



RECYCLING & UNIVERSAL WASTE HANDLING

Region 8 Sustainability & Environmental Management System

1.0 Purpose & Scope

To streamline the collection of recyclable materials by utilizing an improved management system that incorporates gathering data from the waste hauler and from annual waste analysis reports. This will ensure that the Denver Federal Center meets EPA guidelines, become a leader in the public sector for recycling and waste diversion efforts and is considered a great neighbor in the local community.

2.0 Activities & Departments Affected

Property Managers, Project Managers, Real Estate Specialists, Facility Managers and Contracting Officers

3.0 Exclusions

All Federal agencies are responsible for implementation and operation of their own recycling programs as defined by Executive Order 13514. GSA is primarily a service provider to ensure everyone can maintain a successful recycling program in all federal facilities.

4.0 Forms Used & Permits Required: (include reporting requirements)

Federal and State Forms and Permits: There are no federal or state forms or permits required for the collection of materials for recycling. Since the material still has a usable life, it is not considered a waste.

PERMIT / FORM / REPORT	SUBMITTED TO: FEDERAL OR STATE AGENCY	SUBMITTAL FREQUENCY
Sustainable Practices Report: Green Purchasing, Waste Management, and Chemicals Management ^(1, 2, 3)	Office of the Federal Environmental Executive (OFEE)	Region Report for Fiscal Year

(1) Reporting requirements began with fiscal year 1992, under Section 502 of the Resource Conservation and Recovery Act (RCRA), in accordance with section 6002(i) of RCRA (42 U.S.C. 6962(i)) and Section 9002 of the Farm Security and Rural Investment Act. Various Congressional Acts and Presidential Executive Orders (i.e., 13101, 13424) since the inception of the original reporting requirement have maintained this requirement; November 2, 2006, letter from the Office of Federal Procurement Policy (OFPP) and the OFEE to Federal Agency Environmental Executives and Agency Senior Procurement Officials. The last changes occurred with Instructions for Implementing EO 13423 was presented by the Council of Environmental Quality on March 28, 2007.

(2) The title of the report form changes per the requirement of the newest regulatory requirement; for example in 2008 and 2009 the report was called "E.O.13423 Sustainable Practices: Green Purchasing, Waste Management, and Chemicals Management". The three Parts include: Green Purchasing, Solid Waste Management (Reduction, Recycling, Electronics Management), and Toxic and Hazardous Chemicals Management.

(3) The report form is completed yearly by the Regional Solid Waste, Recycling Program Manager.

In-house GSA Region 8 and Contractor Forms:



- Battery Log Form

5.0 Acronyms, Abbreviations, and Definitions

Acronyms	Meaning
CASU	Cooperative Administrative Support Units
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CO	Contracting Officer
DEQ	Department of Environmental Quality
DFC	Denver Federal Center
COR	Contracting Officers Representative
EO	Executive Order
EPA	Environmental Protection Agency
GSA	General Service Administration
ISO	International Standards Organization
O&M	Operations and Maintenance
OFEE	Office of the Federal Environmental Executive
PBS	Public Building Services
RCRA	Resource Conservation and Recovery Act

Definitions:

Authorized Agency Representative: An employee or contractor of a Federal agency whom the agency has designated to be responsible for contacting the Contractor for calling the recyclable paper contractor for pickup of materials and for completing and signing the PBS Wastepaper Delivery Order.

Aerosol can: A container in which gas under pressure is used to aerate and dispense any material through a valve in the form of a spray or foam.

Batteries: Includes dry cells (alkaline batteries), rechargeable batteries, and wet cells (vehicle type batteries).

Cooperative Administrative Support Units (CASU) Program: An interagency network of Federal entrepreneurial organizations that provides the full range of "best value" support services to Federal agencies on a cost reimbursable basis. Located throughout the United States, the National CASU Network meets customer agency needs by providing high quality, low cost services, with quick turn-around. Through partnering arrangements, the Network is national in scope and can deliver services to Federal government offices and posts of duty anywhere in the country.

