



Environmentally Preferable Purchasing: What is New in DOE Order 450.1A

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Overview



- Acquisition and Sustainable Practices
- Electronics Stewardship
- Toxic Chemical Reduction
- High Performance Sustainable Building
- Alternative Fuels and Vehicles
- Energy Efficiency
- Water Efficiency



Acquisition is a Sustainable Practice



Major Elements of Sustainable Acquisition:

- Build green purchasing into DOE site Environmental Management System to:
 - Build green purchasing into DOE site operating contract (related FAR and DEAR clauses, DOE O 450.1A - CRD)
 - Build green purchasing into all service contract requests for proposal/specifications
 - Build green purchasing into all other purchasing systems (purchasing card, purchase requests)



Acquisition is in ALL Sustainable Practices



- Improve energy efficiency by purchasing ENERGY STAR/FEMP approved equipment
- Reduce greenhouse gas emissions by purchasing non-emitting materials and renewable energy
- Reduce water consumption by purchasing Water Sense products
- Reduce toxic/hazardous chemicals by purchasing benign alternatives
- Improve indoor air quality and reduce environmental impact of facility construction/renovation and operation by incorporation of HPSB principles for purchasing non-toxic, sustainable materials into project design and specification
- Reduce fleet's total consumption of petroleum by following the first principle of purchasing: reduce purchases (and by purchasing alternative fuels)
- Meet electronic stewardship requirements by purchasing EPEAT registered equipment



Electronics Stewardship



Former voluntary program is now mandatory:

- Specify EPEAT-registered electronics in purchasing contracts
- Enable ENERGY STAR features
- Have policies to extend useful life
- Specify take back of equipment and packaging
- Ensure all non-usable electronic equipment is reused, donated, sold, or recycled



Toxic Chemical Reduction



- DOE O 450.1A requires implementation of chemical tracking systems that cover the entire chemical lifecycle, including acquisition
- Identify chemicals presently purchased, including those contained in materials, such as
 - formaldehyde (found in adhesives, fiberboard, insulation, oriented strand board, etc.)
 - polyvinyl chloride - PVC (found in carpet, flooring, piping, etc.)
 - volatile organic compounds – VOC (found in caulk, paint, etc.)
- Identify alternative materials with no or greatly reduced toxic chemicals
- Specify “no toxic/hazardous chemicals” in requests for proposal and contracts



High Performance Sustainable Building



- HPSB Goals for new construction, leasing, and existing buildings all have acquisition components
 - Build green (specify in contracts)
 - Lease green (specify in lease negotiations, renegotiations, and renewals; no leases in non-ENERGY STAR buildings by 2010)
 - Green existing building inventory so that 15% of the inventory complies with the HPSB principles by 2015 (purchasing and maintenance are key)



EPP in HPSB

Guiding Principles



- Employ integrated design principles – Design conservation of materials into the construction/remodel plans
- Optimize energy performance – Purchase ENERGY STAR/FEMP compliant equipment
- Protect and conserve water – Purchase WaterSense approved products
- Enhance indoor environmental quality – Purchase good ventilation design and non-offgassing materials
- Reduce environmental impact of materials – Purchase materials and supplies that are locally-produced, recycled- and biobased-content, non-toxic, etc.



Alternative Fuels and Vehicles



- EO 13423 mandates
 - Reduction in fleet's total consumption of petroleum products by 2% annually through end of fiscal year 2015 (conservation—purchase less)
 - Increase in total fuel consumption that is non-petroleum-based by 10% annually (purchase biodiesel and ethanol)
 - Use of 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



Energy Efficiency



- Reduce energy intensity 3% annually or 30% by 2015 (purchase energy-efficient products)
- Specify ENERGY STAR/FEMP criteria in all contracts (DOE Acquisition Letter 2006-09 and FAR 2006-008)
- Products and services with ENERGY STAR/FEMP standards available for purchase include:
 - Appliances: dishwashers, refrigerators, etc.
 - Commercial equipment: boilers, chillers, coolers, etc.
 - Construction: doors, roofing, windows
 - Electronic/Office Equipment: computers, copiers, etc.
 - Food Service Equipment: vending machines, etc.
 - Lighting: compact fluorescents, exit signs, etc.





Water Efficiency



- Reduce water use by 2% per year or 16% by 2015
- Give preference to purchase of water efficient products, including those meeting EPA's WaterSense standards (<http://www.epa.gov/watersense/>) per EO 13423
- Products and services with WaterSense standards available for purchase include:
 - Faucets
 - Irrigation control technologies
 - Irrigation services
 - Toilets





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