



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Waste Characterization and Generator Status

Waste Characterization and Generator Status

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Regulations for Context

Public Act 451, Michigan Natural Resources and Environmental Protection Act:

- Part 111, Hazardous Waste Management
- Part 121, Liquid Industrial By-Products
- Part 115, Solid Waste Management
- Part 169, Scrap Tires

Public Act 368, Michigan Public Health Code:

- Part 138, Medical Waste Regulatory Act
- Part 2, Ionizing Radiation Rules

Federal Toxic Substance Control Act (TSCA)

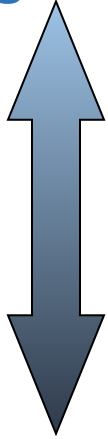
Non-Household Wastes are Regulated

Hazardous waste regulations...

- apply to all businesses, including municipalities, hospitals, & service industries, not just manufacturing industries
- are written broadly to address hazards posed by all waste streams

More Risk = More Regulation

Less
Regulation



More
Regulation

Solid Waste Generators

Liquid Industrial By-Products Generators (LIB)

Universal Waste Generators

Very Small Quantity Generators (VSQG)

Small Quantity Generators (SQGs)

Large Quantity Generators (LQGs)

What is a Waste?

A waste is any **discarded** material and can be...

- solid
- liquid
- semisolid
- gaseous

What is a Waste?

A waste is any material that **cannot be used for its original intended purpose**, including materials that are...

- burned as fuel
- accumulated and recycled or reclaimed
- discarded, abandoned or disposed

Waste Characterization

Waste determination must be made:

- At the point of waste generation, before any dilution, mixing, or other alteration of the waste
- Any time the waste has or may have changed as a result of exposure to the environment or other factors that may change the properties of the waste, making the classification change

1st Characterize then Calculate Quantity

Hazardous waste regulations require each business at each site to...

- evaluate the **character & composition** of their wastes
- determine the **total weight** of all hazardous waste generated **each month**

This is necessary to determine the legal disposal options for the waste!!!

What Types of Wastes are Generated?



Waste Characterization

(Rule 302)

Where to begin?

- Perform a waste survey at each site where you generate waste – job sites and office
- Tour the entire location and inventory all of the waste streams
- Don't overlook identifying & characterizing ALL waste streams

Waste Survey

Office Activities

Electronics



Batteries



Electric Lamps



Elemental Mercury

Waste Survey

Fleet & Shop Equipment Maintenance



Parts Washer



Antifreeze &
Mercury Switches



Used Oil

Waste Survey

Drains and Discontinued Lines

- * Automatically subject to waste regulations 90 days after equipment taken out of service



Drains



Discontinued Lines

Waste Survey

Remodeling and Demolition Debris

Demolition



Expired Products



Gym



Flooring

Abrasive Blasting



Waste Survey

Laboratory and Art Class Waste



Waste Characterization

NO matter Who does it, **the Generator is Responsible.**

- Do the waste characterization yourself
- Hire a consultant
- Use your disposal company services
- Use a combination of the above

Waste Characterization

Knowledge

- SDS
- Facility Process Information
- Technical Information
- Manufacturer Information
- Hazardous Waste Listings



Testing

Waste Characterization

6 Basic Steps to Characterization

1. Is waste listed? Review lists of waste types & codes in rules
2. Is waste characteristic? Analytic test or by knowledge (SDS, knowledge of process, etc.)
3. Does an exclusion or exemption apply?
4. Do other regulations apply? (liquid industrial, solid, etc.)
5. Create & maintain characterization records for at least 3 years from the date waste was last shipped off-site
6. Re-characterize if change process or materials

Waste Characterization

Basic Steps

Listed Hazardous Waste (F, K, P & U wastes)

A common waste stream known to be hazardous without testing

Characteristic Hazardous Waste (D wastes)

A waste stream found to be ignitable, corrosive, reactive, and/or toxic by testing

Hazardous Waste Mixture Rule

Mixture of a listed hazardous waste with other non-hazardous wastes is a listed hazardous waste

Hazardous Waste Derived From Rule

Residuals derived from treating a listed hazardous waste is listed hazardous waste

Waste Characterization

Step 1

Listed Hazardous Waste

(Rules 302 and 213, 214)

Waste Characterization

Step 1 Listed Waste

Generators may use knowledge to determine if a listing applies by looking at the...

