



Hazardous Waste (HW) and Universal Waste (UW)

Practical Tips in Managing HW and UW

March 19, 2024

Unified by Purpose

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Overview of managing HW and UW including generators, labeling, training, manifests, plans, records, and inspections with tips.

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Practical Tips in Managing HW and UW

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Procter & Gamble - Lima Manufacturing

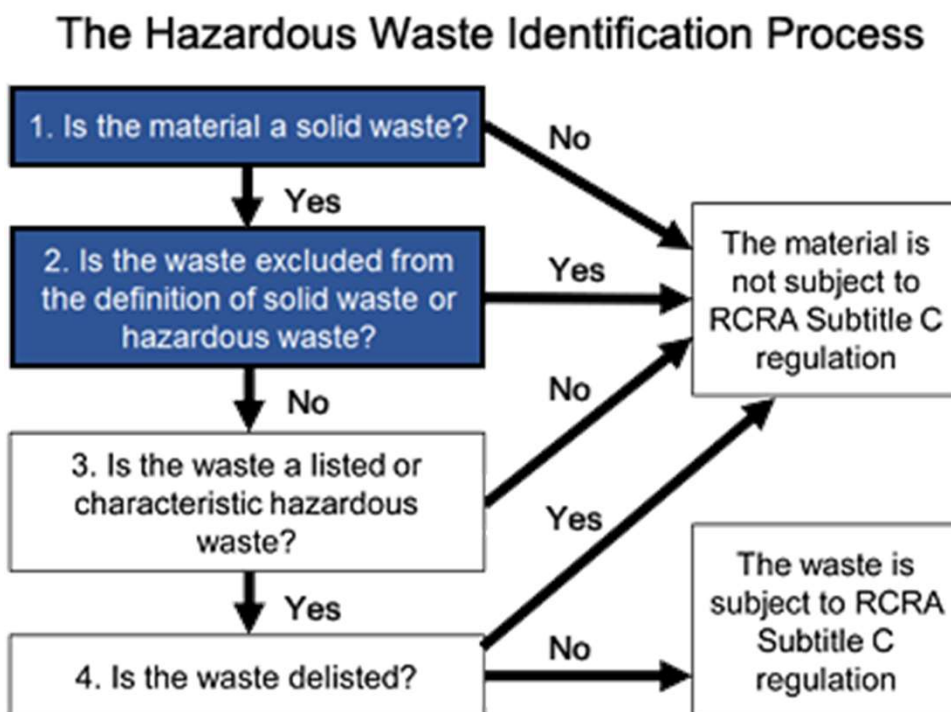
Hazardous Waste



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Hazardous Waste Determination



Definition of Solid Waste

Per EPA, a solid waste is any material that is discarded by being:

- **Abandoned**: The term abandoned means thrown away. A material is abandoned if it is disposed of, burned, incinerated, or sham recycled.
- **Inherently Waste-Like**: Some materials pose such a threat to human health and the environment that they are always considered solid wastes; these materials are considered to be inherently waste-like. Examples of inherently waste-like materials include certain dioxin-containing wastes.
- **A Discarded Military Munition**: Military munitions are all ammunition products and components produced for or used by the U.S. Department of Defense (DOD) or U.S. Armed Services for national defense and security.
- **Recycled in Certain Ways**: A material is recycled if it is used or reused (e.g., as an ingredient in a process), reclaimed, or used in certain ways (used in or on the land in a manner constituting disposal, burned for energy recovery, or accumulated speculatively). Specific exclusions to the definition of solid waste are listed in the Code of Federal Regulations (CFR) at [40 CFR section 261.4\(a\)](#). Many of these exclusion are related to recycling.



At what point does an unused commercial chemical product become a solid waste?



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“Abandoned”

An unused commercial chemical product meets the definition of a solid waste when the generator makes the decision to discard it. Under RCRA, unused products do not become ‘waste’ until they become ‘discarded material.’

- EPA believes that an unused product becomes ‘discarded’ when an intent to discard the material is demonstrated (62 FR 6622, 6626; February 12, 1997).
- TIP: Careful! If usable do not waste, but EPA skeptical if stored and not used indefinitely.

Hazardous Waste Determination

- § 262.11(a) The hazardous waste determination for each solid waste must be made
 - at the point of waste generation,
 - before any dilution, mixing, or other alteration of the waste occurs,
 - and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.



