



Department of Housing and Urban Development

Electronics Stewardship Program and Implementation Plan



February 2010

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Department of Housing and Urban Development Electronics Stewardship Program

Executive Summary

Used and obsolete electronics are part of an increasing and complex waste stream that poses a threat to the environment. As the world's largest purchaser of electronics products and services, the Federal Government has a responsibility to provide leadership in environmentally sound practices and cost-effective lifecycle management of its electronics assets. Electronic assets include, but are not limited to, office electronics such as commodity desktops, laptops, monitors, printers, and copiers. The U.S. Department of Housing and Urban Development (HUD) defines electronics as any of the items with the Product Service Codes 70, 74, 41, 36, 58, 77, 62, or 35 (see Appendix B of this document). Electronics stewardship was elevated to the level of a Presidential Executive Order (E.O.), for the first time in U.S. history, with the issuance of **E.O. 13423 (signed on January 24, 2007), "Strengthening Federal Environmental, Energy, and Transportation Management"** on January 24, 2007. The E.O. also sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, water conservation, and fleet management. Subsequent "Instructions for Implementing Executive Order 13423," issued by the White House Council on Environmental Quality on March 29, 2007, elaborated on the goals of electronics stewardship and required that all Federal agencies complete an Electronics Stewardship Plan (ESP). Electronic products contain not only toxic substances that can pollute groundwater, but also precious metals that require enormous amounts of energy to mine. Proper end-of-life management of electronics keeps toxins out of landfills and recovers metals for manufacturing.

Accordingly, HUD's environmental stewardship program and implementation plan addresses improving management of electronics (from reduced energy use to prolonged computer life to increased materials recycling) -- delineating the strategies for all lifecycle phases – acquisition, operations and maintenance, and end-of-life, in order to meet the electronics stewardship goals of E.O. 13423:

1. Acquisition:

- 95% of electronic products purchased are Electronic Product Environmental Assessment Tool (EPEAT)–registered, for products where EPEAT standards exist. **(required by E.O. 13423)**
- Ensure applicable information technology (IT) solicitations and contracts incorporate appropriate language for the procurement of EPEAT-registered equipment.
- Where no EPEAT standards exist, insert FAR clause 52.223-15, Energy Efficiency in Energy-Consuming Products, in solicitations and contracts for energy-consuming products listed in the ENERGY STAR® Program or Federal Energy Management Program (FEMP). **(required by the Federal Acquisition Regulation).**

- Strive to purchase EPEAT Silver rated electronic products or higher if available.

2. Operations & Maintenance:

- ENERGY STAR[®] features are enabled on 100% of computers and monitors **(required by E.O. 13423)**
- Extend the useful lifetime of electronic equipment to four or more years.

3. End-of-Life:

- 100% of non-usable electronic products are reused, donated, sold, or recycled, using environmentally sound management.

A detailed implementation plan is listed in Appendix A of this document.

Department of Housing and Urban Development Electronics Stewardship Program

1.0 Introduction

Used and obsolete electronics are part of a vast, complex waste stream that represents a serious environmental concern for our nation. The U.S. Federal Government, the world's largest bulk purchaser of information technology (IT) equipment and services, disposes of an estimated 10,000 computers each week. Computers and other electronics contain a variety of hazardous materials that, if not properly managed, can harm public health and the environment. In addition, the environmental impacts of the energy used to power our electronics are high. Electronic equipment also contains components that can and should be reclaimed, reused, and/or recycled in the current marketplace.



2.0 Commitment to Electronics Stewardship

The Department of Housing and Urban Development (HUD) is committed to managing its electronic assets in an environmentally sound and energy efficient manner throughout their life cycle. HUD is demonstrating this commitment in a number of ways, including:

- Establishing a cross-functional Electronics Stewardship Working Group, with membership from the Office of Administration, Office of the Chief Information Officer, Office of the Chief Procurement Officer, and Office of the Chief Financial Officer
- Working to reduce energy consumption of computers and extend their lifespan
- Pledging to purchase electronics that meet the mandatory criteria of EPEAT-registered
- Performing due diligence in the disposition of obsolete electronics

All the products that fall under the Products Service Codes/Federal Supply Codes listed in Appendix B apply to HUD's Electronics Stewardship Program and Implementation Plan. The ESP will: a) Enhance and expand existing HUD sustainable practices in order to comply with E.O. 13423; b) Reduce energy consumption; c) Reduce toxics disposal related to electronics, and d) Save money through reduced energy consumption and increased electronics life expectancy.

