX*

To The Heads of Executive Departments And Establishments

*Subject:* Acquisition of Green Products and Services.

1. *Purpose.* This policy letter provides Executive branch policies for the acquisition, use and disposition of green products and services, including but not limited to: recycled content products; water-efficient, energy-efficient, Energy Star® and those products with the lowest watt stand-by power; biobased products; environmentally preferable products; alternative fuels; hybrid and alternative fuel vehicles; non-ozone depleting substances; renewable energy; and all services that may include the supply or use of any of these products. Agency acquisition policies and programs shall enhance and, where appropriate, mandate the purchase and use of green products and services covered in this policy letter.

2. *Authority.* This policy letter is issued pursuant to section 6(a) of the Office of Federal Procurement Policy Act, 41 U.S.C. 405(a), Section 6002 of the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6962, the Energy Policy Act of 1992, 42 U.S.C. 6903(19), the Energy Policy Act of 2005, 42 U.S.C. 6361, Section 9002 of the Farm Security and Rural Investment Act of 2002 (FSRIA), 7 U.S.C. 8102, and Executive Order (E.O.) 13423, Strengthening Federal Environmental, Energy, and Transportation Management.

3. *Applicability.* This Letter applies to all executive agencies.

4. *Rescission.* This policy letter rescinds Office of Federal Procurement Policy (OFPP) Policy Letter 92–4, Procurement of Environmentally-Sound and Energy-Efficient Products and Services, dated November 2, 1992.

5. *Definitions.*

*Alternative fuel* is defined by Section 301 of the Energy Policy Act of 1992, as implemented by the Secretary of Energy through rulemaking, at 10 CFR Part 490.2.

*Biobased product* means a product determined by the Secretary of Agriculture to be a commercial or industrial product (other than food or feed) that is composed, in whole or in part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials.

*Energy efficient or FEMP-designated product* means a product designated by the Federal Energy Management Program, Department of Energy as being among the highest 25 percent of equivalent products for energy efficiency.

*Energy Star® product* means a product that is rated for energy efficiency under an Energy Star® program established by Section 324A of the Energy Policy and Conservation Act.

*Environmentally preferable* means products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, product, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

*Electronic Product Environmental Assessment Tool (EPEAT)* is an environmental procurement tool designed to help institutional purchasers in the public and private sectors evaluate, compare and select electronic products based on their environmental attributes. The first EPEAT standard applies to computer desktops, laptops and monitors.

*EPEAT-registered products* are those products which meet the Institute of Electronic and Electrical Engineers (IEEE) 1680 Standard for the Environmental Assessment of Personal Computer Products, and products registered under similar standards developed after the date of this policy letter, and are listed on the EPEAT Product Registry located at *www.epeat.net*.

*Executive agency* means an Executive department, a military department, or any independent establishment within the meaning of 5 U.S.C. 101, 102, and 104(1), respectively, and any wholly owned Government corporation within the meaning of 31 U.S.C. 9101.

*Life-cycle cost effective* means the life-cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product). Additional guidance on measuring cost-effectiveness is specified in 10 CFR Parts 436.18(a), (b), and (c), 436.20, and 436.21.

*Ozone-depleting substances* means any substance designated as a Class I or Class II substance by the Environmental Protection Agency (EPA) in 40 CFR Part 82.

*Postconsumer content* means a material or product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item.

*Recovered material* means waste material and by-products which have been recovered or diverted from solid waste, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

*Recycled content products* means products containing recovered materials designated for federal preferred procurement by the EPA under Section 6002 of RCRA. The products are also known as EPA-designated items.

*Renewable energy* means energy produced by solar, wind, biomass, landfill gas, hydrokinetic, ocean (including tidal, wave, current and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

*Sustainable* means to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans.

*Water efficient product or service* means a product or service that uses less water than competing products or services that serve the same purpose, including those meeting EPA's WaterSense standards.

6. *Background.* E.O. 13423, *Strengthening Federal Environmental, Energy, and Transportation Management,* issued on January 26, 2007 (72 FR 3919), directs federal agencies to conduct their environmental, transportation, and energy-related activities in support of their respective missions in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner. In agency acquisitions of goods and services, the Executive Order requires: (i) use of sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy-efficient, water-efficient, and recycled-content products, and (ii) use of paper of at least 30 percent postconsumer fiber content.