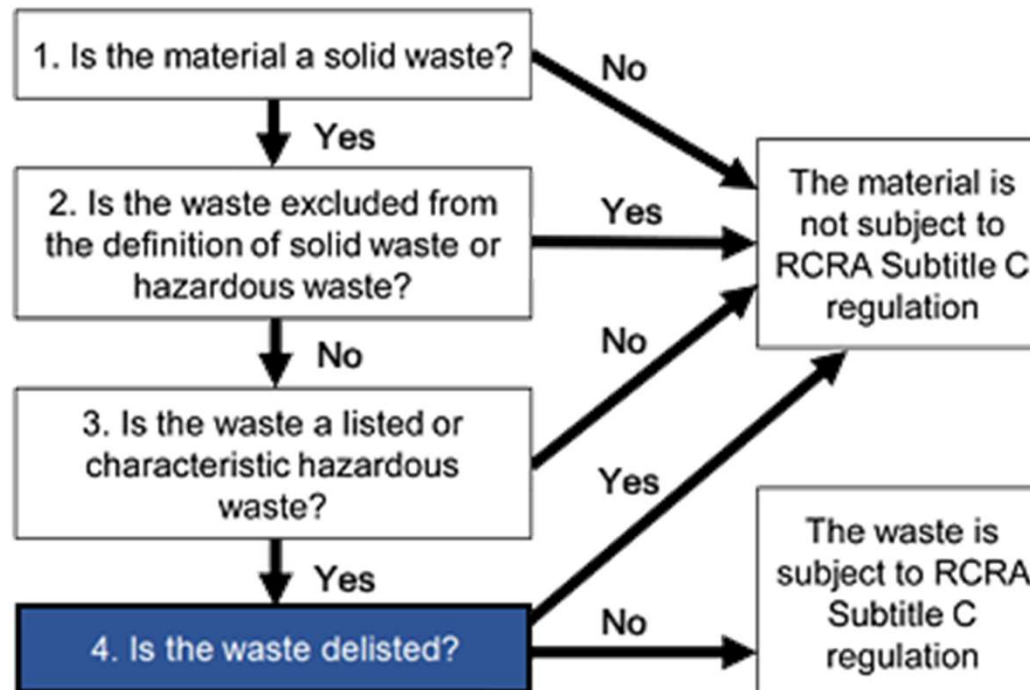
Is It Hazardous Waste?

- An item is considered to be hazardous waste if it meets one or more of the following characteristics:
 - Mixture contains a listed hazardous waste and a non-hazardous waste.
 - Material meets the definition of one of the following:
 - Ignitability (flashpoint < 60°C or supports combustion)
 - Reactivity (e.g., water reactives, cyanides, explosives, unstable chemicals)
 - Corrosivity (pH < 2 or > 12.5)
 - TCLP toxicity (e.g., pesticides, heavy metals, organic compounds, see Waste Analysis Plan, Attachment B)
 - Material is listed in 40CFR 261 Subpart D (see Waste Analysis Plan, Attach. B)
 - Material is not excluded from regulations.



Is It Hazardous Waste?

The Hazardous Waste Identification Process



You have a hazardous waste.

So are you a Hazardous Waste Generator?

- Determine your generator status:
Monthly Generated Amounts
 - VSQG - ≤ 100 kg
220 lb or $\frac{1}{2}$ Drum
 - SQG - 100 - 1,000 kg
2,200 lb or $\frac{1}{2}$ to 5 Drums
 - LQG - $\geq 1,000$ kg
 $\geq 2,200$ lb or 5 Drums



Generator Status

- **Which Generator Status is Best for my Site?**

VSQG - \leq 100 kg 220 lb or 1/2 Drum

SQG - 100 - 1,000 kg 2,200 lb or 1/2 to 5 Drums

LQG - \geq 1,000 kg \geq 2,200 lb or 5 Drums

- **Strive to be the lowest status generator possible.**
- **Reduce, Reuse, Recycle, ...waste**
- **Use the waste rule definitions: Universal wastes, Used Oil**

- **Compliance TIP - ALWAYS start or seek out definitions**

- **WHY does generator status matter? - Details to come...**
 - **Waste MIN reduction plans**
 - **Training annually**
 - **EPA Inspection frequency**
 - **Basically more regulated and more involved programs**



Hazardous Waste Labeling

- The EPA requires that the generator “mark each hazardous waste container with a capacity of 119 gallons or less with the following words and information”:
 - HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
 - Generator’s Name and Address _____.
 - Generator’s EPA Identification Number _____.
 - Manifest Tracking Number _____.



Hazardous Waste Labeling

Name and address of facility

Date drum became full and transferred to accumulation area

HAZARDOUS WASTE			
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL. IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.			
PROPER D.O.T. SHIPPING NAME _____		UN OR NA# _____	
GENERATOR INFORMATION:			
NAME _____			
ADDRESS _____			
CITY _____		STATE _____	ZIP _____
EPA ID NO. _____	EPA WASTE NO. _____		
ACCUMULATION START DATE _____	MANIFEST DOCUMENT NO. _____		
HANDLE WITH CARE! CONTAINS HAZARDOUS OR TOXIC WASTES			

Manifest number

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Label and mark containers properly for shipping:

For shipments of hazardous material, including hazardous wastes, the DOT requires each non-bulk package (maximum capacity no more than 119 gallons) to display, at a minimum:

The Proper Shipping Name and identification number of the hazardous material [49 CFR 172.301(a)];

The name and address of the shipper and/or the designated recipient [49 CFR 173.301(d)];

The diamond hazard labels for the primary (and most subsidiary) hazard classes of the hazardous material [49 CFR 173.400, 173.402].