Certificate of Destruction: A certificate provided to the government documenting the witnessed destruction of confidential documents.

Coated Paper: Any paper or paperboard that has been coated, usually with a clay or



starch coating.

Computer Printout: Consists of white sulfite or sulfate papers manufactured for use in data processing machines. This grade may contain colored stripes or bars, as well as impact or non-impact (e.g., laser) printing.

Contractor Containers: Those containers provided by the Contractor and approved by the COR to store and transport recyclable materials at the holding agency's storage area to the loading dock at each location identified in Exhibit 1.

Contractor Payment: Payment, made by the Contractor to the U.S. Government, for the removal of wastepaper and other recyclable materials from locations.

Corrugated Containers: Baled or un-baled corrugated containers having liners of test liners, jute or kraft. Commonly known as "cardboard" or "OCC." No more than five percent (5%) out-throws or prohibitive materials by weight.

Electronic Devices: Means electronic equipment which contains electronic circuit boards and includes but not limited to computer monitors, televisions, computers, cell phones, laptops, printers, terminals, mainframes and stereo equipments.

File Stock: Consists of discarded correspondence files and record files without limitations as to prohibitive materials, including some carbon paper.

Ground wood: A substance found in paper material that has been processed by a minimum of 10% mechanical pulping. Ground wood contains virtually the whole, unbleached wood, including lignin.

Heavy Books: Consists of dry, clean, used and over issued books; stitchless stock; quire waste; and similar printed matter. This category grade may contain bleached sulfite and sulfate books adulterated with fine ground wood.

Holding Agency: The Government agency and location which has been identified in Exhibit 1 and which has the right to store and request, by their authorized representative (COTR), pick up by the Contractor of wastepaper as required.

Lamp: The bulb or tube portion of an electric lighting device.

Lignin: The brown, insoluble polymer that binds the cellulose fibers of woody plants.

Loading Dock: The Government designated service location identified in Exhibit 1 where the Contractor trucks are to pick up and empty the recyclable paper material containers when requested by the holding agency's authorized representative.

Magazines: Coated periodicals and catalogs containing print, as well as black-and-white



and/or colored photographs.

Mercury Containing Device: Electrical switches, fluorescent bulbs, vacuum pumps, thermostats, gauges, flow regulators, etc.

Miscellaneous Ledger: Consists of printed or unprinted sheets, shavings and cuttings of colored or white sulfite or sulfate ledger, bond, writing or other papers which have a similar fiber and filler content. This grade must be free of treated, coated, padded or heavily printed stock.

Mixed Paper: Various grades of paper, including miscellaneous ledger, file stock, wet strength, heavy books, magazines, slick-coated paper, colored paper, carbonless paper, ground wood printing and copier paper, and contaminated high grade paper, or any combination thereof. No more than ten percent (10%) out throws or prohibitive materials by weight.

Newsprint: Consists of newspapers containing less than 5% of other papers. No more than five percent (5%) out throws or prohibitive materials by weight.

Notification: The request by the authorized agency representative to the Contractor for scheduling the removal of recyclable paper material from the holding agency.

Out throws for Paper: All paper products that are so manufactured, treated or formulated so as to be unsuitable for consumption as the grade specified.

PBS Wastepaper Delivery Order: R8 Form 1359, in quadruplicate (4 copies), which shall be completed in part by the Contractor and in part by the Government representative each time recyclable paper material is removed from a holding agency's loading dock when requested by the authorized agency representative.

Pesticide: – Includes both chemicals used to control or eliminate pests, or plant regulator, defoliant, or desiccant.

Prohibitive Materials: Any materials, which by their presence in packing of the recyclable paper material in excess of the amount allowed, will make the packing unusable as the grade specified; or any materials that may be damaging to equipment.

RCRA: Resource Conservation and Recovery Act; A Federal law enacted in 1976 to address the treatment, storage, and disposal of hazardous waste

Recycling: A series of activities that includes collecting recyclable materials that would otherwise be considered waste, sorting and processing recyclables into raw materials such as fibers, and manufacturing raw materials into new products.