Other goals of E.O. 13423 address improving energy efficiency, consuming renewable energy, reducing water consumption, increasing diversion of solid waste, ensuring sustainable/green construction of buildings, reducing petroleum use, and ensuring acquisition and use of EPEAT-registered electronic products. E.O. 13423 further requires that agency programs to reduce and better manage the use of toxic and hazardous chemicals include reducing the acquisition of such chemicals.

Acquiring green products and services is a key element of successfully implementing E.O. 13423, an effective environmental management system (EMS), and a sustainability program. This policy letter provides guidance to agencies for implementing the green acquisition requirements of E.O. 13423, including its implementation within an EMS framework. E.O. 13423 also provides guidance to agencies that do not have an EMS or have not yet incorporated goals toward sustainability but are still required to implement an affirmative procurement program for green products and services as part of their overall acquisition strategy.

7. *Policy.* It is the policy of the federal government to develop and implement green purchasing policies and affirmative procurement programs in order to conserve resources and be good stewards of the environment and reduce our negative impact on the environment. The purchase of green products applies to all acquisition and contracting mechanisms used by federal agencies, including service contracts, purchases made with government purchase and fleet cards and purchases below the micropurchase threshold.

8. *Responsibilities.*

A. *General requirements.* In implementing this policy, Executive agencies shall:

(1) Identify opportunities for and give preference to the acquisition of green products and services including but not limited to:

(a) Alternative fuels and Alternative fuel vehicles (AFVs) and hybrids as required by Section 303 of the Energy Policy Act of 1992 and amended by the Energy Policy Act of 2005 and E.O. 13423;

(b) biobased products designated by the Department of Agriculture (USDA) under section 9002 of the Farm Security and Rural Investment Act of 2002 (FSRIA);

(c) Energy Star®, FEMP-designated, and those electronic products with the lowest available stand-by power as required by section 104 of the Energy Policy Act of 2005 and E.O. 13423;

(d) Environmentally-preferable products and services in accordance with E.O. 13423;

(e) EPEAT-registered electronics in accordance with E.O. 13423;

(f) Low or no toxic or hazardous chemicals or materials or products containing lesser or no toxic or hazardous constituents;

(g) Non-ozone depleting substances under the Clean Air Act as contained in EPA's Significant New Alternatives Program (SNAP);

(h) Recycled content and/or remanufactured products designated by EPA under section 6002 of RCRA;

(i) Renewable energy as required by section 203 of the Energy Policy Act of 2005, E.O. 13423; and

(j) Water efficient products, including those meeting EPA's ''WaterSense'' standards.

(2) Ensure representation of environmental and energy experts, managers, or technical personnel on integrated procurement teams for all major acquisitions and consider each of the following factors:

(a) Sustainable design practices;

(b) Life cycle cost analysis;

(c) Product or packaging take back (return to manufacturer for recycling or remanufacturing purposes); and

(d) Maximization of energy and resource recovery in solid waste management.

(3) Incorporate green purchasing requirements within agency, organizational, and facility environmental management systems. Guidance can be found in *Incorporating Environmentally Preferable Purchasing into Environmental Management Systems,* available at *http://www.epa.gov/epp/pubs/grn-pur/green-pur-ems.htm.*

(4) Develop and implement a formal, comprehensive, written affirmative procurement program (APP), also referred to as a green purchasing plan, for all products and services covered by this policy letter.

(a) Minimally, an APP must:

- State a preference for the acquisition of the green products and services identified above;
- Delineate the roles and responsibilities of contracting officials, program managers, product specifiers, and purchase card holders and administrators;
- Promote the acquisition of green products and services internally within the agency and externally to all product vendors and service providers, including other federal, state, and local agencies;
- Provide for annual compliance monitoring, corrective action, and/or auditing as appropriate;
- Provide mechanisms for reporting on the effectiveness of the program to demonstrate compliance;
- Require flow down of green product preferences to contractors and subcontractors; and
- For recycled content products only, require estimates of the total amount of recovered materials used in items supplied or used under the contract, certification that the minimum recycled content requirement was met, where appropriate, and implement procedures for verifying the estimates and certifications.