- origin of the waste
- waste composition
- process producing the waste

Waste Characterization

Step 1

What are listed hazardous wastes?

F Codes (Table 203a) – Wastes from non-specific sources (e.g. spent chlorinated solvents, metal treatment wastewaters & sludges)

K Codes (Table 204a) – Wastes from specific industries

Waste Characterization

Step 1

What are listed hazardous wastes?

P & U Codes (Table 205a-c) – Commercial chemical products, off-specification products, container and spill residues including some Michigan only U Codes (e.g., formaldehyde, parathion, benzene, DDT, xylene)

P Codes are all acutely hazardous

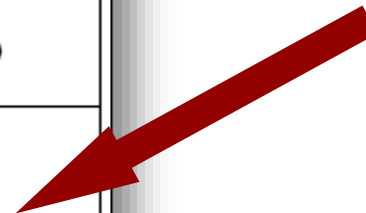
Waste Characterization

Step 1

Listed Hazardous Waste Codes

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Table 203a		
EPA Hazardous Waste Number	Hazardous Waste From Nonspecific Sources	Hazard Code
F020	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating process, of tri- or tetrachlorophenol or of intermediates used to produce their pesticide derivatives. This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol	(H)
F021	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating process of pentachlorophenol or of intermediates used to produce its derivatives	(H)
F022	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the manufacturing use as a reactant, chemical intermediate, or component in a formulating process of tetra-, penta-, or hexachlorobenzenes under alkaline conditions	(H)
F023	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production of materials on equipment previously used for the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating process of tri- and tetrachlorophenols. This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol	(H)

Acutely hazardous when “H” appears in Hazard Code Column.



Waste Characterization

Step 2

Characteristic Hazardous Waste

(Rules 302 and 212)

Waste Characterization

Step 2 Characteristic Waste

Generator may use knowledge or testing like...

- Information about chemical feedstocks and other inputs to the process
- Knowledge of products, by-products, and intermediates produced by the process
- Chemical or physical characteristics of wastes

Waste Characterization

Step 2

What are characteristic hazardous wastes?

Characteristic Hazardous Waste & Codes:

- Ignitable - D001
- Corrosive - D002
- Reactive - D003
- Toxic - D004 – D043 (Table 201a)
- Severely Toxic – 001S - 007S (Table 202)

Waste Characterization

Step 2

Characteristic Common Tests

Flash point – Used for testing **ignitability** < 140 F (D001)

Examples: paints, solvents, U.S. DOT oxidizers and ignitable compressed gasses

pH – Used for testing **corrosivity** ≤ 2 or ≥ 12.5 (D002)

Examples: acids, bases

Reactivity – Test as required for DOT classification for materials that are **unstable** at normal conditions, reacts violently with water, explode, and/or emit toxic gas (D003)

Examples: lithium hydride & trichlorosilane

TCLP (Toxicity Characteristic Leaching Procedure) - Used for testing leaching potential for Table 201a hazardous constituents and determining a waste is **toxic** (D004-D043)

Examples: Paints or sludges containing metals or MEK, contaminated media

Waste Characterization

Step 2

Characteristic Common Tests

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R 299.9217 Table 201a.