3.0 Applicability

The Electronic Stewardship Plan outlines policies that apply to all of HUD employees and applicable contractors for all three electronics lifecycle phases. The policies apply to all HUD IT acquisitions except where the determination has been made that they are

not eligible to comply with some or all of the goals of E.O. 13423 because of security, emergency support, or other sensitive/mission critical considerations.



4.0 Federal Electronics Challenge

Prior to the formal launch of the FEC in 2004, there existed no Government-wide strategy for reducing or managing the environmental or energy impacts of federal electronic assets. The FEC is a voluntary partnership program that engages federal agencies in the development and implementation of such a strategy, providing technical assistance, tools, training, networking and recognition opportunities for all agency and facility level partners. A goal of the FEC is to maximize economic and environmental benefits derived from improved electronics stewardship across the Federal Government.

The FEC strategy consists of three parts: (1) Establishing a plan to purchase “green” electronics; (2) Managing existing inventory in a more efficient manner; and (3) Ensuring the responsible and environmentally compliant disposition of electronics at their end of its useful life.



5.0 Roles and Responsibilities

5.1 HUD Environmental Executive

- Authorizes, and provides Departmental leadership for, the ESP.
- Serves as HUD Senior Designated Official responsible for implementing E.O. 13423.
- Directs the issuance of ESP policies and guidance.
- Implements an awareness program to promote electronics stewardship.

5.2 HUD Chief Information Officer

- Monitors the performance of HUD’s IT programs and activities.
- Consults with HUD’s Office of Administration and Office of the Chief Procurement Officer to ensure implementation of HUD’s FEC implementation plan according to the requirements of E.O. 13423.
- Issues policies and guidance on HUD’s IT programs and activities.
- Ensures that IT staff are trained on energy-saving techniques and fully aware of the requirements of E.O. 13423.

5.3 IT Technical Staff

- Coordinates efforts to ensure that Energy Star® features are enabled on computers and monitors.
- Coordinates efforts to ensure that IT contractors, including help desk personnel, are aware of and adhere to HUD's ESP.
- Receives training on the requirement to implement all three life-cycle phases of electronics stewardship.

5.4 HUD Senior Procurement Executive

- Implements and ensures compliance with the Department's ESP.
- Conducts assessment and oversight of Department-wide contracting and procurement.
- Monitors the Department's progress in achieving the milestones of HUD's ESP.
- Issues procurement policies and regulations for compliance with E.O. 13423.
- Ensures that appropriate personnel (e.g., contracting officers and program personnel) are trained in environmentally preferable purchasing.

5.5 Contracting Officer

- Adheres to the requirements of HUD's ESP as required by E.O. 13423 and the FAR Part 23.
- Ensures that applicable FAR clauses on Energy Star® and EPEAT purchases are inserted appropriately into all new solicitations and contracts.
- Ensures that applicable FAR language and clauses on Energy Star® and EPEAT purchases are included when modifying existing contracts.
- Provides guidance to program/technical personnel on applicable procurement requirements and clauses relative to electronics purchasing.
- Ensures that vendors are familiar with ESP and E.O. 13423 requirements contained in solicitations/contracts.
- Reviews with appropriate vendors their role in the procurement of EPEAT-registered products/energy efficient products during the initial contract kickoff and reinforce with the contractor when appropriate during contract performance.

5.6 Program/Requirements Personnel

- Ensures that relevant electronics stewardship requirements are identified prior to procurement request submission to the contracting officer or other sources of supply.
- Consults with contracting, environmental, and energy personnel to improve and enhance statements of work or specifications that incorporate electronics stewardship requirements of E.O. 13423.
- Uses available boilerplate specifications and model templates for contracts as appropriate.
- Follows the Federal Management Regulation (FMR) for the reassignment, transfer, donation, sale, and recycling of electronics.

5.7 Office of Administrative & Management Services

- Oversees functions of environmental management and property management to ensure the goals/milestones of HUD's ESP are met.

- Ensures that resources are identified to fully implement the ESP according to the requirements of E.O. 13423.
- Follows the FMR for the reuse, transfer, donation, sale, and recycling of electronics.
- Enforces HUD's 100% No Landfill policy for electronics.
- Provides guidance on ESP implementation and promotes HUD's ESP.

6.0 Acquisition



E.O. 13423 requires that 95% of an agency's electronic products be EPEAT-registered, for products that have EPEAT standards. The Electronic Product Environmental Assessment Tool (EPEAT) is an application that helps purchasers rank electronic products based on their environmental attributes. HUD will strive to procure EPEAT silver-rated electronic products or higher if available. EPEAT evaluates electronic products according to three tiers of environmental performance: Bronze, Silver and Gold. EPEAT's website is <http://www.epeat.net/>. Currently, EPEAT has registered only desktop computers, monitors, and notebooks. In the future, EPEAT plans to add other electronics to its registry. Where no EPEAT standards exist, HUD will purchase Energy Star® products or other energy-efficient items listed on the Department of Energy's Federal Energy Management Program (FEMP) Product Energy Efficiency Recommendations product list as required by the Federal Acquisition Regulation (FAR) Part 23.203, unless there is written justification.