(b) An effective APP should also address:

- Preference for green products and services in the agency's annual procurement forecasts for all products and services;
- Development of templates for incorporating green purchasing requirements into solicitations and contracts and/or using the model templates developed by other agencies;
- Use of Federal Business Opportunities (FedBizOpps) and other e-procurement tools to publicize and promote requirements for green products and services and/or sustainable acquisitions;
- The incorporation of green product requirements in the agency's automated contract writing system;
- Strategic sourcing opportunities for purchasing green products and services;
- Achievement of best value based on life cycle cost assessments of cradle-to-grave manufacture, use and disposition;
- Past performance evaluation of contractors' adherence to green

components/sustainable aspects of contracts;

• Green and/or sustainable standards and performance indicators in statements of work, source selection factors, and performance-based acquisitions;

• Reporting of green contract requirements implementation through the Federal Procurement Data System (FPDS); and

• For agencies that manage government specifications or commercial item descriptions, review and revise, as necessary, specifications and standards to permit the acquisition of green products and services.

(5) Work with private standard setting organizations and participate, pursuant to OMB Circular A–119 and the National Technology Transfer and Advancement Act (NTTAA), in the development of voluntary standards and specifications defining green products, practices and services.

(6) Develop and require training on the acquisition of green products and services as well as agency sustainable practices for requirements personnel, procurement personnel, purchase card and travel card holders and administrators, fleet managers, and facilities managers.

(7) Conduct pilot projects to test and measure results from the purchase and use of green products and services. Agencies may be requested to serve as a lead agency in coordinating a pilot and reporting government-wide results associated with the pilot.

(8) Ensure that the agency (a) meets at least 95 percent of its requirements for acquiring an electronic product with an EPEAT-registered electronic product, unless there is no EPEAT standard for such product, (b) enables the Energy Star® feature on agency computers and monitors, (c) establishes and implements policies to extend the useful life of agency electronic equipment, and (d) uses environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life.

B. *Relationship of green purchasing requirements to other socio-economic programs.* Executive agencies should first determine their specific performance requirements for products and services then identify sources that effectively meet the agency's performance needs. If an agency determines that a green product or service can meet its performance needs, it shall first consider mandatory and preferred sources to obtain green products or services. If these sources do not offer products or services that meet the agency's performance needs, the agency shall obtain such products and services from other sources.

Nonprofit agencies employing people who are blind or severely disabled under the AbilityOne Program pursuant to the Javits-Wagner-O'Day Act and Federal Prison Industries' UNICOR programs are mandatory sources. See Subparts 8.6 and 8.7 of the Federal Acquisition Regulation (FAR). Small businesses, including Small Disadvantaged, Women-Owned, Native American, Alaska Native, HUB-zone, and Service-Disabled Veterans, are preferred sources.

C. *Automatic substitution policies.* Executive agencies in coordination with General Services Administration (GSA) and the Defense Logistics Agency (DLA) shall implement automatic substitution policies in accordance with the following guidelines:

(1) GSA and DLA shall coordinate with Chief Acquisition Officers and Senior Officials appointed under Section 3(d) of E.O. 13423 to identify opportunities and establish policies to automatically substitute functionally equivalent green products and services in place of non-green products and services ordered by customer agencies. These products and services may include, but are not limited to, general office products, other paper products such as tissues and towels, biobased cleaning products, and/or any other green products and services appropriate to agencies' needs.

GSA and DLA shall report to the OFPP Administrator annually on the products and services for which these automatic substitution policies have been implemented.

(2) GSA and DLA shall provide only Energy Star® and FEMP-designated energy efficient products for all categories of products covered by the Energy Star® and FEMP programs, unless the head of an agency provides written justification as covered in paragraph 8.G.(2) of this policy letter.

D. *Compliance and listing of green products in federal catalogs and on-line ordering systems.* GSA, DLA and any other central supply source shall:

(1) Clearly identify and prominently display designated green products and services covered in this policy letter in federal catalogs and on-line ordering systems; and

(2) Phase out competing non-green products from their supply catalogs, contracts, specifications, inventories, and schedules, in accordance with the following deadlines:

(a) For a green product designated prior to the publication of this policy letter—by January 1, 2010 or an alternative deadline established in consultation with the Federal Environmental Executive and the Administrator of OFPP.