Rule 217. Table 201a reads as follows:

EPA Hazardous Waste Number	Chemical Abstract Services Number	Material	Extract Concentration milligrams per liter
D004	440-38-2	Arsenic	5.0
D005	7440-39-3	Barium	100.0
D018	71-43-2	Benzene	0.5
D006	7440-43-9	Cadmium	1.0
D019	56-23-5	Carbon tetrachloride	0.5
D020	57-74-9	Chlordane	0.03
D021	108-90-7	Chlorobenzene	100.0
D022	67-66-3	Chloroform	6.0
D007	7440-47-3	Chromium	5.0
D023	95-48-7	o-Cresol	200.0**
D024	108-39-4	m-Cresol	200.0**
D025	106-44-5	p-Cresol	200.0**
D026	-----	Cresol	200.0**
D016	94-75-7	2,4-D (2,4-Dichlorophenoxyacetic Acid)	10.0
D027	106-46-7	1,4-Dichlorobenzene	7.5
D028	107-06-2	1,2-Dichloroethane	0.5
D029	75-35-4	1,1-Dichloroethylene	0.7
D030	121-14-2	2,4-Dinitrotoluene	0.13*
D012	72-20-8	Endrin (1,2,3,4,10,10-hexachloro-1,7-Epoxy-1,4,4a,5,6,7,8,8a octahydro-1,4-endo, endo-5,8-dimethano naphthalene)	0.02
D031	76-44-8	Heptachlor (and its Epoxide)	0.008
D032	118-74-1	Hexachlorobenzene	0.13*
D033	87-68-3	Hexachlorobutadiene	0.5
D034	67-72-1	Hexachloroethane	3.0
D008	7439-92-1	Lead	5.0
D013	58-89-9	Lindane (1,2,3,4,5,6-hexa-chlorocyclo-hexane, gamma isomer)	0.4
D009	7439-97-6	Mercury	0.2
D014	72-43-5	Methoxychlor (1,1,1-trichloro-2,2-bis(p-methoxyphenyl)ethane)	10.0
D035	78-93-3	Methyl ethyl ketone	200.0
D036	98-95-3	Nitrobenzene	2.0
D037	87-86-5	Pentachlorophenol	100.0
D038	110-86-1	Pyridine	5.0*
D010	7782-49-2	Selenium	1.0
D011	7440-22-4	Silver	5.0
D039	127-18-4	Tetrachloroethylene	0.7
D015	8001-35-2	Toxaphene (C ₁₀ H ₁₀ C ₁₈ , Technical chlorinated camphene, 67-69% chlorine)	0.5
D040	79-01-6	Trichloroethylene	0.5
D041	95-95-4	2,4,5-Trichlorophenol	400.0
D042	88-06-2	2,4,6-Trichlorophenol	2.0

TCLP Sample Extract
Concentration Limit

If sample extract meets or exceeds limits, waste is a characteristic toxic hazardous waste

Waste Characterization

Step 2

Characteristic Severely Toxic

If a waste contains > 1.0 part per million of the dioxin and furans in Table 202, the material is a severely toxic hazardous waste

Table 202	
Michigan Hazardous Waste Number	Substance
001S	Aflatoxin
002S	2,3,7,8-Tetrachlorodibenzo-p-dioxin
003S	1,2,3,7,8-Pentachlorodibenzo-p-dioxin
004S	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
005S	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
006S	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
007S	2,3,7,8-Tetrachloridibenzo furan

Waste Characterization

Step 3

Exemptions and Exclusions

(Rules 202, 203, 204, 206, 207, and 228 of Part 111)

Waste Characterization

Step 3

What are exemptions & exclusions?

Wastewater discharges to municipal wastewater treatment plant **authorized** by that sewer authority are exempted at the point of discharge to the sewer

Batteries, pesticides, mercury devices, electric lamps, consumer electronics, antifreeze, and aerosol cans handled as Universal Waste enjoy a **partial exemption**

Waste Characterization

Step 3

What are exemptions & exclusions?

Wastes that are used or reused in a process to make a product are excluded provided there is no reclamation - Beware of sham recycling & get EGLE concurrence on exemption. Supporting documents required!!!

Laboratory samples are exempt until being discarded

Waste Characterization

Step 3

What are exemptions & exclusions?

