



Universal Waste

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Region 7 LCRD Program Background

The Region 7 LCRD Program consists of the following Branches and Sections:


RCRA Oversight,
Authorization Grants
& PCB

Brownfields &
Redevelopment
Branch

Tanks, Toxins, &
Pesticides Branch

Grants Management &
Budget

Superfund



What is Universal Waste

EPA defines Universal Waste into 5 specific different categories

Batteries

Pesticides

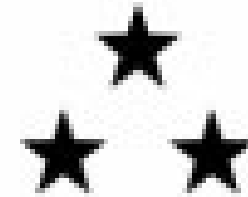
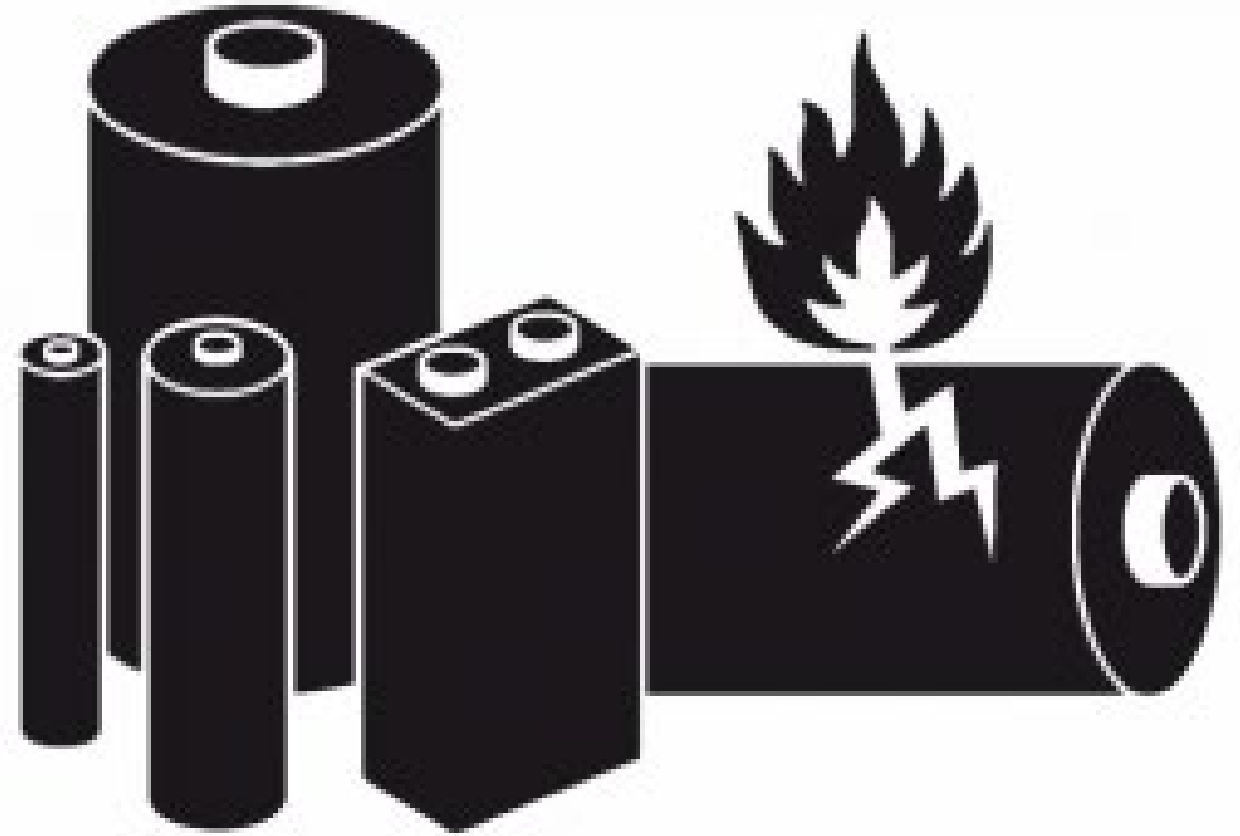
Mercury Containing Equipment

Lamps

Aerosol Cans

Batteries

- ▶ 40 CFR section 273.9
- ▶ One or more electrically connected cells





Pesticides

PREVENTION, DESTROYING, REPELLING OR MITIGATION OF PESTS
OR PLANT REGULATOR



Mercury Containing Equipment



- ▶ Thermostats
- ▶ Containing elemental mercury integral to its function
- ▶ Final Rule 08/05/2005

Lamps

- ▶ Bulb or tube portion of an electric lighting device
- ▶ Examples:
 - ▶ Fluorescent
 - ▶ High intensity discharge
 - ▶ Neon



