



**NASA Ames**

**Recycling Program**

**Presented To:**

**2009 NASA RECYCLING and AFFIRMATIVE  
PROCUREMENT/POLLUTION PREVENTION  
WORKSHOP**

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**NASA Ames Research Center**

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## Ames Environmental Compliance

### Ames Environmental Objectives:

- Comply with the Executive Orders 13423 and 13150
- Continue to augment the Center's waste prevention and recycling activities
- Divert 35% of NASA's solid waste from landfills by CY 2010 compared with the CY 1997 baseline; and
- Achieve 100% compliance in affirmative procurement



## Ames Recycling Restructure

Previous Ames Recycling Program:

- Designated four dedicated staff to the recycling program.
- Approximately 1,600 paper recycling bags were distributed to offices
- Approximately 100 cardboard recycling bins were situated throughout the Center.



## Ames Recycling Restructure, cont'd

### Current Ames Recycling Program:

- Restructured the recycling program due to budget constraints
  - Hired a vendor for paper (\$0 cost) & cardboard recycling (min. cost)
- Integrated the bottles and cans recycling tasks to the onsite janitorial contract



## **Material Use, Recycling, and Waste Disposal Activities**

- Electronic recycling, including 100% of the monitors & CRT's.
- Metal and wood scrap
- Cardboard and mixed paper products
- Plastic beverage containers and aluminum cans
- 100% waste vehicle oil (motor, transmission, and hydraulic)
- Engine oils
- Re-refine/recycle 100% waste vehicle antifreeze/coolant on-site.
- Vehicle tires and batteries



## Affirmative Procurement Activities

- Purchase of re-refined engine, transmission (ATF), & hydraulic oil accounts for 100% of oil utilized in vehicle maintenance activities.
- Purchase of B20 Bio-diesel; accounts for 100% of diesel fuel consumed in Motorpool fleet vehicles.
- Procurement of 'Smart Washer' Parts Washer for Motorpool operations which utilizes an environmentally friendly water-based solvent.
- Procurement of bio-based lubricants for use in Motorpool maintenance operations.



## Affirmative Procurement Activities, con't

- Purchase of 100% post-consumer content copier and printer paper.
- Purchase of 100% post-consumer content Green Seal Certified commercial sanitary tissue (paper towels, toilet tissue, facial tissue) by the Janitorial Service contractor.
- Purchase and utilization of refuse / garbage can liners manufactured from recycled content by the Janitorial Services contractor.
- Purchase and utilization of numerous green-star products such as strippers, cleaners, and polishes by the Janitorial Services contractor.



# BACKUP CHARTS

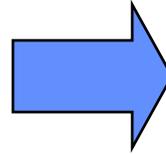


## Recycling during ODIN Computer Refresh

- Standard refresh of 1,100 computers (40% Apple/ 60% Dell)
- Packaging foams, booklets and excess parts were recycled by Apple Co.
- Cardboard recycled through existing program
- Saved \$6.7k and 400 cubic yards of refuse
- Considering expanding to Center-wide
- For more information: Richard Mogford 650-604-1922



# Recycling during ODIN Computer Refresh



1. Computer packaging from refresh
2. Placed in refuse bin & collected by Apple truck & staff
3. Compressed into bales for recycling



## EO 13423 Workgroup Established

- Coordinates activities
  - Environmental Management
  - Logistics
  - Energy Management
  - Acquisitions & contracts
- First Meeting April 16 covered
  - Transportation
  - Energy
  - Water
  - Greenhouse gasses
- For more information: Ann Clarke 650-604-2350 or Roger Ashbaugh 650-604-5660



## Water Conservation

- Planting native gardens rather than grass
  - Estimated to conserve 1.7- 4.2 gal/ sqft each week
- Connected to Sunnyvale reclaimed wastewater for some irrigation
  - Estimated to conserve 10% of Ames' annual potable water use
- Strategic Investment Project Approved
  - Will use treated groundwater from pump & treat systems
  - Will conserve 9% of Ames annual potable water use
  - Will provide more robust water supply for Arc Jet