Package and label hazardous waste for shipment off-site to a RCRA facility for treatment, storage, or disposal.

Per §262.32, Generators must add the RCRA waste codes before shipping waste off-site:

- This allows receiving TSDFs to know how to treat the wastes to meet land disposal restriction requirements.
- Generators must mark their containers with the applicable RCRA waste codes or use a bar-coding system that performs the same function.



Onsite Hazardous Waste Identification Labels



Accumulation units must be labeled with the words “Hazardous Waste” and an indication of the nature of the hazard (e.g., using the words ignitable, corrosive, toxic, or reactive or another nationally recognized hazard label).

Containers and tanks labels must have the words “Hazardous Waste” and indicate the hazards of the contents of the accumulation units.

For containment buildings, the generator must have a sign in a conspicuous place with the words, “Hazardous Waste” and the hazards of the waste can indicate the hazards of the contents of the accumulation unit using any of several established methods (e.g., DOT hazard communication, OSHA hazard statement or pictogram, NFPA chemical hazard label, or RCRA characteristic).

Hazardous Waste Requirements (Depending on Generator Status)

Training Requirements

- If “dealing” with waste
 - RCRA Training
- If signing a manifest
 - RCRA Training
 - DOT Training

Reporting

- Biennial Waste (Federal)
 - Annual Manifest Report
 - (Indiana – LQG, SQG)

Hazardous Secondary Material

it depends on if, what and how the hazardous waste/hazardous secondary material is being processed



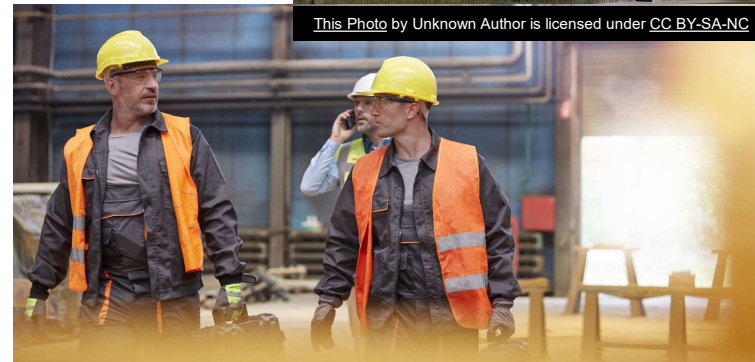
WHO REQUIRES TRAINING

Individuals who require this training perform hazardous waste related tasks, such as:

- Characterizing and Identifying waste
- Scheduling hazardous waste shipments
- Inspecting hazardous waste storage and accumulation areas
- Maintaining inventory and recordkeeping
- Marking and labeling containers
- Maintenance of tanks or other equipment
- Any emergency coordination
- Loading/unloading or transporting hazardous waste

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TRAINING OVERVIEW



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▶ The training is designed to ensure that facility personnel can respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

- ▶ (1) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
- ▶ (2) Key parameters for automatic waste feed cut-off systems;
- ▶ (3) Communications or alarm systems;
- ▶ (4) Response to fires or explosions;
- ▶ (5) Response to ground-water contamination incidents; and
- ▶ (6) Shutdown of operations.

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TRAINING REQUIREMENTS

RCRA Hazardous Waste Generator training is designed for individuals who manage or otherwise deal with hazardous waste. Hazardous waste can cause chemical exposure, fire, oxygen deficiency, radiation, biologic hazards, safety hazards, electrical hazards, heat stress, cold exposure, or noise exposure. Hazardous waste training is required for large quantity and small quantity generators. Training is required for individuals who label or move hazardous waste containers and those who perform inspections. ***Training is required within six months of employment, and annual training is also required.*** This presentation covered this requirement.

DOT Hazardous Materials Transportation training is for workers who handle, manage, transport, or ship hazardous waste or materials. This includes those who load, unload, or handle hazardous materials; select, mark, label, or modify containers or packaging; prepare materials for shipping, or prepare shipping papers; are responsible for the safety of hazardous materials during shipment; and vehicle operators. ***Training is required within 90 days and must reoccur every three years.*** Additional DOT training is required to understand that a hazmat employee is certifying that every aspect of the hazardous materials shipment is in full compliance with all applicable DOT regulations. The presentation demonstrates an overview of this requirement.



DOT Hazardous Materials Transportation Training

TOP cited deficiency regarding hazardous waste handling

- DOT Hazardous Materials Transportation training for signing manifests.

TIP - Best Practice offering for shipment, hazardous waste, hazardous materials

- Offer applicable DOT truck placards, UN numbers, and incorporate a verification statement the site offered the appropriate placards and the driver confirmed compliance.



MANIFEST SHIPMENTS

Manifest Training:
Let's get started by passing out the handouts!

We have colored coded each section to help you understand who is responsible for each section of the manifest.

Who Is Responsible For Each Box on the Manifest
In general, the sections marked with a specific color circle would be completed by the company's indicated.