Sorted White Ledger: Consists of post consumer white ledger and computer printout



paper. This will include machine copies, laser and impact printer output, letterhead, office stationery and a mix of the white and computer paper normally found in the office environment. No more than five percent (5%) out throws or prohibitive materials by weight.

Secure Shred: Confidential materials that shall be destroyed by pulping, shredding (5/16 in. strip or less), chemical process, or other qualifying methods proposed and approved by the Contracting Officer/Contracting Officer Representative who is indicated in Part 1 or in amendments to this contract.

Ton: The term ton, as used in this contract, means short ton, which is equivalent to 2,000 pounds.

Universal Wastes: Are hazardous materials that are generated by very small to very large non-residential sources such as private businesses, government agencies and schools. These wastes are subject to wide spread use which makes their disposal difficult to control. Items that are considered universal wastes are: Batteries, pesticides, mercury-containing devices, mercury-containing light wastes, aerosol cans, electronic devices and components.

6.0 Procedure

State Specific Procedures & Requirements [refer to individual State Legal Reviews for details on Statues, Laws, and Rules]:

Each state has its own rules regarding universal wastes, however to be progressive and to help move the Presidential mandates forward, we need to have all buildings through out the region ensure that all universal wastes are recycled and not landfilled. It shows good faith to our customers and community that GSA is doing the right thing for the right reasons.

STATE	REQUIREMENT
Colorado	The only requirement is to ensure that all materials listed on the State of Colorado's Universal Waste rule are collected for recycling and not placed in dumpsters to be disposed of at local area landfills.
Montana	Adoption of Federal Universal Waste Rule (40 CFR 273). A generator of universal waste may treat waste lamps on-site by crushing or intentional breaking, if state regulations are followed. Administered by the Montana DEQ Recycling and Waste Reduction Program . DEQ staff continues to work with industry and businesses across Montana to develop markets that can sustain and expand recycling programs across the state.
North Dakota	Similar to Federal Universal Waste Rule (40 CFR 273). A concern is expressed to recycle and reduce waste. Administered by the North Dakota Department of Health, Environmental Health Section, Waste Management Division through the Solid Waste and Pollution Prevention and Recycling Programs .



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STATE	REQUIREMENT
South Dakota	The standards for management of universal hazardous waste are those of Federal Universal Waste Rule (40 CFR 273), inclusive (July 1, 2008). Administered by the South Dakota DENR Division of Environmental Services through the Waste Management and Recycling Programs.
Utah	R315-16: Standards for Universal Waste Management. The Utah DEQ administers Green Choices , a waste reduction program to encourage waste reduction and recycling.
Wyoming	Chapter 14, Standards for Universal Waste Checklist. The Recycling, Waste Reduction and Beneficial Use Program is regulated by the Wyoming DEQ through the Solid and Hazardous Waste Division .

Standardized Procedure:

6.1 General Facilities Materials

- 6.1.1 Annually, conduct a waste analysis for the building to determine what materials are recyclable. Waste analysis surveys can be done through the solid waste contractors for a fee or be inclusive of the contract. The surveys can also be conducted by contractors who specialize in developing surveys to promote increasing collection of recyclables. They can be hired through the local recyclers, or through environmental firms that have waste analysis services available.
- 6.1.2 Develop a management plan for the separation and collection of those materials that are identified in the waste survey. Consider where the material will be collected, where it will be stored until pick up, pest control, etc.
- 6.1.3 Determine if the recycling services can be provided by the contract administered by CASU. If not, add provisions to the janitorial contract to manage the recycle materials. The value of the materials typically offset building cleaning costs.
- 6.1.4 For paper, commingled containers and cardboard coordinate with the building occupant on style, placement and purchase costs for collection containers for recyclables. Success of recyclable material collection relies on its simplicity. Collection containers should be well marked (i.e. photo of acceptable material) and labeled. Location selection should be in areas where people congregate i.e. lunch rooms, kitchenettes, copy centers, etc. The janitorial service will be responsible for collecting the materials in the described locations and taking it to the loading dock area. The building occupants are responsible for placing their materials in the centralized bins. Desk to Desk service for recyclable materials collection can be done, however it will add a significant increase in the cleaning contract. Educate the tenant's facilities managers on the associated costs in waste materials