7.0 Operations & Maintenance



..Enable EnergyStar®..

... It benefits our environment and economy...and can help stop global warming.....



... HELP!!

E.O. 13423 requires that an agency, when acquiring an electronic product, meets at least 95 percent of those requirements with an EPEAT-registered electronic product, unless there is no EPEAT standard for such product. E.O 13423 also requires that the Energy Star® feature is enabled on 100% of an agency's computers and monitors (except those systems and computers that are exempt from mission-critical or security reasons), or to the maximum degree based on agency mission needs. HUD will strive to extend the useful life of electronics within the Department to a minimum of four years. HUD will use EPA's guidance to improve the operation and maintenance of electronics products. In addition, HUD will continue to follow the Federal Management Regulation for the reassignment of electronic equipment within the Department, and its transfer to certain eligible institutions and the federal community.



8.0 End-of-Life Management .. *HUD's 100% No Landfill Policy...* *....Why?*

- *Discarded computers are hazardous wastes - and when dumped into landfills or improperly recycled, pose a hazard to the environment and human health.*
- *Computer or television displays (CRTs) contain an average of 4 to 8 pounds of lead each. Lead accumulates in the environment, and has highly acute and chronic toxic effects on plants, animals and microorganisms.*



...Lead, Cadmium, Mercury and other harmful chemicals in electronics, when dumped into a landfill, can cause genetic mutations such as this 3-eyed frog.



HUD will follow the FMR for the donation, sale, and recycling of electronic equipment no longer needed by the Federal Government. HUD will make maximum use of its program to donate used electronics through the General Services Administration's (GSA) Computers for Learning (CFL) program. When electronics are unable to be reused, HUD will dispose of them through the Federal Prison Industries (UNICOR) electronics recycling program, GSA Bulletins, Recycling Electronics and Asset Disposition (READ) Services Contract, or other environmentally responsible recyclers such as the EPA's Plug-In to eCycling. HUD will perform due diligence to ensure that the electronic products that have reached the end of their useful life are recycled by companies or organizations employing environmentally sound management

practices. HUD will seek assurance that those organizations that refurbish and re-sell used HUD electronics have a “take back” guarantee when those resold products reach their end-of-life.

9.0 Electronics Stewardship Program Promotion and Education



9.1 HUD Electronics Stewardship Working Group

HUD has formed an in-house HUD Electronic Stewardship Working Group (HESWG). The HESWG is composed of staff members from the Office of Administrative and Management Services, the Office of the Chief Information Officer, Office of the Chief Financial Officer, the Office of the Chief Procurement Officer, and the Office of Administration. Members of the HESWG are responsible for implementing HUD’s ESP and fostering compliance with E.O. 13423.



9.2 Training

Training efforts will occur continuously as needed. HUD’s Affirmative Procurement Plan will incorporate the acquisition part of the ESP. HUD employees will be encouraged to attend outside training when available and as appropriate. Internal resources and forums will be used, including existing training classes and meetings, the OCPO newsletter, and others.



9.3 Websites

HUD will incorporate electronics stewardship information into various internal and public websites. The OCPO’s website will be updated to include the ESP, along with HUD’s Affirmative Procurement Plan, E.O. 13423, and it will have a list of various websites to facilitate the purchasing of EPEAT and energy efficient electronics. HUD will have an ESP component on the Office of the Chief Information Officer (OCIO) intranet website in order to keep the IT workforce apprised of the goals and milestones related to the three life-cycle phases of electronics stewardship. These websites will be updated as appropriate to include various training materials, websites, and other relevant items.

10.0 Tracking, Measuring & Reporting on Electronics Stewardship



E.O 13423 requires that agencies track, measure and report on the progress made toward reaching the electronics stewardship goals. Appendix A is HUD's Electronics Stewardship Implementation Plan. This plan provides milestone dates, status of milestones, and responsible party(ies). HUD will measure progress by continuously updating this appendix. Milestones achieved will be reported to OFEE, as achieved.

10.1 Federal Electronics Stewardship Work Group (FESWG)

The Federal Electronics Stewardship Work Group (FESWG) was formed in 2005 in OFEE as an interagency group focused on electronics stewardship. The implementing instructions for E.O. 13423 state that FESWG will continue to convene under the direction of OFEE in order to promote agency implementation of the goals of the E.O.