Waste Generator



Generator or Transporter



Printer of Manifests



Disposal Facility



Please print or type. (Form designed for use on elite (12-pitch) typewriter.) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of
3. Emergency Response Phone
4. Manifest Tracking Number

5. Generator's Name and Mailing Address
6. Generator's Phone
7. Generator's Site Address (if different than mailing address)

8. Transporter 1 Company Name
9. Transporter 2 Company Name
10. Designated Facility Name and Site Address
11. U.S. EPA ID Number

11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))
12. Container No., Type
13. Total Quantity
14. UH1, UH2, UH3
15. Waste Codes

16. Special Handling Instructions and Additional Information

17. GENERATOR OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/hazardous, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (1) if I am a large quantity generator or (b) (1) if I am a small quantity generator is true.

18. International Shipments: Import to U.S. Export from U.S. Part of entry/exit Date leaving U.S.:

19. Transporter Acknowledgment of Receipt of Materials
20. Discrepancy: Quantity Type Residue Partial Rejection Full Rejection

21. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

22. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a.

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)



E-Manifest

Hazardous Waste Electronic Manifest (e-Manifest) System

EPA launched the hazardous waste e-Manifest system nationwide on June 30, 2018.

Generators, transporters, and receiving facilities have the option to create and submit manifests electronically. These manifest users may continue to use paper manifests after June 30, 2018; however, use of e-Manifest is highly encouraged by EPA.

- The RCRAInfo registration and login page is <https://rcrainfo.epa.gov/rcrainfoprod/action/secured/login>.
- An e-Manifest Introduction and Registration [video](#) and [presentation](#) are available to guide you through the process.
- A number of states have additional requirements regarding the use of the Uniform Hazardous Waste Manifest. Some states require state-specific waste codes in addition to the federal hazardous waste codes to be entered on the new manifest.

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RCRAInfo

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The system enables cradle-to-grave waste tracking of many types of information regarding the regulated universe of RCRA hazardous waste handlers. RCRAInfo characterizes facility status, regulated activities, and compliance histories in addition to capturing detailed data on the generation of hazardous waste from large quantity generators and on waste management practices from treatment, storage, and disposal facilities.

RCRAInfo Sign In

Sign In

[Register](#)

[Forgot User Id?](#)

[Forgot Password?](#)

Warning Notice and Privacy Policy

Warning Notice

In proceeding and accessing U.S. Government information and information systems, you acknowledge that you fully understand and consent to all of the following:

1. you are accessing U.S. Government information and information systems that are provided for official U.S. Government purposes only;
2. unauthorized access to or unauthorized use of U.S. Government information or information systems is subject to criminal, civil, administrative, or other lawful action;
3. the term U.S. Government information system includes systems operated on behalf of the U.S. Government;
4. you have no reasonable expectation of privacy regarding any communications or information used, transmitted, or stored on U.S. Government information systems;
5. at any time, the U.S. Government may for any lawful government purpose, without notice, monitor, intercept, search, and seize any authorized or unauthorized communication to or from U.S. Government information systems or information used or stored on U.S. Government information systems;
6. at any time, the U.S. Government may for any lawful government purpose, search and seize any authorized or unauthorized device, to include non-U.S. Government owned devices, that stores U.S. Government information;
7. any communications or information used, transmitted, or stored on U.S. Government information systems may be used or disclosed for any lawful government purpose, including but not limited to, administrative purposes, penetration testing, communication security monitoring, personnel misconduct measures, law enforcement, and counterintelligence inquiries; and
8. you may not process or store classified national security information on this computer system.

Hazardous Waste Manifest - Who signs? Who cares?

Trained person (DOT 40 hour, RCRA, liability)

- These regulations state that employees must have general awareness/familiarization, function-specific training, and safety/security training. This training is required within 90 days of employment for a new employee and then re-occur every 3 years.
- Training is regulated under both RCRA (Resource Conservation and Recovery ACT) and US Department of Transportation (DOT).

TIP - Why does the signatory care, what liability?

- DOT requires that the person signing the manifest have "first hand knowledge" of the information listed on the manifest and the regulations that apply to the waste. The generator must certify that the materials are properly classified, described, packaged, marked, and labeled, and in proper condition for transporting.
- Who to call if an accident, broken open, spill, rejected, or injury.



UNIFORM HAZARDOUS WASTE MANIFEST

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

VOID

EPA Form 8700-22 (Rev. 3-03) Previous editions are obsolete. DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Hazardous Waste Requirements (cont.)

- Contingency Plan (LQG) and Waste MIN Plan
- Recordkeeping
 - Hazardous waste characterizations
 - Hazardous waste quantities
 - Manifests / e-Manifests
 - (Return Manifest copies)
 - Training records



PREPARE PLANS, RECORDS & REPORTS

- ▶ Have written preparedness and contingency plans and emergency procedures.
- ▶ Have a waste minimization plan for your facility.
- ▶ Have a training plan and provide RCRA training initially and annually for all employees managing hazardous waste.
- ▶ Obtain 12-digit EPA ID Number.
- ▶ File Manifests and Biennial Generator reports appropriately.
- ▶ Keep waste analysis and waste determination records.
- ▶ Maintain required Land Disposal Restriction reports for each waste stream.



