



<i>Environmental Guideline</i> Universal Waste Management	
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Activity Description
<p>Universal Waste Management: the collection, containment, treatment, and disposal or recycling of discarded materials regulated by the State of Colorado as universal wastes. Universal waste rules are a component of the hazardous waste regulations found in RCRA.</p> <p><i>There are six categories of universal wastes:</i></p> <ol style="list-style-type: none">1. <u>Aerosol cans</u> containing any hazardous chemical products or components including combustible propellant gas;2. <u>Small batteries</u> containing toxic heavy metals (principally lead, cadmium, silver or mercury), or demonstrating gross hazards (corrosivity);3. <u>Mercury-containing light bulbs</u>- generally all fluorescent light bulbs, compact fluorescents, high intensity discharge bulbs, mercury and sodium vapor bulbs, neon lights (excludes "incandescent" and "halogen" bulbs);4. <u>Electronic equipment and components</u> containing or consisting of soldered (w/lead solder) circuit boards, cathode ray (or TV) tubes, illuminated LCD panels or other flat screen devices;5. <u>Mercury-containing devices</u> such as thermometers, thermostats, anything containing a mercury switch, manometers, wall mounted sphygmomanometers, and other intact equipment containing a visible bead or more of elemental liquid mercury;6. <u>Agricultural pesticides</u>, specifically unused pesticide products generally packaged and applied in bulk in agricultural enterprises, including fungicides, herbicides, insecticides and rodenticides. <p><i>To be a universal waste, the material must:</i></p> <ol style="list-style-type: none">1) Be discarded or intended for disposal;2) Demonstrate a hazardous characteristic (e.g., is flammable, is toxic due to heavy metals, etc); and,3) Fit within one of the six designated categories of universal waste in Colorado. <p>If a discarded item demonstrates a hazardous characteristic, but does not fit in any one of the six categories of universal wastes in Colorado, then it may be subject to more strict management as a hazardous waste or other regulated waste.</p>

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Potential Environmental Risks

The following environmental concerns are associated with this activity:

- Contaminating your workplace
- Creating a health hazard in your workplace
- Creating a fire or other safety hazard
- Contributing to illegal disposal
- Jeopardizing the health and safety of solid waste handlers
- Contaminating otherwise non-regulated waste
- Contaminating soil and ground water
- Violating City landfill use rules

Potential consequences from performing the activity incorrectly:

- Personal injury, injury to co-workers or members of the public, contamination of local eco-systems, property damage, and environmental pollution
- Legal orders and penalties for violation of local, state and federal laws- civil and criminal proceedings, arraignment, litigation and financial and other legal penalties.
- Job loss and significant disruption to delivery of services to the public.

Critical Operating Requirements

A. General Requirements *Responsible: All Staff*

Prohibited Activities

- Do not discard universal wastes in the trash or otherwise mix with normal municipal solid waste.
- Do not be abuse, break, empty, take apart or otherwise treat universal wastes unless specifically authorized in a universal waste treatment plan.
- Do not be sweep or wash spills into any sewer system or waterway, or on to any soils.
- Soil, water, or other media which become contaminated by release of materials from universal wastes must not be left in place to cause contamination or harm, but must be contained and remediated as soon as possible.

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Critical Operating Requirements	
<u>A. General Requirements</u>	<i>Responsible: All Staff</i>
General Considerations <ul style="list-style-type: none">• Each person performing a task or job in which universal wastes are generated or collected is responsible for understanding how the waste must be managed and what specific rules or procedures need to be followed.• Some universal wastes may be incompatible with other wastes, other materials, or the container in which they are placed. Avoid creating hazards caused by placing incompatible materials and wastes in contact with each other.• All universal wastes need to be properly contained. Determine the best container and means of collecting universal wastes in compliance with state rules, and always keep containers of universal wastes closed when not in use.• Universal waste containers must always be properly labeled.• Universal wastes can, through abuse and normal deterioration or breakage, release hazardous or toxic substances.• Hazardous or toxic substances released from universal wastes must be managed as hazardous wastes.• This Environmental Guideline is provided for guidance only and does not supersede any regulations.	
Training Requirements <ul style="list-style-type: none">• Workers and supervisors who generate or manage universal wastes on the job are required to have specific training relating to waste management and environmental compliance.• Training may consist of brief of classroom instruction and discussion of applicable topics plus some hands-on practice in the workplace.• Training is usually provided several times a year.• Workers require both initial training plus repeat training or “refresher” training once a year thereafter.	
Storage & Material Handling Requirements <ul style="list-style-type: none">• All containers of universal waste must be labeled with the words “Universal Waste” plus a description of the waste (e.g., aerosol cans, thermometers, etc.)• Universal wastes must be separated from all other discarded materials and collected in containers appropriate to the waste.• Do not mix different universal wastes in a single container.• Store universal wastes in a location and in such a manner as to protect the wastes from damage or deterioration and prevent release of the hazardous substances within them.• Maintain legible labels and markings on all containers of universal waste.• Generally, collected universal wastes may remain in storage for a period of one year. Follow specific work instructions regarding how to comply with this time limit.	
<u>B. Planning Requirements</u>	<i>Responsible: All Staff</i>
B1. Document the quantity of the different universal wastes you collect and store on a periodic basis (weekly or monthly) per specific work instructions and forms.	
B2. Be sure to obtain and keep on hand all MSDSs for all products at your facility that will eventually be managed as a universal waste.	