The Office of Management and Budget (OMB) will track the progress of meeting electronics stewardship requirements through revised Environmental Scorecards, which went into effect in January 2008. HUD will participate in a FESWG sub-workgroup formed to address the reporting procedure to be used in measuring progress toward meeting the electronics stewardship goals. Based on the findings and recommendation of this workgroup, HUD will formulate the means to implement within the Department tracking and reporting procedures.



10.2 Tracking and Reporting

The HESWG will continue to work with FESWG, OMB and OFEE to determine the appropriate means to track and report Departmental progress in all three life-cycle phases of electronics stewardship: acquisition, operations and maintenance, and end-of-life.

HUD's Electronics Stewardship Implementation Plan

Milestone	Status of Milestone	Responsible Party(ies)
Finalize and sign HUD's revised (version 2.0) Electronics Stewardship Program (reflecting changes in E.O. 13423) and Implementation Plan. Signatories include the Assistant Secretary for Administration, Chief Information Officer, Chief Procurement Officer, and Chief Financial Officer.	Completed 7/1/08	All parties to the ESP
Insert EPEAT language in HUD solicitations, contracts and/or Task/Delivery Orders for procurement of products covered by EPEAT (currently computer desktops, laptops, and computer monitors) (new purchases and leases). Strive to purchase EPEAT Silver rated electronics products or higher, if available and practicable. See #1 below.	Ongoing (as applicable contracts and/or task/delivery orders are awarded).	OCPO Contract Operations Office
Educate procurement, IT, property management, and other staff as appropriate on HUD's Electronic Stewardship Program.	Ongoing. Training conducted each year.	All parties to the ESP
Promote EPEAT and Energy Star® products or other energy-efficient items listed on the Department of Energy's Federal Energy Management Program (FEMP) Product listing among purchase card holders.	Ongoing.	Office of Administration Office of the Chief Procurement Officer
Incorporate environmentally preferable purchasing (EPEAT, Energy Star® products or other energy-efficient items listed on the Department of Energy's Federal Energy Management Program (FEMP) Product Energy Efficiency) into HUD's Purchase Card Guidance.	In progress.	Office of Administration ; Office of the Chief Procurement Officer
Incorporate EPEAT FAR clause, 52.223-16 into HITS or other existing contract(s).	Completed July 2008.	OCPO Contract Operations Office
Where no EPEAT standards exist, insert	Ongoing (as	OCPO

FAR clause 52.223-15, Energy Efficiency in Energy-Consuming Products, in solicitations and contracts (and leases) for energy-consuming products listed in the ENERGY STAR® Program or Federal Energy Management Program (FEMP).	applicable contracts/task orders are awarded).	Contract Operations Office
Ensure that 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.	Ongoing.	OCPO Contract Operations Office
Include in HITS contract a provision to regularly refresh/replace its PCs. This replacement occurs, on average, every four years.	Completed July 2008.	OCPO Contract Operations Office
Modify HUD procurement policy to include the environmentally preferable purchasing of IT equipment and other electronics.	Completed July 2008.	OCPO Policy Office
Provide guidance on Total Cost of Ownership Analysis using FEC resources.	Completed July 2008.	OCPO Policy Office
Establish policy to encourage life cycle cost analysis and to assist in selecting products and services.	Completed July 2008.	OCPO Policy Office
National level activity for Green Operations and Maintenance - HUD directive/guidance for power-down management, Energy Star® implementation, 4-year replacement cycle and memorandum from CIO promoting FEC participation by IT community and HUD organizations. (Use EPA's guidance to improve the operation and maintenance of electronics products provided at www.federalelectronicschallenge.net/resources/docs/oandm.pdf)	Completed July 2008.	OCPO Policy Office
Implement Best Management Practices to reduce energy consumption, including, but not limited to: <ul style="list-style-type: none"> • After-hours shut down of non-critical equipment in coordination with network security • "Sleep mode" and "hibernate" 	Completed July 2008. HUD installed an energy management control system at Headquarters (Robert C.	OCIO/ Office of Administration