Contingency Plan (LQG)

example

I. Purpose and
Implementation

II. Summary of Facility
Information

III. RCRA Hazardous Waste
Materials On site

IV. Emergency Response
Authorities and Process

V. Responsibilities of Facility
Personnel

VI. Emergency Coordinator
Procedures

A. Communication Sequence

B. Emergency Procedures

C. Post-emergency Equipment
Maintenance

VII. Observer Procedures

A. Fires and Explosions:

B. Spills or Releases

VIII. Emergency Equipment
Located On Site



EMERGENCIES

To respond effectively to emergencies by familiarizing yourself with the following:

- ▶ emergency procedures
- ▶ contingency plan – call coordinator
- ▶ emergency equipment, spill kits, fire extinguisher, eye washes emergency systems, Cut-off systems, communications, and alarms
- ▶ locations



Summary of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)

Comprehensive Environmental Response, Compensation, and Liability Act -- otherwise known as CERCLA

- 42 U.S.C. §9601 et seq. (1980)
- The or Superfund -- provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment.
- Through CERCLA, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.



Superfund Sites & "Deep Pockets":

- EPA cleans up orphan sites when potentially responsible parties (PRPs) cannot be identified or located, or when they fail to act.
- Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements.
- EPA also recovers costs from financially viable individuals and companies once a response action has been completed; aka "Deep Pockets."
- EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies.

Hazardous Waste Review

- Regulations
 - 40 CFR 260 – 273
 - 262 – Generators Rules
 - 263 – Transporters Rules
 - 264 – TDSF Rules
- Generator Statuses
 - Very Small Quantity Generator (VSQG)
 - Small Quantity Generator (SQG)
 - Large Quantity Generator (LQG)



Ready for Inspection?



INSPECTIONS

Internal/Periodic

HAZARDOUS WASTE STORAGE AREA WEEKLY INSPECTION CHECKLIST

Inspections conducted on a weekly basis. Maintain checklist as documentation of this requirement.

Inspection program must meet requirements of 22 CCR §66265.174. Retain records at the Department level.

Corporate/ Legal/Third Party

Inspections verify that wastes are being stored safely to prevent harm to employees or the environment.

RCRA

EPA and its regulatory partners inspect facilities that generate, transport, treat, store or dispose of hazardous waste to verify compliance with applicable regulations.



INSPECT SITES PERIODICALLY

There are **different inspection requirements**, based on generator status and the type of hazardous waste accumulation area (satellite accumulation areas or central accumulation areas).

Inspect all hazardous waste areas weekly. Document and fix any concerns.

Respond to spills. Clean up and dispose of properly.

Maintain structures , containment, and safety equipment.

Maintain a daily waste transfer log, detail how much and type of waste was placed in the container, and by whom §262.11(f) and §262.40.



**TIP - INSPECT Your Waste and Recycling Outlets
BEFORE Using and Regularly Thereafter**



Ready for Inspection?

- EPA Inspector Checklists and Program Checklists
- Internet search – inspection tips, auditor & auditee
- EPA most cited violations, per media
- EPA initiatives – inspection focus
- Auditing experience or auditor training
- Conduct Internal audits
- Pictures – document conditions on that date
- Always accompany inspector
- Assume compliance and learning experience



Ben Reuse, Alternative Use, Minimize

- Know all the requirements of applicable laws and regulations.
- Ensure all solid wastes are properly classified and classification is documented.
- Ensure that all site waste generation is tracked.
- Ensure that all solid wastes are appropriately managed on site, in appropriate containers and all necessary records are kept.
- Ensure that all solid waste shipments are made appropriately with the necessary paperwork properly prepared, and documentation retained.
- Ensure that all waste handlers (transporters, processors, disposal sites, etc.) Are inspected as required.
- Determine which employees are handling regulated solid waste.
- Ensure all employees handling regulated solid wastes are appropriately trained for their role.
- Ensure that employees shipping hazardous waste are trained on appropriate dangerous goods requirements.
- Develop procedures for handling/shipping solid waste.
- Conduct periodic checks (in process measures) of solid waste systems.
- Ensure that sufficient resources are in place to execute the system.
- Inspect the facility accepting the alt use material. Ensure all key players from your facility are in the know; security, quality...



At what point does an unused commercial chemical product become a solid waste?

"Speculative Accumulation"

Speculative accumulation refers to false claims that wastes will be recycled and/or the indefinite storage of hazardous waste before recycling.

- EPA believes that an unused product becomes 'discarded' when an intent to discard the material is demonstrated (62 FR 6622, 6626; February 12, 1997).
- The RCRA Subtitle C regulations also indicate that materials which are "accumulated speculatively" prior to recycling are solid wastes (261.2(c)(4)).
- EPA created the speculative accumulation provision to mitigate the risk posed by facilities that over accumulate hazardous secondary materials prior to recycling. The provision serves as a safety net.
- EPA subjects persons who "accumulate speculatively" to immediate regulation as hazardous waste generators or storage facilities. (50 FR 614, 650; January 4, 1985).