Aerosols

- ▶ Non-refillable
- ▶ Flammable propellants
 - ▶ Propane
 - ▶ Butane



Generator Universe

Generator Category	Number of Facilities	Total Hazardous Waste Generated (tons)	Percent of Total Hazardous Waste Generated	2017 Iowa Number / % National
VSQGs	353,400–591,800	46,000–148,000	<1%	3832 / 1%
SQGs	49,900–64,300	66,000–141,000	<1%	895 / 2%
LQGs	20,800	35.2 million	99%	191 / 1%
Total	424,100–676,900	35.3–35.4 million	100%	4918 / 1%

* Numbers of VSQGs and SQGs are estimates based on Biennial Report (BR) and limited state data. LQG number is derived from 2013 BR. The Iowa data is from the RCRA database

2 common Findings:

- Universal Waste storage is the most common area of non-compliance; labeling, closing containers, disposing within the 1-year time frame
- Lack of tank inspections and training per Spill Prevention Control and Countermeasures (SPCC) plans

Waste Program

- Can manage up to 11,000 pounds of Universal Waste without following the Haz Waste Generator requirements reducing regulatory burden
- Encourages recycling and proper disposal of these previous mentioned waste
- Can ship via common carrier
 - Which saves money
- No requirement to use Haz Waste Manifest
- GSA/O&M can move universal waste between buildings even though universal waste is a type of hazardous waste



Universal Waste Assumptions

Facilities will accumulate less than 11,023 pounds of universal waste (all categories combined) at the site at any one time. Thus, they are a small quantity handler of universal waste.



If over this, contact your regional environmental manager

Must Follow for Protection of Environment:

Container in closed and labeled

Label as Universal Waste with Date of Accumulation

- First date you started storing the waste
- Clearly marked storage areas

Must Dispose within 1-year

- At a facility permitted/designated for receiving hazardous waste, like a hazardous waste recycler
- If load is too small for pick up, document it, and continue accumulation until it can be properly managed

Universal Waste- Labeling

To minimize
confusion or
mixing of
waste
properly
label

- Universal Waste- Batteries
- Universal Waste- Pesticides
- Universal Waste- Mercury
Containing Equipment
- Universal Waste- Lamps

Universal Waste Storage



Before



After





Bad Storage of Universal Waste



Proper Storage of Universal Waste


Goals of the Final Rule

The 2016 HW Generator Improvements Final Rule —

- ▶ Over 60 changes to Hazardous Waste Generator Program that:
 - ▶ Reorganizes the regulations to make them more user-friendly and thus enables improved compliance by the regulated community
 - ▶ Provides greater flexibility for hazardous waste generators to manage waste in a cost-effective manner through episodic generation and VSQG-LQG consolidation provisions
 - ▶ Strengthens environmental protection by addressing identified gaps in the regulations
 - ▶ Clarifies certain components of the hazardous waste generator program to address ambiguities and foster improved compliance


Risk Management Survey

1. Does the facility comply with hazardous/universal waste accumulation requirements?
2. What other waste, outside of solid waste (universal waste, electronic waste, used oil) does the facility recycle? (if more than one selection applies, please indicate it in the findings/observations field)
3. Is there evidence of improper disposal, abandonment, or dumping of solid waste (including electronic waste, universal waste, or hazardous waste) at the facility?



Hints and Tips to Avoid Common Violations

- ▶ Examples of what to do or not to do!
 - ▶ Do keep all records
 - ▶ If in doubt, ask questions
 - ▶ Maintain good housekeeping
 - ▶ do not store chemicals or wastes in a room or building that is in bad or poor condition
 - ▶ Get rid of wastes on a regular basis




Hints and Tips to Avoid Common Violations

- ▶ Examples of what to do or not to do!
 - ▶ Incompatible chemicals
 - ▶ Keep equipment in good operating condition (i.e., repair or replace leaking plating tanks)
 - ▶ Keep your building in good condition
 - ▶ Clean up spills or leaks on a regular basis
 - ▶ Dispose of chemicals that have exceeded their shelf life



Hints and Tips to Avoid Common Violations

- ▶ Examples of what to do or not to do!
 - ▶ Keep containers of hazardous waste closed
 - ▶ Label and date
 - ▶ Inspection hazardous waste storage areas
 - ▶ Keep adequate aisle space
 - ▶ Keep copies of manifests and disposal



Hints and Tips to Avoid Common Violations

- ▶ Examples of what to do or not to do!
 - ▶ Do not discharge anything to a stormwater drain without an NPDES permit
 - ▶ Do not discharge to POTW without permission or without a NPDES permit
 - ▶ do not place or dispose wastes on the ground

Questions?

- ▶ Call the U.S. EPA Region 7 Environmental Action Line 1-800-223-0425 or

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EPA/STATE WEB PAGES

- ▶ U.S. EPA Region 7
- ▶ <http://www.epa.gov>
- ▶ Iowa Department of Natural Resources
- ▶ <http://www.dnr.ia.gov>
- ▶ 5 Universal Waste Categories
- ▶ <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-273#273.9>