





Managing Spill Waste







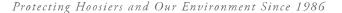


Presentation Overview

Waste

- What is it?
 Hazardous Waste and Solid Waste
- What do you do with it?
 Waste Determinations
 Hazardous Waste Disposal
 Solid Waste Disposal
 Solids and Liquids







Solid Waste -- What is it?

Indiana Statutory Definition

Indiana Statute IC 13-11-2-205

Sec. 205. (a) "Solid waste", for purposes of IC 13-18-12, IC 13-19, IC 13-21, IC 13-20-22, and environmental management laws, except as provided in subsection (b), means any garbage, refuse, sludge from a waste treatment plant, sludge from a water supply treatment plant, sludge from an air pollution control facility, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or from community activities.

The term does not include:

- (1) solid or dissolved material in:
 - (A) domestic sewage; or
 - (B) irrigation return flows or industrial discharges;

that are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act Amendments (33 U.S.C. 1342);

- (2) source, special nuclear, or byproduct material (as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.));
- (3) manures or crop residues returned to the soil as fertilizers or soil conditioners as part of a total farm operation; or
- (4) vegetative matter at composting facilities registered under IC 13-20-10.



A State that Works

What is solid waste?

- Garbage,
 Refuse, Sludge
 or Other
 Discarded
 Material
- Solid,Semisolid,Liquid orContained Gas











What is **not** solid waste?

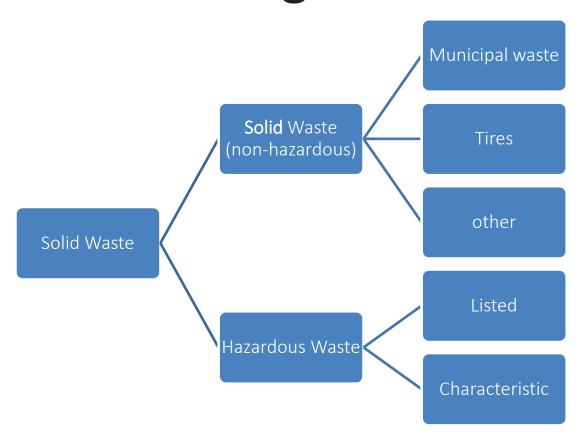
- Waste discharged legally under the Clean Water Act (domestic sewage, NPDES permitted discharges, etc)
- Spent nuclear waste
- Manure or crop residues
- Compost at an Indiana registered facility







Solid waste is divided into 2 broad categories







Let's look at some similar terms that are "hazardous"







What's the difference?

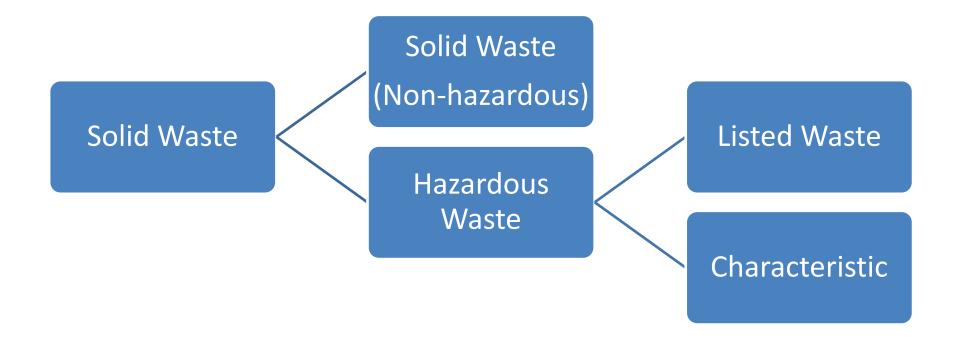
- Hazardous Substance is defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Typically, it's used in DOT transportation applications, as there is a quantity threshold for a chemical – after which a marking or placard needs to be placed on the vessel or vehicle carrying this chemical.
- Hazardous Material is defined as any substance or material, which could adversely
 affect the safety of the public, handlers or carriers during transportation. All DOT
 hazardous materials are listed in the DOT's Hazardous Material Table. For example,
 in a retail store, there are several products on the shelves, which are considered
 Hazardous Materials (fingernail polish remover, Liquid Drano, Lighter Fluid
 insecticides). These may become hazardous wastes if discarded.
- Hazardous Waste is waste that is dangerous or potentially harmful to our health or the environment and is defined by the EPA. Hazardous wastes can be liquids, solids, gases, or sludges. They can be discarded commercial products, like cleaning fluids or pesticides or the by-products of manufacturing processes.

Source: Sharps Compliance Inc. https://blog.sharpsinc.com/hazardous-waste-defined





What are the types of Hazardous Waste?





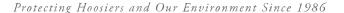




What is listed waste?