Used oil that is recycled

Petroleum contaminated media from leaking UST systems that fail the TCLP for D018 – D043 only & are being remediated under EGLE approval pursuant to Part 213

Off-specification fuel (gasoline, kerosene, diesel, etc.) being recycled for use as fuel or burned as fuel

Waste Characterization

Step 3

What are exemptions & exclusions?

Materials remaining in manufacturing units that would otherwise be hazardous wastes - if/when taken out of service, the material becomes a hazardous waste (degreasers)

Waste Characterization

Step 3

What are exemptions & exclusions?

Cautionary example for use of knowledge:

Analyses of wastes from dry cleaning processes using the newer "green" solvents are testing positive for chromium

Waste Characterization

Step 3

What are exemptions & exclusions?

Aerosol cans as a universal waste type or puncture and accumulate hazardous waste?

See guide [On-site Aerosol Can Drum Top Recycling Systems](#)



Waste Characterization

Step 3

What are exemptions & exclusions?

Empty Containers Rule 207

Compressed gas:

- Container pressure is equal to atmospheric pressure
- Container is not clogged
- No audible liquids in container when shaken

Waste Characterization

Step 3

What are exemptions & exclusions?

Empty Containers Rule 207

After all **non-acute** hazardous waste has been removed using common practices and the amount of waste residue remaining in the container does not exceed...

- No more than 1 inch or 3.0% by weight of the total capacity of the container for containers less $\leq$ to 119 gallons
- No more than 1 inch or 0.3% by weight of the total of the container for containers $>$ than 119 gallons

Waste Characterization

Step 3

What are exemptions & exclusions?

Empty Containers Rule 207

For *acute* hazardous or *severely toxic* hazardous waste containers to be empty, they must:

- Be triple rinsed with appropriate solvent or cleaned by proven equivalent method
- Have inner liner that prevented contact with container removed
- If listed due to characteristic, no longer exhibit the characteristic
- Note: rinse water used to remove residue and any inner liner would still be a hazardous waste

Waste Characterization

Step 3

What are exemptions & exclusions?



Rags & Textiles

Hazardous waste or
Excluded waste?

See [Solvent Contaminated Wipes Guidance](#)

Waste Characterization

Step 3

What are exemptions & exclusions?

Hazardous wastes from which precious metals are recovered enjoy a *partial exemption*

Dredge spoils from projects permitted by the U.S. Army Corps of Engineers or EGLE

Waste Characterization

Step 3

What are exemptions & exclusions?

Hazardous Secondary Materials –Exempt if meet the legitimacy criteria established in Rule 232 and recycled:

- Under generator control (Rule 204(1)(aa))
- Transferred to another person for the purpose of reclamation (Rule 204(1)(bb))
- Transferred to another person for the purpose of remanufacturing (Rule 204(1)(cc))
- Exported and reclaimed at a reclamation facility located in a foreign country (Rule 204(1)(dd))

See [Hazardous Secondary Materials Guidance](#)

Waste Characterization

Step 3

What are exemptions & exclusions?

Household waste, including single & multiple residences, hotels & motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, & day-use recreational areas

Waste Characterization

Step 4

Do other waste regulations apply?

(Parts 121, Part 115, etc.)

Other Regulations and Label Examples

NON- REGULATED WASTE

OPTIONAL INFORMATION

SHIPPER _____

ADDRESS _____

CITY, STATE, ZIP _____

CONTENTS _____

THIS WASTE
IS NOT
REGULATED
BY THE U.S.
ENVIRONMENTAL
PROTECTION
AGENCY

THIS CONTAINER
ON HOLD
PENDING ANALYSIS



CONTENTS _____

ORIGIN OF MATERIALS _____

ADDRESS _____

CONTACT _____

DO NOT TAMPER WITH CONTAINER
AUTHORIZED PERSONNEL ONLY

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Waste Characterization

Step 4

Do Other Waste Regulations Apply?

What is Liquid Industrial By-Product?