Legitimate Hazardous Waste Recycling Versus Sham Recycling

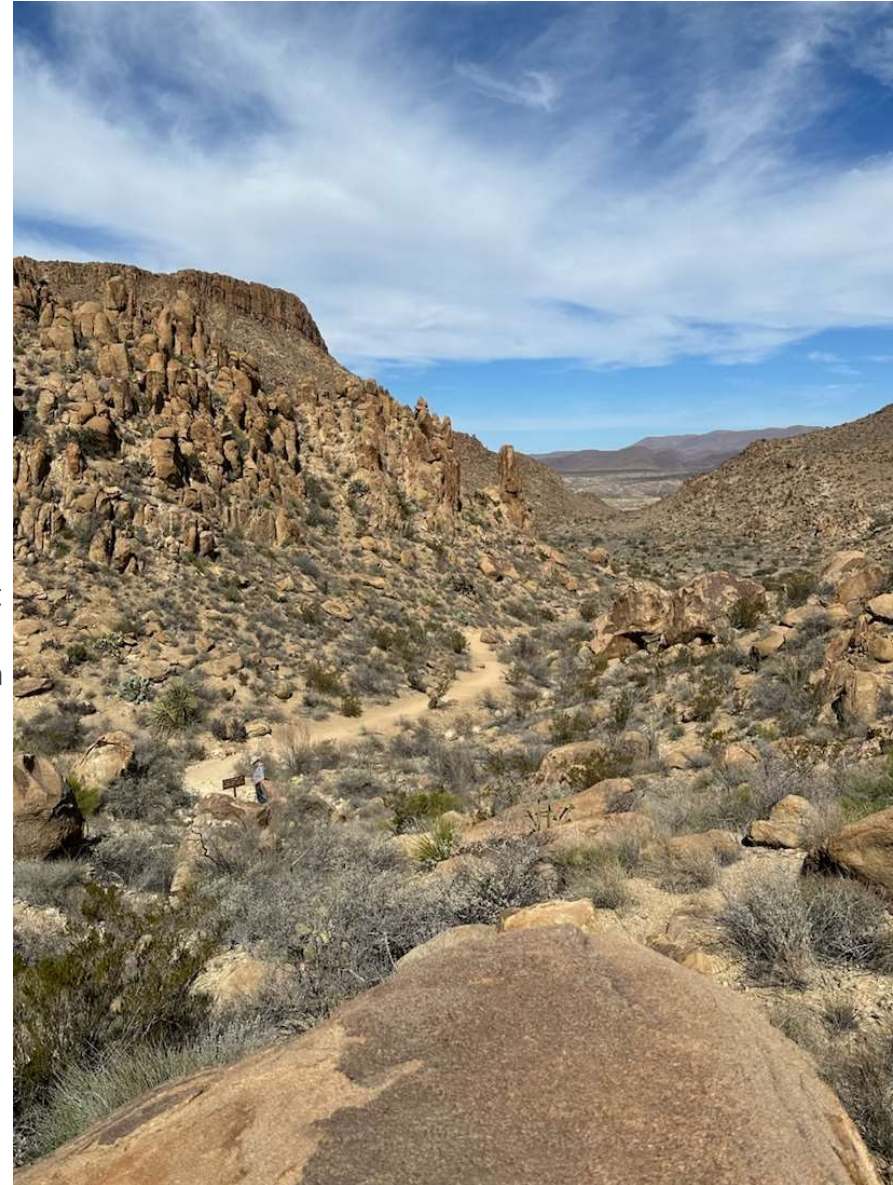
Some examples of "sham" recycling include:

- Ineffective or only marginally effective for the claimed use - e.g., using certain heavy metal sludges in concrete when such sludges do not contribute any significant element to the concrete's properties.
- Used in excess of the amount necessary - e.g., using materials containing chlorine as an ingredient in a process requiring chlorine, but in excess of the required chlorine levels.
- Handled in a manner inconsistent with its use as a raw material or commercial product substitute - e.g., storing materials in a leaking surface impoundment as compared to a tank in good condition that is intended for storing raw materials.
- Recycled product is not comparable to a product made from analogous raw materials - e.g., producing a product with higher concentrations of hazardous constituents than would be normally found in such a product.



EXCLUSIONS / EXEMPTIONS

- It depends on if, what and how the hazardous waste/hazardous secondary material is being processed.
- Some hazardous wastes are excluded or exempt from regulation as hazardous waste. These rules are self-implementing. If a generator claims their hazardous waste is excluded or exempt, they are responsible for maintaining information that demonstrates the waste meets the terms of the exclusion or exemption.
- For example, hazardous secondary material that is generated and then transferred to another person in the US for the purpose of reclamation is not a waste, provided that it meets all of the requirements of including material management standards, assuring the reclamation facility is either an authorized facility or that the reclaimer intends to properly and legitimately reclaim and manage the hazardous secondary material, and information on the reclaiming facility including documentation that it has notified the appropriate authorities as required.