- Listed waste is waste that is found on a list in the hazardous waste regulations as follows:
- Listed Hazardous Waste
 - Wastes from generic industrial processes, certain industrial sectors and unused chemical products and/or formulations
 - Hazard Codes
 - F-Listed Wastes non-specific sources
 - K-Listed Wastes specific sources
 - P-Listed Wastes pure or commercial grade formulations: acutely toxic (H)
 - U-Listed Wastes pure or commercial grade formulations: toxic (T), ignitable (I), corrosive (C), extremely toxic (E), and/or, reactive (R)







What is characteristic waste?

- Characteristic wastes are non-listed wastes that exhibit measurable properties that present a substantial threat, causing the waste to be managed as a hazardous waste.
- Four characteristics of a non-listed hazardous waste
 - Ignitability can create fires under certain conditions, spontaneously combust or, is a liquid with a flash point less than 140°F
 - Corrosivity a liquid with a pH greater than or equal to 12.5 or less than or equal to 2 is corrosive.
 - Reactivity normally unstable and readily explodes or violently reacts without detonating. Reactive wastes can create toxic fumes or gases.
 - Toxicity has the potential to leach dangerous concentrations of chemicals into the ground.
 - Toxicity characteristic leaching procedure (TCLP)
- The hazard identification codes begin with a D





So you have spill waste...

You need to determine which regulations apply

- How do you decide which regulations apply?
 - Waste Determination
- Who is responsible for that decision?
 - The generator
 - You can get help, but ultimate responsibility is yours
 - If IDEM refers to Enforcement, the action will likely be taken against you





Waste Determinations

- What is a waste determination?
 - When a generator determines the regulatory status
- How is it done?
 - Testing and/or knowledge
- What is testing?
- What is knowledge?
 - Must be accurate and relevant
 - Must be documented
 - Examples: Product labels, SDSs, historical testing
- When do you do it?
 - Point of generation







What's next?

Manage and dispose under the applicable regulations.

Hazardous Waste → State and Federal Hazardous Waste Regulations

- 329 IAC 3.1
- 40 CFR 260-268

Hazardous waste is regulated from "cradle to grave" starting with the "generator" and ending at the disposal facility

Solid Waste → Indiana Land Disposal Facilities Rule

• 329 IAC 10

Solid waste regulations focus on the disposal facility

Let's look at the Hazardous Waste requirements for generators first.

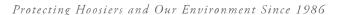




Hazardous Waste Generator Status

	VSQG	sqg	LQG
Rate	< 220 lbs/month (0.5 drum)	220-2200 lbs/month (5 drums)	>2200 lbs/month
Max Amount Onsite	2200 lbs (5 drums)	13220 lbs (30 drums)	N/A
Maximum Time	N/A	180 days	90 days
HW Treatment/Disposal Standards?	No*	Yes	Yes
EPA ID Number	Not required	Yes	Yes
Contingency Plan and Emergency Procedures	Not required	Basic planning required	Full plan required
Preparedness and Prevention	Not required	Required	Required







Episodic Generation/Event

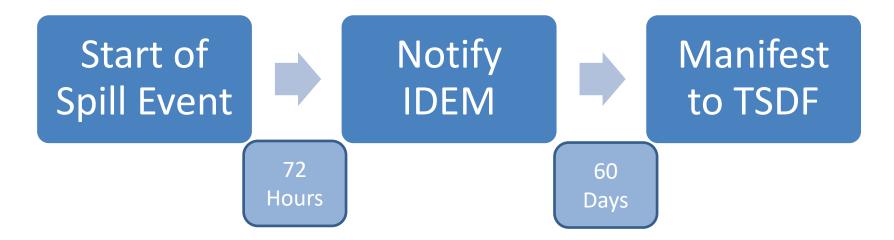
- What is an Episodic Event?
 - An activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category (40 CFR 262.231).
- How does it work?
 - Allows generators to maintain current generator status while disposing at a higher level.
 - Generators can have one planned and one unplanned per year.
- Notification requirements
 - 30 days in advance for planned event
 - Within 72 hours for unplanned event

Note: If you are a VSQG, you will need an EPA ID number



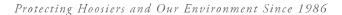


Unplanned Episodic Event – Timeline and Tip



Tip: Notify IDEM if unsure of waste determination in 72 hours, you can withdraw request later if you discover the waste is **not** hazardous



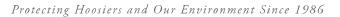




What are Hazardous Waste treatment/disposal standards?

- Applies to SQG and LQG
- Also known as "LDR" Land Disposal Restrictions
- Includes treatment standards
 - Regulated constituents
 - Underlying constituents
- Disposal at permitted Treatment, Storage, Disposal Facility (TSDF)
- What about VSQG?
 - Can be disposed in MSWLF or
 - Hazardous Waste TSDF







Steps for Hazardous Waste Management and Disposal

- Container
- Label
- Manifest
- HW Transporter
- TSDF











Steps for Solid Waste Management and Disposal

- Contain
- Transport to permitted solid waste facility.
- Pre-approval through LF
 - Landfill must screen for hazardous waste
 - Landfill corporate policies
 - Sometimes the terms "special waste" or "waste profile" is used to describe
- No state "waste manifest" -- Use DOT shipping papers and landfill-required records





Disposal of Liquids vs Solids

- Solid waste must be disposed in a landfill permitted for the waste.
- Landfills cannot accept liquid wastes, so what do you do?
 - Solidify before transportation *
 - Ship to disposal facility that can solidify the waste prior to disposal
- What can you use for solidification?
 - Oil dry
 - Oil boom
 - Sawdust
 - Cellulose

^{*}A hazardous waste determination must be done **before** solidification.