Defined under Section 12101, Part 121 of Public Act 451

Determine using the Paint Filter Test, Method 9095 in EPA SW-846

If there are any free liquids in the by-product or if the by-product is thinner than butter at or < 100 F, it should be managed as a liquid industrial by-product

Waste Characterization

Step 4

Do Other Waste Regulations Apply?

What is Liquid Industrial By-product?

Liquid wastes from locations other than “industrial” sites, like municipal, and commercial facilities including: Health care facilities, office nail salons , and car washes

Liquid hazardous wastes from a VSQG (formerly called CESQG)

Wastewaters, including most mobile power washing wastewater, carpet cleaning wastewater, food processing wastewater, and abrasive blasting wastewaters that are NOT a hazardous waste

Most sludges from trench drains or blind sumps (unless there’s been a release making it a hazardous waste)

Waste Characterization

Step 4

Do Other Waste Regulations Apply?

- Some storm sewer cleanout
- Animal boarding and breeding wastewaters
- Most antifreeze
- Slaughterhouse wastewaters
- Landfill leachate
- Most used oil being recycled
- Grease trap waste
- Off-specification fuels being recycled
- Food processing wastewaters
- Brine

Waste Characterization

Step 4

Do Other Waste Regulations Apply?

Are some Liquid Industrial By-products exempt?

- Liquids remaining in manufactured articles, until they are removed or the item is discarded (auto, light ballast)
- Liquid vegetable or animal fat transported directly to biofuel manufacturer or handled under MDARD
- Some off-specification fuels being re-refined into fuel products

RECEIVING FACILITY REPORTING REGULATIONS:

Biosolids, Medical Waste, Liquid Industrial By-products, Septage, Sanitary Sewer & Combined Sanitary Sewer Wastewaters, and Stormwater

WASTE DESCRIPTION	ACT 451, NREPA * REGULATORY CITATION	RESPONSIBLE DIVISION	REPORTING DUE DATE	ADDITIONAL ONLINE RESOURCES	REPORTED INFORMATION
Separate or combined sanitary sewer system maintenance waste from system subject to Part 31 NPDES or groundwater discharge permit	Part 31, Section 3112a and discharge permit	Water Resources	Initial report due immediately for any release to land or surface water, no more than 24 hours after the release begins	EGLE SSO-CSO website at Michigan.gov/water (Waste Water tab)	Amount and quality of the discharge, cause of the discharge, impacted water and/or land area, beginning and end time of the discharge, and permittee's compliance status.
Biosolids land applied via a Part 31 approved Residual Management Program	Part 24 Rules , Rule 2403(3)	Water Resources	October 30 of each year	Michigan.gov/biosolids	Dry tons of land applied biosolids, analytical data, pathogen and vector attraction reduction documentation, land application site summary, and permittee compliance certifications.
Sewage sludge or other non-hazardous residuals from WWTP failing the paint filter test and being disposed	Part 121, Section 12101(n) and Section 12112(5)	Materials Management	April 30 of each year	Form EQP 1602 , Instructions Part 121 Liquid Industrial By-products Reporting Web page	Amount of liquid industrial by-products accepted in prior calendar year (Jan 1 - Dec 31)
Combined sanitary sewer system maintenance wastes from a satellite system not subject Part 31 NPDES or groundwater discharge permit	Part 121, Section 12101(n) and Section 12112(5)	Materials Management	April 30 of each year	Form EQP 1602 , Instructions Part 121 Liquid Industrial By-products Reporting Web page	Amount of liquid industrial by-products accepted in prior calendar year (Jan 1-Dec 31)
Separate stormwater sewer system maintenance waste (permitted or not permitted)	Part 121, Section 12101(n) and Section 12112(5)	Materials Management	April 30 of each year	Form EQP 1602 , Instructions Part 121 Liquid Industrial By-products Reporting Web page	Amount of liquid industrial by-products accepted in prior calendar year (Jan 1-Dec 31)

800-662-9278

[Michigan.gov/EGLE](#)

October 2020

Waste Characterization

Step 4

Do Other Waste Regulations Apply?