management to ensure they select the best service to their needs keeping their bottom line costs in mind. Keep tenants informed on recycling alternatives that are available for their excess goods (i.e. computers, chairs, old furniture, toner cartridges, ink jet cartridges). Document any training provided to the tenant regarding the recycling program.

- 6.1.5 Provide a dedicated area on or near the loading docks of buildings for adequate storage of recyclable materials. For paper products, there must be enough space to store a minimum of four 95 gallon totes. All totes must have lids for fire safety and to keep out pests. Buildings that produce at least 1,000 lbs of recycled paper products per week should have bailers installed to manage the material. Bailed cardboard has a high resale value bailed up compared to sitting loose in a Gaylord or similar container. Provide a separate storage area for non-paper recyclables until the volume is large enough to ship out to a recycler that provides a volume cost savings to the government.
- 6.1.6 For tenants who enter into the commingled container recycling program, ensure the lidded totes are marked and stored in an area where pest control is effective.
- 6.1.7 Ensure that copies of the weight slips provided by the recycling contractor are kept on file in the buildings property manager's office.
- 6.1.8 Submit a quarterly report to the Regional Recycling Coordinator of the total volume of materials collected.

6.2 Universal Waste

Universal wastes include:

- Batteries
- Electronic Devices
- Mercury Containing Devices
- Pesticides
- Aerosol cans
- Lamps

Batteries

Batteries have been divided into two major groupings: wet cells and dry cells. Dry cells are all rechargeable and alkaline batteries. Wet cells are found in motor vehicles, track hoes, fork lifts, etc. Batteries will be shipped out once there is a sufficient amount to cover the costs of shipping or once a year which ever comes first. A Battery Collection Log is used to track shipments. EPG will be responsible for tracking this effort.



Wet Cells –

- **At the DFC**: Will be collected by EPG and stored in Building 11 in secondary containment until a sufficient quantity is collected to warrant transporting them to an auto supply store, which will currently recycle the batteries..
- **Region 8 GSA locations other than DFC**: Wet cell batteries will be stored in approved storage containers until there is a sufficient amount for best value to the government for disposal. Containers need to be approved by the Regional Fire Marshal before being placed into use.

Dry Cells – A designated collection container will be provided. Lithium batteries will have the ends taped. If in doubt about the type, tape the end of the dry cell battery.

Documentation – Copies of weight slips or counts of batteries that are shipped to a recycler will be provided to the EPG and the Regional Recycling Coordinator.

Electronic Devices

Used electronic devices that are excess government property will be transferred to GSA Federal Acquisitions Service or CASU for sale at government auction. Non-working equipment will be bundled with other products and either transferred to FAS or stored in a secure location until there is sufficient material to ship to an electronics recycler.

Data Security – Any device that contains privacy act or sensitive data must be destroyed prior to recycling. Electronics recyclers offer a data destruction service. Ensure that documentation of the destruction is provided to the Regional Recycling Coordinator.

Documentation – Copies of shipping manifests and weight slips will be provided to the Regional Recycling Coordinator.

Mercury Containing Devices

The majority of mercury containing devices within GSA are fluorescent light tubes. These tubes are required to be recycled by the building O&M contractor responsible for the building. Mercury switches and other mercury containing devices are the responsibility of the O&M contractor for proper disposal. Shipping manifests and certificates of reclamation will be provided to the Regional Recycling Coordinator.

Documentation – Copies of shipping manifests will be provided to the EPG and the Regional Recycling Coordinator.



Pesticides

Pest control and landscape contractors are required under the Universal Waste or Hazardous Waste regulations to appropriately handle and dispose of unspent, unused, or expired pesticide. The contractor brings pesticides to GSA controlled facilities and is contractually responsible for handling, using, and disposing the chemicals.

