



# What Small Businesses Need to Know about Hazardous Waste Regulations

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## Goals

- Help small businesses understand complex, but important regulations that ensure:
  - Liabilities related to release and improper disposal are minimized
  - Our environment is protected for everyone to enjoy them for years to come

## Waste Regulations

- Regulations governing proper handling of waste discussed today include:
  - Act 451, Michigan Natural Resources & Environmental Protection Act:
  - Part 111, Hazardous Waste
  - Part 121, Liquid Industrial By-Product
  - Act 138, Hazardous Materials Transportation Act

## Definitions

- Hazardous Waste
  - Listed (F, K, P, U wastes): common waste streams
  - Characteristic (D wastes): ignitable, corrosive, reactive, and or toxic by testing
- Liquid Industrial By-Product (LIB)
  - Non-hazardous liquid waste generated by a non-household and is discarded
  - Material contains free flowing liquids, can be a sludge – paint filter test
  - Examples: Used oil, wastewaters, wash waters, contaminated fuels

## Hazardous Wastes Examples

- Aerosol cans (toxic and ignitable)
- Cleansers (corrosive and toxic)
- Solvents (ignitable and toxic)
- Paints (ignitable and toxic)
- Contaminated Fuel (toxic and ignitable)
- Pesticides (toxic)
- Electric lamps (toxic metals)
- Batteries (toxic metals and corrosive)

## Liquid Industrial By-product Examples

- Includes liquid from non-industrial sites like municipal, commercial, health care, etc.
- Mobile power washing wastewaters
- Carpet cleaning wastewaters
- Food processing wastewaters
- Catch basin cleanout
- Sanitary sewer cleanout
- Grease trap waste
- Most antifreeze
- Most used oil

The [final, new Part 111 Rules](#) are not yet effective. The final new rules must reside with the Joint Committee on Administrative Rulemaking for 15 session days after which they can be filed with the Office of the Great Seal and will take effect seven days later. To get timely e-notifications on the effective date of the final, new rules and information about new and updated publications, [SUBSCRIBE](#) to receive our EGLE Waste News and Updates.

## Definitions

- Universal Waste
  - Universal waste includes certain hazardous waste types eligible for partial exemption from hazardous waste management standards if managed to meet the universal waste regulations
  - Universal waste does not count toward generator status and can reduce generator status
- Federal universal waste types:
  - Batteries
  - Pesticides
  - Mercury containing equipment
  - Lamps
  - **Aerosol cans soon!**
- Michigan only universal waste:
  - Pharmaceuticals
  - Consumer electronics
  - Antifreeze

## Reorganization of Generator Regulations

NEW 2020

Topic	New Rule	Old Rule
Applicability	Rule 301	Rule 301
Waste Characterization	Rule 302	Rule 302
Generator Status Calculation	Rule 303	Rule 205(5)
VSQG Accumulation	Rule 304	Rule 205(1), (2), (3)
Satellite Accumulation	Rule 305	Rule 306(2)
SQG Accumulation	Rule 306	Rule 306(4)
LQG	Rule 307	Rule 306(1)
Site ID	Rule 308	Rule 303
Manifest Requirements	Rule 309	Rule 304
Pre-transport Requirements	Rule 310	Rule 305
Recordkeeping for SQG/LQG	Rule 311	Rule 307
Reporting for SQG/LQG	Rule 312	Rule 308
LDR	Rule 313	Rule 311
Transfrontier Shipments	Rule 314	Rule 312
Academic Laboratory	Rule 315	Rule 313
Episodic Generation	Rule 316	NEW
VSQG Collections	Rule 304(e)(v)	Rule 205(4)

## What is a CESQG aka VSQG?

- A site owned and operated by an entity that:
  - Generates < 220 lbs./100 kg (~ 1/2 drum) non-acute hazardous waste in a calendar month
  - Generates < 2.2 lbs./1 kg acute hazardous waste in a calendar month
  - NEVER accumulates > 2,200 lbs./1,000 kg (~5 drums) nonacute hazardous waste nor >2.2 lbs./1 kg of acute hazardous waste on site at any time
- Must properly dispose of waste and maintain records to verify proper disposal
- **There will be 1 new exception to this under new rules for “Episodic Generating Events” which we’ll discuss later in more detail - CESQG renamed to VSQG**

## Hazardous Waste Generators

- CESQG, **soon to be VSQG**
  - Generate < 220 lbs. non-acute monthly
  - Generates < 2.2 lbs. acute or severely toxic monthly
  - ~ ½ drum non-acute monthly
  - Never accumulate > 2,200 lbs.
- SQG
  - Generate > 220 lbs. & < 2200 lbs. non-acute monthly
  - Generates < 2.2 lbs. acute or severely toxic monthly
  - ~ ½ drum to 5 drums monthly
  - Never accumulate > 13,200 lbs.
- LQG
  - Generate ≥ 2200 lbs. non-acute or
  - > 5 drums monthly
  - > 2.2 lbs. acute