Liquid Industrial By-products - Empty Containers

Part 121, Section 12102a

After all **liquid industrial by-product** has been removed using common practices and the amount of waste residue remaining in the container does not exceed...

- no more than 1 inch or 3.0% by weight of the total capacity of the container for containers $\leq$ to 110 gallons or
- no more than 1 inch or 0.3% by weight of the total capacity of the container for containers $>$ than 110 gallons

Waste Characterization

Step 5

Waste Characterization Record

(Part 111, Rule 307 and Part 121, Section 12103)

Waste Characterization

Step 5

Waste Characterization Records

Records for each waste stream may include:

- Waste type, description, codes
- Source of waste
- Analytical data
- Safety Data Sheets
- Sampling procedure and representative sample information

WASTE CHARACTERIZATION RECORD	
Completed By: _____	WASTE CHARACTERIZATION RECORD
Completion Date: _____	
Waste Details	Sample Details
Waste type: _____	Date sampled: _____
	Location(s) sampled: _____
Waste description: _____	Sample procedure: _____
	Analysis method: _____
	Basis for concluding the sample is representative of the waste and analysis method is valid: _____
	Accuracy and precision of the test: _____
	Other: _____
me(s) for safety data sheets (SDS) considered: _____	
or CC applicability: _____	
al restrictions underlying hazardous constituents: _____	

WASTE CHARACTERIZATION RECORD	
EXAMPLE AND GUIDANCE	
To meet the waste characterization and recordkeeping requirements of the waste regulations,¹ consider creating a record that details your answers to the waste characterization questions provided in the form below. This detail will help ensure thorough documentation of your determination and provide a comprehensive resource for your site's management team. Answers to the questions provided on the form would supplement the following records that are specifically required under the rules and required to be available at the site of generation for each waste stream requiring review: • Waste type.² • Narrative description of the waste.² • Source of waste. • Chemical composition and properties of the waste and anticipated fluctuations in its chemical composition and properties. • Test results obtained from sampling and analyzing the waste. • Records documenting the validity and relevance of the tests, sampling, analytical or other methods used, including all of the following information: a. The sampling procedure used and the reasons for determining that the sample is representative of the waste. b. The accuracy and precision of any tests conducted. c. The knowledge basis for the generator's determination if testing, sampling, and waste analyses were not conducted. • Safety Data Sheets (SDS) or other reference materials relied upon for making the waste determination. • Any calculations used to evaluate subpart BB and CC applicability (to determine the parts per million volume (ppmv) volatile organic compound content of the waste). ¹ Part 111, Rules 302 and 311; Part 121, Section 12103(1)(a) and 12103(3); and Part 115 section 11504(2) and 11518(4). ² Use the same waste type, waste description, and any other unique waste identifier on this form as you use on the land disposal restriction notification and uniform hazardous waste manifests created for this waste stream. 800-662-9278 Michigan.gov/EGLEWaste Rev. 8/2021	