Aerosol Can Disposal

Each state regulates aerosol cans per state regulations. In general (1) depressurize can (e.g. puncture can in a safe manner), in Colorado the method of depressurization must be predetermined [6 CCR 1007-3, Section 262.34] and documented, (2) drain contents of can into a drum, this waste material is to be considered hazardous and disposed of appropriately, and (c) dispose of can in an appropriate manner, if the state permits, recycle the can.

Fluorescent Tubes (non mercury containing) and Lamps

All fluorescent tubes and lamps not covered under mercury containing products procedure are to be recycled by the O&M contractor. Tubes and lamps will be stored until there is a sufficient amount to be shipped to a recycler in a secure location. Ship the material per recyclers' requirements and or recommendations.

Documentation – Copies of shipping manifests will be provided to the EPG and the Regional Recycling Coordinator.

6.3 Construction Debris

- 6.3.1 For Construction Debris, ensure that there are sufficient roll off containers provided to allow for source separation of recyclables.
- 6.3.2 Construction Wood waste can be ground on site and used as mulch or sent to a facility that has composting capabilities.
- 6.3.3 All steel construction waste will be commingled in one roll off container and shipped off to a local metals recycler.
- 6.3.4 For concrete, brick and other masonry type debris, segregate the material to ensure the purity of the load from other construction debris.
- 6.3.5 Concrete, brick and other masonry debris can be ground onsite and hauled off to a local recycler.



6.3.6 Weight slips must be signed by the demolition contractor and provided to the following GSA personnel: Project Manager, Contracting Officer and the Regional Recycling Coordinator.

6.3.7 For Landscaping wastes, ensure that all organic materials are utilized on site as mulch.

7.0 Records Management

- Waste Analyses
- Management Plans
- Weight slips
- Quarterly Report
- Battery Collection Log: Accumulation start dates will be tracked along with dates of recycling shipments.
- Shipping Manifests

8.0 References

- CDPHE, Universal Waste Rule [Colorado Hazardous Waste Regulations 6 CCR 1007-3 Part 273], June 2003
- Environmental Protection Agency, WasteWise Program
- The National Recycling Coalition:
web site <http://www.nrc-recycle.org>
- Council of Environmental Quality, Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management", March 28, 2007
- Executive Order 13101: "Greening the Government through Waste Prevention, Recycling and Federal Acquisition", signed by President William J. Clinton on 14 September 1998.
- Executive Order 13423: "Strengthening Federal Environmental, Energy, and Transportation Management", signed by President George W. Bush on 24 January 2007.
- Executive Order 13514: "Federal Leadership in Environmental, Energy, and Economic Performance", signed by President Barack Obama on 5 October 2009.



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- Paul A. Denett, Administrator, Office of Federal Procurement Policy, and Edwin Piñero, Federal Environmental Executive, Office of the Federal Environmental Executive, Letter: FY 2006 Reporting on Implementation of the Resource Conservation and Recovery Act, Section 6002, the Farm Security and Rural Investment Act, Section 9002, and Other Environmental Purchasing Requirements, November 2, 2006
- Resource Conservation and Recovery Act (RCRA), 40 CFR 239, Subchapter I—Solid Wastes
- U.S. Environmental Protection Agency [Administering Agency], Resource Conservation and Recovery Act (RCRA) of 1976; 42 U.S.C. § 6901 et seq, as amended by the Federal Facility Compliance Act. [Statute]; 40 CFR 148, 239- 282 {283-299 revised} [Regulation]; Section 6002 of RCRA (42 USC 6962)

9.0 Appendices

Attachment A: Recycling, Universal Waste & Construction Debris Flowchart

Attachment B: Battery Disposal Log

Document Control Information:	Approved & Dated:
Recycling & Universal Waste "Month-Date-Year".doc	 Oct. 12, 2010