(b) For a green product designated after the publication of this policy letter—the latter of January 1, 2010 or within one year after the date specified in subparagraph (c) or an alternative deadline established in consultation with the Federal Environmental Executive and the Administrator of OFPP.

(c) The date referred to in subparagraph (b) is the date a notice is issued in the **Federal Register** by the manager of a green product program at USDA, EPA, or DOE designating new products for its lists that :

(i) Can meet the functional performance requirements of competing non-green products in the same or similar product category; and

(ii) Adequately address factors that would otherwise justify exemptions from green purchasing products as described in paragraph 8.G of this policy letter.

E. *Requirements for paper and printing.* In implementing the policy for paper and paper products acquired through GSA, the Government Printing Office, or private entities, Executive agencies shall:

(1) Require the use of printing and writing paper containing a minimum of 30 percent postconsumer fiber;

(2) To the maximum extent practicable, ensure that all copier machines, faxes, and printers are set up to print double-sided documents and that any reports, studies, analyses, assessments or any other contract deliverables are provided as double-sided copies;

(3) To the maximum extent practicable, require that all printing services require the use of recycled content paper and double-sided copying;

(4) To the maximum extent practicable, refrain from specifying printing and writing papers that do not contain a minimum of 30 percent postconsumer fiber for products with a limited useful life such as annual reports, catalogues, training materials, and telephone directories as appropriate; and

(5) To the maximum extent practicable, provide and transfer documents electronically to eliminate paper requirements.

F. *Service contracting.* Executive agencies must include requirements and preferences for the use of green products in all new service contracts and recompeted service contracts where green products may be substituted for

equivalent non-green products in the performance of the contract. Agencies are also encouraged to incorporate these requirements and preferences into existing contracts as they are modified or extended through options. Requirements and opportunities to incorporate sustainable practices and green products in service contracts are provided below. Agencies should explore further opportunities for including these practices and products in all relevant service contracts.

(1) Buildings and leased space: When acquiring leased space or entering into construction contracts for buildings and other major assets, agencies shall:

(a) implement the five Guiding Principles for High Performance and Sustainable Buildings identified in the *Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding* and relate technical guidance found on the Whole Building Design Guide *(www.wbdg.org)* as long as it is life cycle cost effective to do so; and

(b) ensure that new buildings are 30 percent more energy efficient than the 2004 International Energy Conservation Code for residential buildings or the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 90.1–2004 for non-residential buildings, if life-cycle cost effective.

(2) Energy efficiency: In order to meet government-wide goals for energy efficiency, sustainable building, green product and service acquisition, and renewable energy, agencies are authorized and encouraged to use Energy Savings Performance Contracts (ESPC) and Utility Energy Savings Contracting (UESC) programs. ESPC and UESC programs are innovative tools for investing in building improvements to reduce energy and water use and increase the portion of remaining energy needs supplied from renewable energy sources. Agencies may use any combination of appropriated funds and private financing to carry out an individual project by covering its up front costs, as long as the entire project's future cost savings exceed the amounts required over time to repay the private financing.

(3) Fleet and rental car services: GSA and or other federal fleet service providers shall, to the maximum extent practicable, include requirements for increasing alternative fuel use, retread tires, re-refined motor oil, biolubricants, and other vehicle related products designated as recycled content, energy efficient, biobased or environmentally preferable and reducing petroleum use to the maximum extent practicable. Agencies should also ensure that Government travel arrangements for federal employee travel contain preferences for alternative fuel vehicles filled with alternative fuel, hybrids, and other designated green products as feasible and applicable.

(4) Janitorial services: Agencies shall include requirements for recycled content products (e.g., towels, sanitary tissue products, and plastic trash can liners) and biobased and/or environmentally preferable cleaning products in all janitorial contracts.

(5) Laundry services: Agencies and their contractors shall request energy and water efficient equipment, and environmentally preferable or biobased detergents in laundry service contracts.

(6) Meeting and conference services: Agencies shall, wherever possible, contract for meeting and conference services with contractors offering such green attributes as proximity to mass transportation, shuttle services using alternative fuel vehicles, recycling services, the use of recycled content and/or biobased products, energy and water efficient facilities, linen/towel reuse programs, reusable china and linens for food service, or sourcing food from local providers.