Other Options for Liquid Wastes

- What about other options?
 - Can you discharge to a sewer, ditch or POTW?
 - Onsite septic?
 - Onsitewastewatertreatment?









Compliance and Technical Assistance Program

Indiana Department of Environmental Management

Helping Indiana businesses one step at a time





Empowering Indiana's Regulated Community with Environmental Compliance Assistance

Free and Confidential

Nonregulatory

Multimedia





Free and Confidential

CTAP services are available to all sectors of Indiana's regulated community at

NO COST!

CTAP offers environmental regulatory assistance to Indiana businesses and organizations of <u>ALL</u> sizes and types including:

- Existing facilities with legacy issues
- New companies looking to locate in Indiana
- Trade associations
- Government agencies

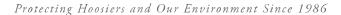




Free and Confidential

Indiana Code 13-28-3-4 mandates that CTAP staff cannot divulge (to anyone) information concerning inquiries, activities, or documents of the program that identify or describe an individual facility or operation, unless a clear and immediate danger to the public health or environment exists.







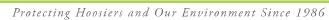


Nonregulatory

CTAP staff are **NOT** regulators and do not have regulatory authority. They do not issue violations, permits, fees, fines, or take enforcement actions.

Therefore, those who receive CTAP services will **NOT** be penalized for reporting relevant environmental information to CTAP when requesting assistance.









Multimedia

CTAP staff are knowledgeable in state and federal air, water, land, and waste management environmental regulations and can assist with self-disclosures.







CTAP Services

CTAP Hotline or Portal

Hotline: (317) 232-8172 or (800) 988-7901

CTAP Portal:

https://www.in.gov/idem/ctap/2328.htm

Site Assessments

CTAP offers free on-site consultations to determine environmental regulatory obligations and compliance status, and identify pollution prevention opportunities.





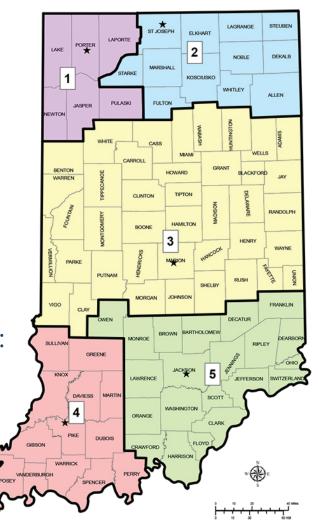
Contact CTAP

- 1 Northwest Regional Office:
 - Charles Breitenfeldt, (219) 250-0119
- 2 Northern Regional Office:
 - Joseph Neuklis, (574) 245-4879
- 3 Indianapolis Central Office: HOTLINE (800) 988-7901 or (317) 232-8172
 - Tracy Barnes
 - Hani Sharaya
 - Mark Stoddard
 - Chrystal Wagner

CTAP Small Business Regulatory Coordinator:

- Angela Taylor, (317) 233-0572
- 4 Southwest Regional Office:
 - Heath Dill, (812) 380-2303
- 5 Southeast Regional Office:
 - Andrew Dryden, (812) 919-2145

Email: CTAP@idem.IN.gov Website: www.idem.IN.gov/ctap







CTAP Services

Training

CTAP offers workshops and training on general and industry-specific topics. CTAP hosts a free training series, *Environmental Management E-101*, for individuals managing environmental responsibilities at Indiana businesses (www.idem.ln.gov/ctap/2471.htm).

Online Resources

CTAP's website (<u>www.idem.IN.gov/ctap</u>) provides sector-specific guidance, fact sheets, regulatory updates, pollution prevention resources, event announcements, and much more.





Are You Ready? Spill Prevention, Preparedness and Spill Waste Disposal Resources

Indiana Disposal Facilities

Hazardous Waste Treatment Storage Disposal Facilities (TSDFs)
Solid Waste Disposal Facilities

Indiana Administrative Rules

<u>Spills, Reporting, Containment and Response Rule – 327 IAC 2-6.1</u>
<u>Indiana Hazardous Waste Management Rule – 329 IAC 3.1</u>
Indiana Solid Waste Land Disposal Facilities Rule – 329 IAC 10





Are You Ready? Spill Prevention, Preparedness and Spill Waste Disposal Resources

IDEM Guidance

Emergency Response Quick Reference Sheet

<u>Understanding the Hazardous Waste Determination Process (2014)</u>

Hazardous Waste Contingency Plans (2014)

Other Links

Hazardous Waste Notification and Reporting