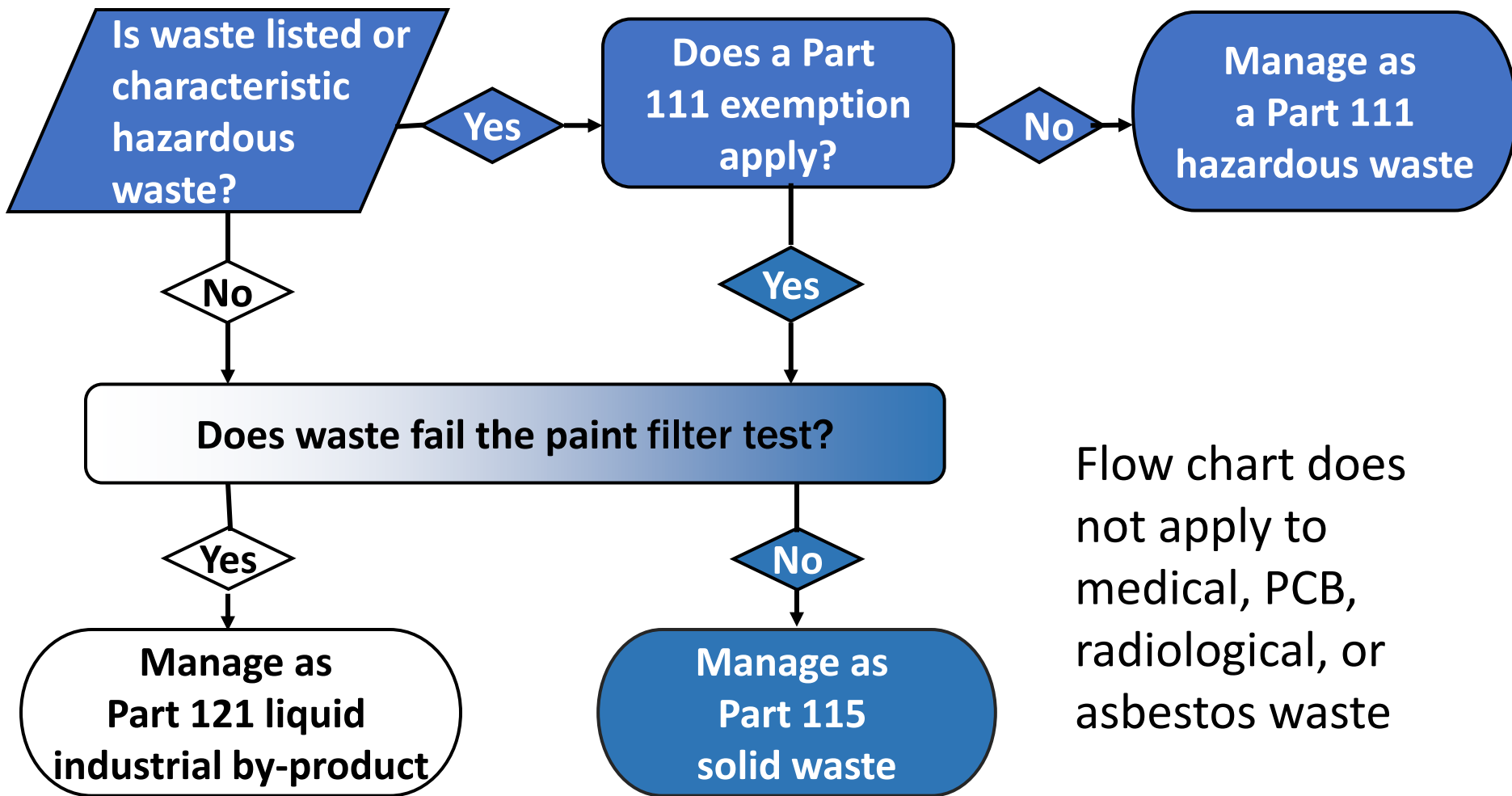
[See Waste Characterization Record & Fillable Form](#)

Waste Characterization

Step 6

Recharacterize if process
or materials change!

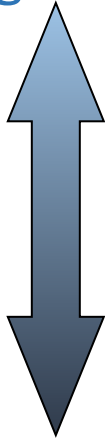
Basic Waste Characterization



Flow chart does not apply to medical, PCB, radiological, or asbestos waste

More Risk = More Regulation

Less
Regulation



More
Regulation

Very Small Quantity Generators (VSQG)

Small Quantity Generators (SQGs)

Large Quantity Generators (LQGs)

Hazardous Waste Generator Category

Monthly Waste Calculation (Rule 303)

Do not include liquid industrial by-product and/or used oil.

Do not include waste specifically excluded from Part 111 like:

- Scrap metal being recycled
- Contaminated fuel being recycled into fuel
- POTW approved direct discharges
- Excluded solvent wipes
- Hazardous secondary materials

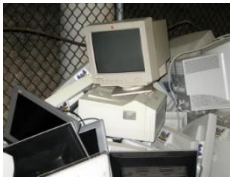


Hazardous Waste Generator Category

Monthly Waste Calculation
(Rule 303)

Do not include hazardous waste managed as a universal waste, like...