Universal Waste

- Overview: to promote the collection and recycling of universal waste to ease the regulatory burden on businesses that wish to collect these wastes and transporters of these wastes, to reduce the quantity of these wastes going to municipal solid waste landfills or combustors.
- If not handled as universal waste, then must be handled as hazardous waste.
- Federal universal wastes
 - Lamps
 - Mercury Containing Equipment
 - Pesticides
 - Discarded Batteries
 - Aerosol Cans



Universal Waste Regulated Participants

- Small quantity handlers of universal waste (accumulates less than 5,000 kg /11,000lbs of universal waste),
- Large quantity handlers of universal waste (accumulates 5,000 kg or more of universal waste),
- Universal waste transporters, and
- Universal waste destination facilities.

Note: Universal Waste Handler categories (Small or Large Quantity Handlers) should not be confused with the hazardous waste generator categories.

In general, most management standards for small quantity handlers and for large quantity handlers are identical, except in regard to U.S. EPA notification requirements (small quantity handlers are not required to notify), employee training, and waste tracking or record keeping (not required for small quantity handlers).



Handler Status

Which Handler Status is Best for my Site?

Hazardous Waste Generator

- VSQG - ≤ 100 kg SQG - 100 - 1,000 kg LQG - $\geq 1,000$ kg

Universal Handler

- SQG - $< 5,000$ kg LQG - $> 5,000$ kg

UNIVERSAL WASTE

- Strive to be the lowest status generator possible.
- Reduce, Reuse, Recycle, ...waste
- Use the waste rule definitions: Universal wastes, Used Oil,
 - Compliance TIP - ALWAYS start or seek out definitions
- WHY does generator status matter? - Details to come...
 - Waste MIN reduction plans
 - Training annually
 - EPA Inspection frequency
 - Basically more regulated and more involved programs



State Specific Universal Wastes

- Ohio - 3745-273-01
 - *Current waste streams that may be managed as a universal waste in Ohio include Paint, Paint-Related Waste, and Antifreeze. Aerosol cans are no longer Ohio specifics.*
- Kentucky - 401 KAR 39:080 section 3.
- Indiana - 329 IAC 3.1-16

*Our 3 states have been authorized by EPA to implement the universal waste rule 40 CFR 273 . Remember aerosol cans are federal

micha360 / iStock / Getty Images Plus / Getty Images



Universal Waste Requirements

- Compatible container, closed and labeled as Universal Waste
 - Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste was put in that area.
 - Labeling the container with the first date universal waste was put into it or when the container was received.
 - Labeling the individual item with the date it was considered a waste or received as a universal waste.
- Store onsite less than 12 months
 - Maintaining an inventory system on-site, which identifies the date it became a waste or was received.
- Training requirement + (Basic UW training)
- Spill cleanup requirement
- Notification by generator



MANAGING UW FROM CRADLE-TO-GRAVE



Cradle-to-grave is a term meaning from start to finish. It is used to describe how hazardous waste is managed from the point of generation through final disposal.



All generators are responsible for their waste material from start to finish. In the cradle-to-grave process, universal wastes can be stored, collected, and transported under less burdensome rules. In the final link of the process, however, universal wastes must be treated, recycled, or disposed under full hazardous waste requirements.



Best Management Practices

- Keep universal waste in a designated accumulation area.
- Use separate containers for each type of universal waste.
- Label containers with the type of universal waste.
- Label containers with the start date of accumulation.
- Practice safe handling to ensure waste does not become physically damaged.
- Store items upright in a sturdy container and routinely check for leaks and spills.

UNIVERSAL WASTE	
SHIPPER	_____
ADDRESS	_____
CITY, STATE, ZIP	_____
CONTENTS	_____

ACCUMULATION START DATE	_____

HW30AL NMC



P&G
Lima Plant

TIP - When/Why Might You Manage as Hazardous Waste vs. Universal Waste?

- **Hazardous Waste 'advantage' over Universal Waste:**
- Aerosol cans at a very small generator?
- Hazardous Waste accumulates indefinitely until QUANTITY is reached (55 gallons).
- Hazardous Waste ships offsite when the container is full, then within 90-180 days.
- Universal Wastes **MUST** ship off-site within 1 year of waste first accumulating; AKA ship annually for compliance.

- Advantage may be timing management
- Recommend only as 'regulatory relief' for very small generators (Used Truck Centers, Offices, garages, R&D centers)
- **"Used Oil" labeling versus Hazardous Waste:**
- If "Used Oil" is labeled "Waste Oil" or "Used Fluids" or "15W-40 Oil", etc. Is it EPA defined "Used Oil"?
- **NO! Only USED OIL if labeled "USED OIL"**

EXAMPLES / CASE STUDIES / WATCH OUT

- What if a Recyclers can not take your waste anymore?
- What if you find a room of waste materials?
- Are they an Approved recycler?
- How do you know?
- Labelling if sometimes recycle vs haz waste
- By product recycling or haz waste



Resources

- Ohio Haz Waste Reporting Rules
https://www.epa.ohio.gov/derr/hazwaste/annual_report
- Indiana
<https://www.in.gov/idem/waste/hazardous-waste/>
- Kentucky
eec.ky.gov/Environmental-Protection/Waste/hazardous-waste/
- RCRA Overview -
<https://www.epa.gov/rcra>
- State websites
- Google search
- Envirofacts
- EPA Eco
- Universal Waste:
www.epa.gov/hw/universal-waste



That is a lot Questions ???