<p>configurations</p> <ul style="list-style-type: none"> • Energy Star® power management features as default • Evaluate, implement and monitor and computer power management techniques and tools (e.g. EZ software) • Train employees on energy conservation 	<p>Weaver Building). This system is designed to optimize energy efficiency of building systems. Employee awareness for energy conservation emphasis is ongoing; HUD will continue to promote awareness through the Department's energy management program.</p>	
<p>National level activity for Green End-of-Life Management Strategies. Develop/issue HUD directive/guidance to address environmentally sound end-of-life management with disposition priorities for reuse and recycling. Include restrictions on land-filling. Make maximum use (100% compliance) of program to donate used electronics through General Services Administration's (GSA) Computers for Learning Program. When electronics are unable to be reused, dispose of them through the Federal Prison Industries (UNICOR) electronics recycling program, GSA Bulletins, Recycling Electronics and Asset Disposition (READ) Services Contract, or other environmentally responsible recyclers such as EPA's Plug-in to eCycling. Provide information to CFL recipients on how to ensure environmentally sound final disposition of donated equipment.</p>	<p>Completed July 2008. Ongoing.</p>	<p>All parties to the ESP</p>
<p>Establish organizational responsibility and funding guidance/mechanisms for environmentally sound management of end-of-life electronics.</p> <ul style="list-style-type: none"> • Request that GSA have purchasers of surplus electronics sign an agreement that 	<p>Ongoing.</p>	<p>OCIO and OCPO Contract Operations Office</p>

<p>they be able to show a “chain of custody” for electronics that are refurbished and resold, and that they have a “take back” program.</p> <ul style="list-style-type: none"> • Request that GSA verify that components and materials of equipment disassembled by contractors are recycled to the maximum extent possible and that the equipment was disassembled in a safe and environmentally-sound manner. • Study the feasibility of leasing computers, with language in the contract that requires the vendor to recycle unusable equipment in an environmentally-sound manner, and have a take-back program for used, refurbished equipment. 		
<p>Conduct monthly (at a minimum) meetings of the HESWG with all team members (IT, acquisition, finance, administrative & management services (property management and facilities) present.</p>	<p>Ongoing.</p>	<p>All parties to the FEC</p>
<p>Develop/utilize available systems for tracking HUD and facility progress in all three life cycle phases of the environmentally sound management of the Department’s electronic assets.</p>	<p>Ongoing.</p>	<p>All parties to the FEC</p>
<p>Begin semi-annual tracking/reporting of agency progress in all three life cycle phases: purchasing, operations & maintenance, and end-of-life.</p>	<p>Ongoing.</p>	<p>All parties to the FEC</p>

#1 According to the EPEAT website, EPEAT will expand to include additional electronic products at some point in the future, at which point the EPEAT clause will apply to those new products.

Product Service Codes/Federal Supply Codes for HUD's Electronic Assets

HUD's electronic assets for tracking purposes are defined by any items that fall into the Federal Supply Classification (FSC) codes below:

Federal Supply Code	Description
70	 <p>ADP Equipment Software, Supplies and Support Equip.</p>
74	 <p>Office Machines</p>
41	 <p>Refrigeration, Air Conditioning and Air Circulating Equip.</p>
36	 <p>Special Industry Machinery</p>
58	 <p>Communications Equipment</p>
77	 <p>Musical Instruments, Phonographs, and Home-Type Radios</p>
62	 <p>Lighting Fixtures and Lamps</p>
35	 <p>Service and Trade Equipment</p>

Additional Guidance on the Acquisition Phase of HUD's Electronic Stewardship Program



Acquisition Planning

EPEAT product requirements should be considered during the acquisition planning stage. Personnel involved in planning for acquisitions should consider from the beginning the use of designated EPEAT products and, where no EPEAT products are available, Energy Star® products or other energy-efficient items listed on the Department of Energy's Federal Energy Management Program (FEMP) Product Energy Efficiency.



Specification Review/Revision

HUD's program offices should review and revise specifications, product descriptions, and standards during the acquisition planning stage to enhance HUD's procurement of EPEAT-registered products and, where no EPEAT products are available, Energy Star® products or other energy-efficient items listed on the Department of Energy's Federal Energy Management Program (FEMP) Product Energy Efficiency.

Standards or specifications unrelated to performance or presenting barriers to procuring EPEAT products or other energy efficiency items should be revised or eliminated when reviewing or drafting procurement specifications. When revising HUD specifications, a preference should be expressed for EPEAT products or other energy efficiency items, to the maximum extent practicable. Additionally, when two or more small businesses exist that can provide qualified EPEAT products as a prime contractor, the product should be set aside for small business. Furthermore, prime contractors should consider small businesses that can provide these products as subcontractors.



Contracting Officers

HUD's contracting officers shall ensure that applicable FAR clauses for EPEAT (52.223-16) and Energy Efficiency in Energy-Consuming Products (52.223-15) are inserted, as

applicable, in new solicitations and contracts. Once appropriate provisions are included in the contract, the contractor should comply with HUD's ESP. It is the responsibility of HUD contracting officials to ensure that: 1) FAR and ESP requirements are included when modifying existing IT contracts and, 2) Appropriate new contracts contain E.O. 13423 compliance provisions. Related procurement policy shall be provided to HUD's contractors through the HUD Acquisition Regulation. HUD contracting officers should ensure that contractors are familiar with all applicable E.O. 13423 requirements contained in their contracts.