G. *Exemptions from requirements.* Exemptions from the purchase requirements covered in this policy letter require written justifications in accordance with the following:

(1) A decision not to procure EPA-designated recycled content products or USDA-designated biobased items directly or though a service contract requires written justification by the agency that a determination was made that such items:

(a) Are not reasonably available within the time required;

(b) Fail to meet performance standards established in applicable specifications or fail to meet the reasonable performance standards of the procuring agency;

(c) Are only available at an unreasonable price (based on life cycle cost); or

(d) Are not available from a sufficient number of sources to maintain a satisfactory level of competition.

(2) A decision not to procure Energy Star® or FEMP designated energy efficient products directly or through a service contract requires written justification by the head of the agency that a determination was made that such products:

(a) Are not cost effective over the life of the product taking energy cost savings into account; or

(b) Are not reasonably available to meet the functional requirement of the agency.

9. *Federal Acquisition Regulatory Councils.* The Defense Acquisition Regulations Council and the Civilian Agency Acquisition Council shall conduct periodic reviews of the relevant parts of the FAR to assure (1) that no unintended limitations to the acquisition of green products and services are contained therein, and (2) that the procurement policies established by this policy letter are fully reflected in the FAR.

10. *Reporting requirements.* Agency activities conducted pursuant to this policy letter will be reported biennially to the President as required by E.O. 13423 and as otherwise required by statute.

A. OFPP will collect data annually from agencies. Each Executive agency shall provide accurate, complete and timely data to OFPP in its annual requests. Requests may include, but are not limited to:

(1) Quantitative data on purchases of indicator items;

(2) Contract compliance data reported through the FPDS system;

(3) Data documenting the results of participation in agency or government-wide pilots;

(4) Evidence of preference language included in service contracts, procurement forecasts, solicitations, and/or competitive sourcing studies; and/or

(5) Evidence of annual training, compliance monitoring, corrective action plans and implementation of corrective actions.

B. Criteria for agency reporting to OFPP on green product purchasing and service acquisitions will be updated as necessary to ensure consistency with the requirements of this policy letter.

11. *Information.* Questions or inquiries about this policy letter should be directed to the Office of Federal Procurement Policy, 725 17th Street, NW, Washington, DC 20503, telephone: 202–395–3501.

12. *Judicial review.* This Policy Letter is not intended to provide a constitutional or statutory interpretation of any kind and it is not intended, and should not be construed, to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any persons. It is intended only to provide policy guidance to agencies in the exercise of their discretion concerning federal contracting. Thus, this Policy Letter is not intended, and should not be construed, to create any substantive or

procedural basis on which to challenge any agency action or inaction on the ground that such action or inaction was not in accordance with this Policy Letter.

13. *Effective date.* This policy letter is effective December 28, 2007.

**Paul A. Denett,**

*Administrator.*

[FR Doc. E7–25211 Filed 12–27–07; 8:45 am]

BILLING CODE 3110–01–P

## POSTAL REGULATORY COMMISSION

**[Docket No. MC2008–1; Order No. 50]**

### Notice

**AGENCY:** Postal Regulatory Commission.

**ACTION:** Notice.

**SUMMARY:** The Commission is establishing a docket to develop a record which will allow it to meet statutory requirements pertaining to a review of nonpostal services. It solicits comments from the Postal Service and others to assist in this task.

**DATES:** Initial briefs due June 18, 2008; reply briefs due July 2, 2008. See Supplementary Information section for additional dates.

**ADDRESSES:** Submit comments electronically via the Commission's Filing Online system at *http://www.prc.gov*.

**FOR FURTHER INFORMATION CONTACT:** Stephen L. Sharfman, General Counsel, 202–789–6820 and *stephen.sharfman@prc.gov*.

**SUPPLEMENTARY INFORMATION:** The Postal Accountability and Enhancement Act (PAEA), Public Law No. 109–435, 120 Stat. 3198 (December 20, 2006), amends the Postal Reorganization Act, 39 U.S.C. 101, *et seq.*, by, among other things, limiting the Postal Service's authority to provide nonpostal services to those it offered as of January 1, 2006. 39 U.S.C. 404(e)(2). The term ''nonpostal service'' is defined in section 404(e)(1) as ''any service that is not a postal service defined under section 102(5)[,]'' which defines the term ''postal service'' to mean ''the delivery of letters, printed matter, or mailable packages, including acceptance, collection, sorting, transportation, or other functions ancillary thereto[.]'' *Id.* at § 102(5).