Electronics



Batteries



Pesticides



Aerosol Cans



Thermostats



Lamps



Pharmaceuticals



Antifreeze



Hazardous Waste Generator Category

Monthly Waste Calculation (Rule 303)

Calculate the amount
generated, not the
amount **shipped**

Calculate the amount in
pounds or kilograms.

Include hazardous waste
treated and/or disposed
on-site unless it is hard
piped to POTW



Hazardous Waste Generator Category

Monthly Waste Calculation (Rule 303)

Review total/maximum amount of hazardous waste generated and accumulated at any 1 time during the month

Compare amount of hazardous waste generated and total accumulated during the month to the VSQG, SQG, and LQG definitions/limits

Generator limits in the new rules are found in **Rule 303** of the Part 111 rules

Hazardous Waste Generator Category

(Rule 303)

Very Small Quantity Generator (VSQG)

- Monthly nonacute hazardous waste generation $\leq$ 220 lbs. or $\sim$ 1/2 drum, acute < 2.2 lbs. and clean-up waste with acute constituents < 220 lbs.
- Total haz waste accumulation must always be $\leq$ 2200 pounds ($\sim$ 5 drums)
- Wastes are properly disposed under other regs
- Records of waste characterization, generator status, and lawful disposal are maintained for 3 years
- Waste accumulated on site never exceeds 6,000 kilograms



Hazardous Waste Generator Category

(Rule 303)

Small Quantity Generator (SQG)

- Monthly hazardous waste generation greater than 220 lbs. and less than 2,200 lbs.
~ ½ drum to 5 drums
- Total hazardous waste accumulation must always be $\leq 13,200$ lbs.
~ 30 drums

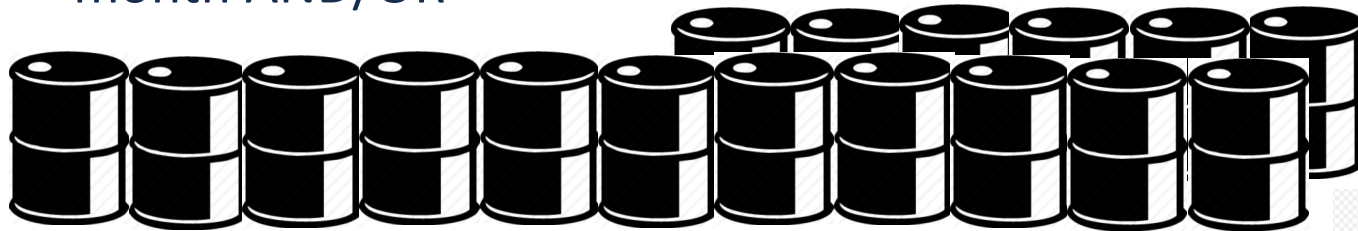


Hazardous Waste Generator Category

(Rule 303)

Large Quantity Generator (LQG)

- Generates > 2200 lbs. of non-acute hazardous waste per month AND/OR



- Generates and accumulates > 2.2 pounds of **acutely toxic** or **severely toxic hazardous** waste

Hazardous Waste Generator

Resources

Learn more via our...

- EGLE Guidebook at Michigan.gov/EHSGuide, Chapter 2
- [Waste Characterization](#), [Record & FILLABLE Form](#)
- [Generator Category and Accumulation Summary Guide](#)
- [Contingency Planning Guidance with Quick Reference Guide](#)
- [Very Small Quantity Generator Guide](#)
- [Small Quantity Generator Guide](#)
- [Universal Waste Guide](#)
- [EGLE Hazardous Waste/LIB Program Staff Map](#)

Questions?

Michigan Department of
Environment, Great Lakes, and Energy

800-662-9278

Michigan.gov/EGLE



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