Sample Contract Language for EPEAT

The contracting officers should review with appropriate contractors their role in the procurement of EPEAT-registered products during the initial contract signing period and should reinforce with the contractor the requirements of the E.O.13423 when appropriate during subsequent meetings and correspondence.

All desktops, laptops, and computer monitors provided under this contract are required to have achieved Bronze registration or higher under the Electronic Products Environmental Assessment Tool (EPEAT). EPEAT is a procurement tool designed to help large volume purchasers evaluate, compare, and select desktop computers, laptops, and monitors based upon their environmental attributes as specified in the consensus-based International Electrical and Electronics Engineers (IEEE) Standard for the Environmental Assessment of Personal Computer Products (IEEE 1680-2006¹).

Additional consideration will be provided for products that have achieved EPEAT Silver or EPEAT Gold registration. The registration criteria and a list of all registered equipment are provided at <http://www.epeat.net>.

.....www.epeat.gov

¹ IEEE Standard 1680-2006 provides a set of environmental performance criteria for laptop computers, desktop computers, and computer monitors. This Standard includes key concepts and implementation procedures relating to reduction or elimination of environmentally sensitive materials, materials selection, design for end-of-life, life cycle extension, energy conservation, end-of-life management, corporate performance, and packaging. The Standard provides a measure of environmental leadership in product design, manufacture, service, and end-of-life management. In addition, it defines the methods by which manufacturers may declare such products as conforming with the Standard and by which such conformance may be verified. It is intended for use by institutional purchasers to select personal computer products, and by product manufacturers who wish to sell such products. There are three levels of conformance with this Standard. To achieve the first level (Bronze), the product shall conform to all of the 23 required environmental criteria. To achieve the second level (Silver), the product shall conform to all of the required criteria plus at least 50 percent of the 28 optional criteria, and to achieve the third level (Gold) the product shall conform to all the required criteria and at least 75 percent of the optional criteria. It is intended that this Standard shall be a baseline for further environmental standards for additional electronic products and shall be updated and revised on a periodic basis to continue to set a higher performance standard for electronic products.

Websites for the Three Life-Cycle Phases



Acquisition

EPEAT - <http://www.epeat.net/>

Federal Electronics Challenge (FEC) -
<http://www.federalectronicchallenge.net/resources/aquisit.htm>

RoHS Directive (reduction in certain hazardous materials in electronics-European Union) -
http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en00190023.pdf

My Green Electronics - <http://www.mygreenelectronics.org/>



Operations and Maintenance

Energy Star® - http://www.energystar.gov/index.cfm?c=fed_agencies.power_mgmt

Federal Management Regulation – www.gsa.gov/fmr

FEC - <http://www.federalectronicchallenge.net/resources/opmain.htm>

Excess Property - <http://gsaccess.gov/>



End-of-Life Management

Computers for Learning - <http://computersforlearning.gov/>

State Agencies for Surplus Property (eligible for donation): www.gsa.gov/sasp

Sales – <http://gsaauctions.gov/>

Plug-In to eCycling Partners -
<http://www.epa.gov/epaoswer/osw/conserve/plugin/partners.htm>

UNICOR – www.unicor.gov/recycling/

FEC - <http://www.federalelectronicschallenge.net/resources/eolmngt.htm>

WEEE Directive (promotion of recycling of electronics-European Union) -
http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en00240038.pdf

GSAXcess® and GSA Auctions® - <http://gsaxcess.gov/>, <http://gsaauctions.gov/>

GSA (Personal Property Disposal) -
<http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8211&channelId=-13012>

DRMS – Defense Reutilization and Marketing Service <http://www.drms.dla.mil/>



Sample Letter to Computers for Learning Designee

Name of POC
Address of School

Greeting:

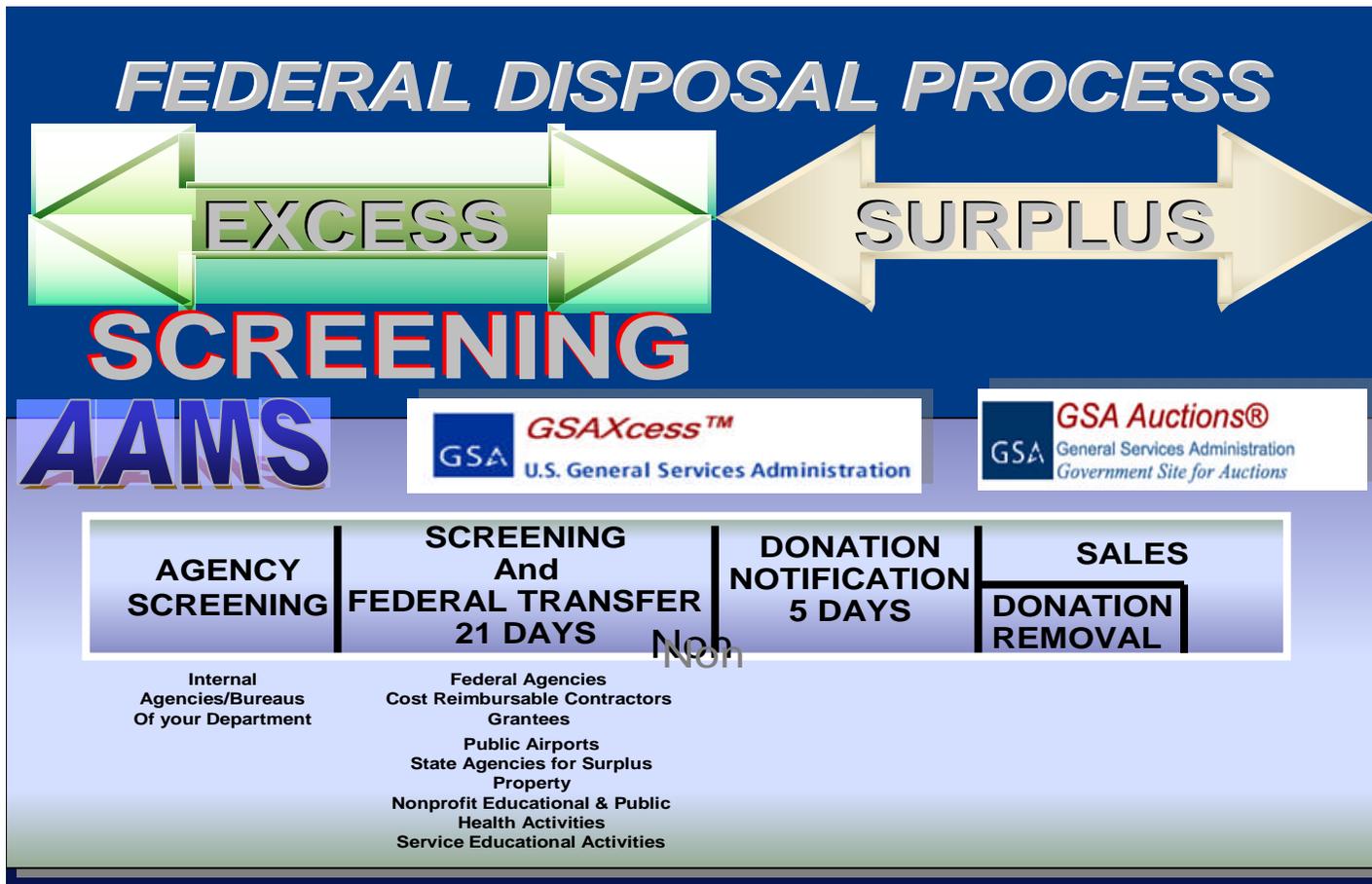
As part of the Federal Electronics Challenge, the Department of Housing and Urban (HUD) is committed to purchasing and disposing of computers in an environmentally responsible manner. This commitment extends to computers that we donate through the Computers for Learning Program. We are asking you to continue to support this effort by recycling the computers listed on the attached list.

There are many recycling programs such as the Recycling Electronics and Asset Disposition (READ) program and the Bureau of Prison's UNICOR program, which recycle electronic equipment based on stringent environmental standards. HUD highly encourages your school to utilize one of these recycling programs, or another recycling program, when the computers no longer meet your educational needs.

Salutation,
Name
Title
Office

cc: Name(s)