Section 404(e)(3) directs the Commission to review each nonpostal service offered by the Postal Service on the date of the PAEA's enactment, December 20, 2006, within two years of that date. The purpose of the review is to determine which nonpostal services should continue, taking into account the public need for the service and the private sector's ability to meet that need. Any nonpostal service that the Commission concludes should not continue shall terminate. Section 404(e)(4). Finally, for any nonpostal service that it concludes should continue, the Commission ''shall designate whether the service shall be regulated under this title as a market dominant product, a competitive product, or an experimental product.'' Section 404(e)(5).

The Commission is initiating this docket to fulfill its responsibilities under section 404(e).[1] To develop a record on which to base its findings, the Commission adopts the following procedural schedule:

1. By no later than March 19, 2008, the Postal Service shall, in the form of a sworn statement, identify and provide a complete description of each nonpostal service offered by the Postal Service on the date of enactment of the PAEA.[2] The description shall include the current status of each nonpostal service and the Postal Service's proposed classification of each such service, *i.e.*, as a market dominant, competitive, or experimental product. The foregoing shall be accompanied by a sworn statement from a knowledgeable person (or persons) addressing the public need for each service and such other matters, if any, the Postal Service deems relevant (collectively, Postal Service statement).

2. By no later than April 30, 2008, any interested person (party) may respond to the Postal Service statement by submitting a sworn statement from a knowledgeable person (or persons) addressing, at a minimum, the ability of the private sector to meet the public need for any nonpostal service that the party asserts should not be offered by the Postal Service (party's statement). A party may also address such other matters, if any, the party deems relevant.

3. By no later than May 21, 2008, the Postal Service and any interested person may submit a reply to any party's statement. Such reply shall be in the form of a sworn statement by a knowledgeable person (or persons).[3]

4. Initial briefs are due no later than June 18, 2008. Reply briefs may be filed and are due no later than July 2, 2008.

Section 505 of title 39 requires the designation of an officer of the Commission in all public proceedings to represent the interests of the general public. The Commission hereby designates Robert Sidman to serve as the public representative, representing the interests of the general public. Pursuant to this designation, he will direct the activities of Commission personnel assigned to assist him and, will, upon request, provide their names for the record. Neither Mr. Sidman nor any of the assigned personnel will participate in or provide advice on any Commission decision in this proceeding.

*It Is Ordered*

1. Docket No. MC2008–1 is established for the purpose of developing a record concerning nonpostal services offered by the Postal Service.

2. The procedural schedule set forth in the body of this order is adopted.

3. Robert Sidman is designated as the public representative, representing the interests of the general public in this proceeding.

4. The Secretary shall arrange for publication of this notice and order in the **Federal Register**.

(Authority: 39 U.S.C. 404.)

By the Commission.

**Steven W. Williams,**

*Secretary.*

[FR Doc. E7–25243 Filed 12–27–07; 8:45 am]

BILLING CODE 7710–FW–P

[1] As a result of this proceeding, the Commission will classify nonpostal services it determines should continue as either market dominant, competitive, or experimental products and will include those services in the Mail Classification Schedule. *See* 39 CFR 3020.13. Section 3642 of title 39 provides for adding to, removing from, or transferring products between the lists. Accordingly, because this proceeding has potential Mail Classification Schedule implications, the Commission is adopting the MC docket designation.

[2] If the services identified differ from the nonpostal services offered as of January 1, 2006, the Postal Service shall identify those services no longer offered, provide a brief description of such services, and indicate their current status.

[3] Any party, including the Postal Service, may submit legal memoranda on matters at issue at any time prior to May 21, 2008.

## SECURITIES AND EXCHANGE COMMISSION

**[Release No. 57031/December 21, 2007]**

### Securities Exchange Act of 1934; Order Granting Registration of Egan-Jones Rating Company As A Nationally Recognized Statistical Rating Organization

Egan-Jones Rating Company, a credit rating agency, furnished to the Securities and Exchange Commission (''Commission'') an application for registration as a nationally recognized statistical rating organization (''NRSRO'') under Section 15E of the Securities Exchange Act of 1934 (''Exchange Act'') for the classes of