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| B3. Procure the right containers and ancillary equipment (labels, boxes, drums, bags, etc.) needed to properly collect and store the universal wastes you will generate, before you generate them. |
| B4. Ensure that your facility has appropriate spill response materials at all times for the types of hazardous substances that could be released from the universal wastes you collect on site. |

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| <u>C. Critical Tasks</u> | <i>Responsible: All Staff</i> |
| C1. Keep all containers of universal wastes closed when not adding to or emptying them. | |
| C2. Label all containers of universal wastes accurately and completely including the words “universal wastes” according to specific work instructions. | |
| C3. Document universal waste collection, storage and removal on the appropriate form according to specific work instructions (see Work Instructions section). | |

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| <u>D. Emergency Response</u> | <i>Responsible: All Staff</i> |
| D1. If a spill occurs, refer to Environmental Guideline Spill Response. <ul style="list-style-type: none">• Call 311 immediately (during normal business hours) or at 303-206-0001 after normal business hours for all spills. | |
| D2. If a universal waste is found to be leaking or a spill has occurred, determine whether any hazardous substances have been released. | |
| D3. Control releases of any hazardous substances from universal wastes to minimize property damage and prevent an imminent risk to human health and the environment. | |
| D4. If hazardous substances have been released in a form and quantity that can be collected and re-contained call EH EQ to report the spill and receive emergency response clean-up assistance. | |
| D5. Collect and containerize all hazardous substances and contaminated media derived from a spill and evaluate for correct labeling, storage and disposal. | |

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| <u>E. Inspection & Maintenance Requirements</u> | <i>Responsible: All Staff</i> |
| E1. Inspect universal waste containers and collection areas regularly (weekly or monthly) according to specific work instructions. | |
| E2. During inspection look for and correct: open containers, unlabeled and improperly labeled containers, undocumented wastes in inventory, leaks from universal wastes, and unidentified items. | |
| E3. Work with DEH staff to collect, manage, transport, and recycle all universal wastes generated at your facility. | |

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Expected Records / Outputs	
<u>Record / Output</u>	<u>Instructions</u>
Waste disposal records (profiles, LDR forms, manifests, sample results, etc.).	<ul style="list-style-type: none"> • Manifests, LDRs & profile forms will be generated by the licensed transporter or disposal facility. • Provide all copies of all manifests and shipping documents and reclamation certificates to DEH for recordkeeping.
Training Records	<ul style="list-style-type: none"> • While formal certifications are not always necessary, some form of "proof of training" (such as sign-in sheets and handouts) is expected and should be maintained on file by the operator.
Any Universal Waste Treatment Protocol and Operating Procedures	<ul style="list-style-type: none"> • This document must be issued before site work can proceed. • This document must be maintained on site at all times during construction activities. It consist of: <ul style="list-style-type: none"> ○ Authorization to discharge ○ SUD Permit ○ Approved CASMP

References	
<u>Phone Numbers</u>	
• 311 (for Spill Reporting during normal business hours)	3-1-1
• DEH DEQ Emergency Response (after normal business hours)	(303) 206-0001
• Paul Bedard (Facility Compliance Program Administrator)	(303) 880-9865
• Gary Lasswell (Environmental Compliance Supervisor)	(720) 865-5440

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References

Guidance Materials (list not limited to the following)

- MSDSs
- WMD MS4 Permit
- DOT Labeling and Placarding Guidance
- Facility specific SPCC Plan

Training Materials (list not limited to the following)

- Operating procedures training (On-the-Job)
- Operator site specific training materials for handling Hazardous Wastes

Related Environmental Guidelines (list not limited to the following)

- CCD-301.03.26 Spill Response
- CCD-301.03.10 General Regulated Waste Management

Applicable Regulations (list not limited to the following)

- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 6 CCR 1007-3, Part 261 State RCRA Regulations
- CCoD Ordinances
- Denver Wastewater Management Division Rules & Regulations
- Metro Wastewater Reclamation District Rules & Regulations

Other Documents

- Air Pollution Emission Notification (APEN) forms
- DEH Compliance Bulletins
- CDPHE Compliance Bulletins
- CCoD Executive Orders