Federal Disposition Process

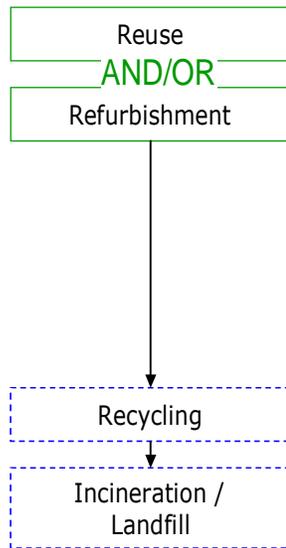


End-of-Life Electronics Management Under the Federal Management Regulation

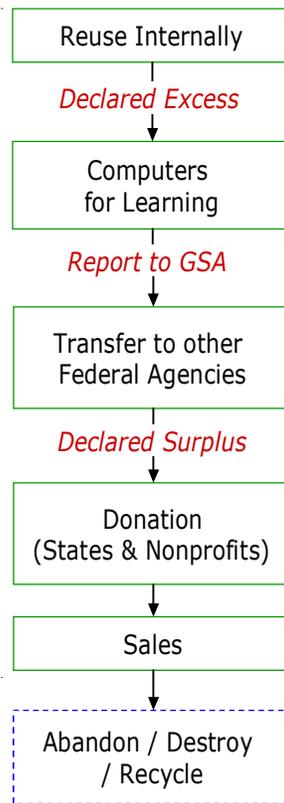
Electronics End-of-Life



Environmental Hierarchy



General Services Administration Hierarchy



Presented: September 6, 2007

Definitions and Acronyms

Definitions

Chain of Custody: Documentation showing the control and movement of an electronic product throughout the end-of-life phase.

Disposition: The process of reassigning, screening, transferring, donating, selling, dismantling, cannibalizing, and recycling personal property.

Donation: Property that the Federal Government gives to a qualified non-Federal organization. Excess personal property becomes available for donation the day following the surplus release date.

Electronic Products: Devices that are dependent on electric currents or electromagnetic fields in order to work properly.

End-of-life: The point in time when electronic equipment is no longer needed by the Federal government; the life-cycle phase after transfer starting with donation.

Excess (property): Any personal property under the control of any Federal agency that is no longer required for that agency's needs, as determined by the agency head or designee.

Federal Management Regulation (FMR): Prescribes policies concerning property management and related administrative activities. GSA issues the FMR to carry out the Administrator of General Services' functional responsibilities, as established by statutes, Executive orders, Presidential memoranda, Circulars and bulletins issued by the Office of Management and Budget (OMB), and other policy directives.

Life-cycle phases: 1) acquisition, 2) operation and maintenance, and 3) end-of-life
Personal Property: Any assets, except real property, under the control of any Federal agency.

Personal Property: Any assets, except real property, under the control of any Federal agency.

Real Property: The land, together with the improvements, structures, and fixtures located thereon under the control of any Federal agency.

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.

Reassignment: Relocating personal property from one activity to another, within the same Federal agency, for the purpose of reuse.

Reuse: Removing or recovering components or systems of components from the whole product, and putting the components or systems of components back into productive use.

Salvage: Property that has value greater than its basic material content but for which repair or rehabilitation is clearly impractical and/or uneconomical.

Scrap: Property that has no value except for its basic material content.

Screening: The process of physically inspecting property or reviewing lists or reports of property to determine whether property is usable or needed for donation purposes.

Screening Period: The time in which excess and surplus personal property is made available for excess transfer or surplus donation to eligible recipients.

Surplus (property): Excess personal property no longer required by the Federal agencies as determined by GSA.

Surplus release date: The date on which Federal utilization screening of excess personal property has been completed.

Take-back: A service provided by the manufacturer by which the product can be returned for reuse or recycling with no more than 10 percent of the returned material going to disposal or incineration.

Transfer: The relocation of excess personal property from one Federal agency to another for the purpose of reuse. HUD can also transfer excess personal property to eligible institutions of higher learning (see Appendix I).

Acronyms

ANSI	American National Standards Institute
APP	Affirmative Procurement Program
BPA	Blanket Purchase Agreement
CAO	Chief Acquisition Officer
CEQ	Council on Environmental Quality
CIO	Chief Information Officer
CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
CPG	Comprehensive Procurement Guidelines
CTC	Closing the Circle
EO	Executive Order
EPA	Environmental Protection Agency
EPEAT	Electronic Product Environmental Assessment Tool
ESP	Electronics Stewardship Plan
FAR	Federal Acquisition Regulation
FEC	Federal Electronics Challenge
FEE	Federal Environmental Executive
FEMP	Federal Energy Management Program
FESWG	Federal Electronics Stewardship Working Group
FMR	Federal Management Regulation
GSA	General Services Administration
HUDAR	HUD's Acquisition Regulation
IAER	International Association of Electronics Recyclers
IDIQ	Indefinite Delivery, Indefinite Quantity (contract)
IEEE	Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization
IT	Information Technology
OCIO	Office of the Chief Information Officer
OFEE	Office of the Federal Environmental Executive
OFPP	Office of Federal Procurement Policy
OMB	Office of Management and Budget
RoHS	Restriction On the use of certain Hazardous Substances in electrical and electronic equipment (European Union directive)
SPE	Senior Procurement Executive
UNICOR	Federal Prison Industries