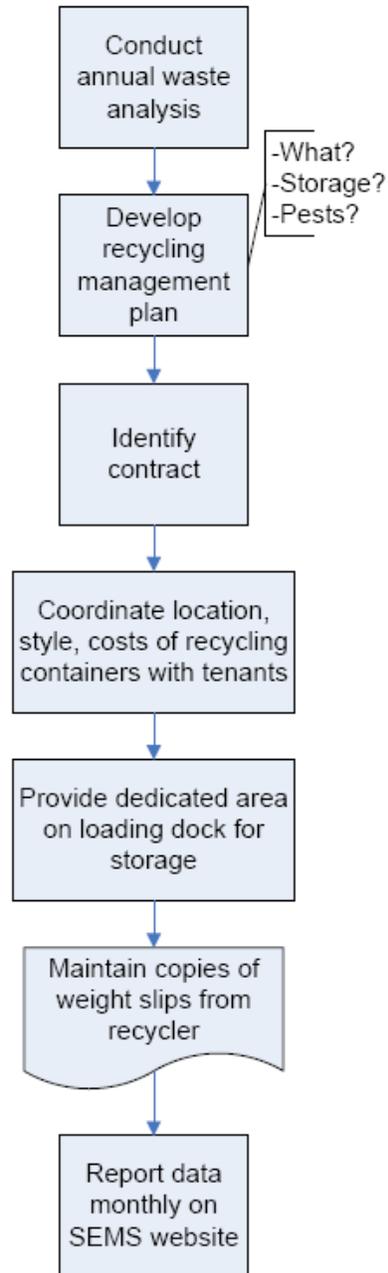
Document Revision and Update:		
Revision Date	Nature of Revision	Revision made by:
12/19/2005	Working Draft	Marion Rule (Buntyn)
03/16/2006	Original Release	Marion Rule (Buntyn)
01/22/2010	Add ISO 14001 Document Controls, add state regulations, add Flowchart, and update to address new federal regulations.	Robert Melvin
03/19/2010	Include RCRA and Farm Security and Rural Investment Act Report requirements	Marion Buntyn, Robert Melvin
06/10/2010	Region 8 requirements.	Marion Buntyn
10/12/2010	Aerosol can disposal added.	Marion Buntyn, Robert Melvin



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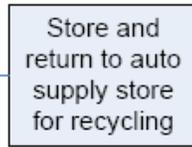
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GENERAL MATERIALS

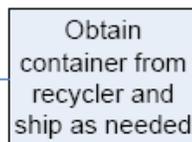


UNIVERSAL WASTES

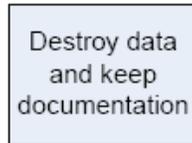
Wet Cell Batteries



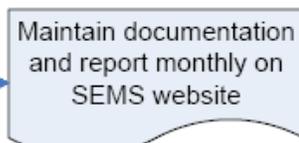
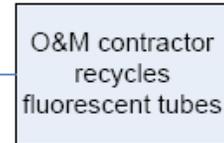
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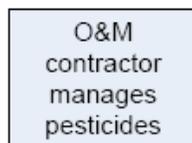
Electronic Devices



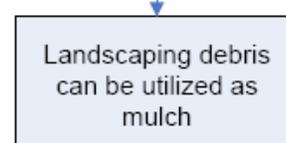
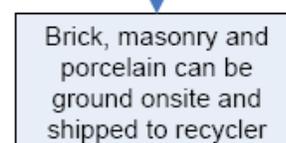
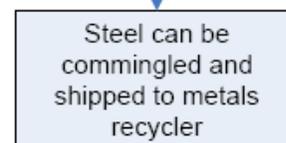
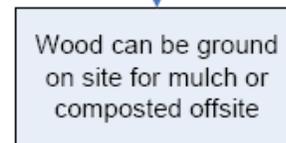
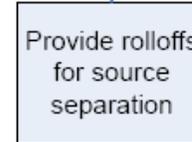
Mercury Containing Devices



Pesticides



CONSTRUCTION DEBRIS



USED OIL