- ▶ Hazardous Waste / Universal Waste
- ▶ Determinations
- ▶ Exclude / Exempt
- ▶ Beneficial Re Use - Alternatives
- ▶ Awareness
- ▶ Generator / Handler Status
- ▶ Labeling, training
- ▶ Contingency / Waste Min Plan
- ▶ Track Hazardous Waste
- ▶ Inspect weekly

Hazardous Waste Accumulation Log

Date: _____

Building/Location: _____

Date Added	Location / Tank ID	Description	Amount in Gall

Hazardous Waste Weekly Inspection Information

Date: _____

Area Inspected: _____

Inspected by: _____

Hazardous Waste Containers	Y / N	Corrective Action	Initials
Are the containers/accumulation log properly dated?			
Are containers clearly marked or labeled an indication of the hazards of the contents?			
Are containers clearly marked or labeled "Hazardous Waste?"			
Are waste stored in compatible containers?			
Is the duration of waste stored below 90 days?			
Are ignitable waste stored 50 feet from property line?			
Are all containers properly closed?			
Is there evidence of container deterioration?			
Is there adequate aisle spacing? Housekeeping?			
Are there any signs of leaks or spills?			
Are ignitable waste wastes properly stored and grounded and bonded?			
Are "No Smoking" signs in place & clearly visible?			
Are fire extinguishers in place & clearly visible?			
Is there decontamination equipment accessible? i.e. eyewash, shower			
Is spill response equipment (Spill kit) adequate & Accessible?			
Is there water at adequate volume & pressure?			
Is communication or warning device readily accessible?			
Is adequate emergency information posted?			





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A man wearing an orange hard hat, safety glasses, and a high-visibility orange and yellow vest over a blue shirt is pointing at a control panel in a factory. The background shows industrial machinery and equipment.

**Dawn Ellis – The Procter & Gamble Co.
Lima Manufacturing**

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**Colleen A. Lear – Project Manager,
Environmental Quality Management, Inc.**

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Abstract & Biographical Information

Understanding Your Waste, Hazardous Waste and Universal Waste Compliance

The intent of this presentation is to help understand how to manage solid waste focused on hazardous waste (HW) and Universal Waste (UW) in an environmentally acceptable manner in compliance with regulations. Practical tips and experiences to avoid costly fines and non-compliance are shared. Integrating accountability of waste into day-to-day decision making to include planning, operations, activities, and functions within a facility to accelerate compliance across all facilities. The session will specifically address best management practices for the identification, generation, accumulation, transport and disposal of regulated materials in addition to beneficial reuse / alternatives with Compliance and Manufacturing experience.

**Colleen A Lear, Project Manager, Engineering and Consulting
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Colleen has 27 years of environmental experience, technical and compliance management experience in the environmental field in both consulting and remediation. She has been involved in a broad range of programs including, HTRW/CERCLA, waste management programs including hazardous, universal, solid and RCRA / Special Waste and asbestos, air compliance and permitting, GWPP, SPCC, and SWPP Plans generation, hydrogeologic/geologic investigations and EPCRA SARA Title III, Section 312 and 313 reporting, and auditing. Currently Colleen works with in the Engineering and Consulting (E&C) group at EQM which is comprised of individuals who have expertise in air, water, SPCC, and EPCRA reporting. Prior to her joining the E&C group in 2021, Colleen was responsible for environmental compliance to federal, state, and local requirements for numerous environmental, hydrogeological, and geological investigations for government, private, and industrial clients including projects for government agencies such as the AFCEE, DOD, DOE, USEPA, and USACE. These activities included assisting and managing multi-contractor/multi-disciplinary teams in investigations, regulatory compliance, regulatory interpretation, regulatory reporting, permit compliance and internal auditing. Colleen holds a Bachelor of Science Degree in Environmental Geology from Ohio University.

**Dawn Ellis, Site Environmental Technician
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Dawn has 19 years of experience in environmental organizations at P&G Lima Manufacturing. She has a broad range of experience in solid waste. Currently Dawn leads the waste management program (including solid, hazardous, universal, reuse/recycle) at Lima Manufacturing Co for P&G. She manages/assists with programs that include Solid Waste, Air Emissions, Site Water Systems, Stormwater, Spill Protection and Other areas such as SARA reporting and Noise control. Activities include participation in various construction, remodeling and building demolition projects; regulatory compliance and reporting; alternative waste streams / beneficial reuse; internal auditing; and internal safety training.