## What is a CESQG aka VSQG?

- Look at all hazardous waste generated across 1 site (any adjoining property) owned and operated by same owner or company - See what the monthly total hazardous waste generation amounts to across the whole site
- Most sites are CESQG:
  - ~ LQG - 550
  - ~ SQG - 1,800

- ~ CESQG/VSQG – 20,000
- Any hazardous waste classification can also generate and accumulate liquid industrial by-product
- Generally should manage universal wastes (e.g. batteries, light bulbs, computers) to meet the universal waste standards to stay CESQG
- CESQGs have the fewest requirements for the management of hazardous waste
- CESQG hazardous waste liquids and universal waste liquids must also be managed to meet the liquid industrial by-product generator requirements as well as the universal waste regulations
- CESQG solids may only be disposed as a solid waste in a landfill with special waste approval/profiling from the receiving landfill

### Hazardous Waste Generator Status - Calculating Amount of Hazardous Waste Generated

- 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 publicly operated treatment works (POTW) aka wastewater treatment plant (WWTP)
- Do not include:
  - Liquid industrial by-product (LIB) and/or used oil
  - Hazardous waste managed as a universal waste
  - Waste specifically excluded from Part 111 such as:
    - Recycled/disposable solvent rags
    - Scrap metal being recycled, verify with vendor
    - Contaminated fuel being recycled as fuel
    - POTW approved direct discharges

### CESQG/VSQG and LIB Records

- Required records include:
  - Waste characterization records
  - Generator status/category records
  - Shipping/disposal records
- All required records must be maintained for 3 years from the last date of off-site shipment for each type of waste and made available for review upon request

### Waste Characterization Records

- Records for each waste stream may include:
  - Waste type/description
  - Source of waste
  - Test results
  - Waste analysis records
  - SDS
  - Sample procedure
  - Representative sample information

### Hazardous Waste Shipments

- CESQG/VSQG generators of hazardous liquids must manage shipment as a liquid industrial by product using a [shipping document](#)
- Small and large quantity generators of hazardous waste (SQGs and LQGs) must utilize a [Uniform Hazardous Waste Manifest](#) for shipments of hazardous waste (any phase, solid, liquid, gas, sludge, etc.)

### Shipping Document

- Shipping document may be any of the following in written or electronic form:
  - log
  - invoice
  - bill of lading

DEQ, OWMRP Example Shipping Document  
**STRAIGHT BILL OF LADING**  
 ORIGINAL - NOT NEGOTIABLE

Bill of Lading Number: \_\_\_\_\_

**FROM:**

<b>1. Shipper / Generator Location</b>		<b>2. Shipper / Generator Mailing Address (if different)</b>	
Ship Generator: 907 Oak Drive Cambridge, MA 02142		Phone No.: _____ Generator ID (if applicable): _____	
<b>Emergency Response Phone:</b> _____			

**TO:**

<b>3. Consignee / Facility Name and Address</b>		<b>4. Consignee / Facility ID#</b>	
Ship Consignee: 123 Main Street Southtown, MA 02133		Phone No.: _____ ID# 002321456	
<b>5. Notes:</b> _____			

**DELIVERED TO:**

<b>5. Carrier/Transporter Name and Address</b>		<b>6. Carrier/Transporter ID#</b>	
Carrier/Transporter: 423 Elm Amherst, MA 01002		Phone No.: _____ ID# 00007700000	

PK	PL	BASIC DESCRIPTION UN or NA number, Proper Shipping Name, Hazard Class, Packing Group (if any)	S		Q		T		Other
			No.	Type	Quantity	Unit	Vol./Wt.	Other	
1		Address	60	DR	230kg	Carton			
2									
3									
4									

7. Special Handling Instructions and Additional Information:

8. Signing Issues: Shipper hereby declares that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/certified, and are in accordance in proper condition for transport according to applicable governmental regulations. As Shipper, I hereby certify that the liquid industrial by-product(s) are fully and accurately described on this shipping document, in proper condition for transport, and that the information conforms to the shipping requirements listed.

Signature (Print or Carbon Name)	Signature	Month	Day	Year
Carrier/Transporter (Print or Carbon Name)	Signature	Month	Day	Year
Generator/ Facility (Acknowledgment of Receipt) (Print Name)	Signature	Month	Day	Year

White Copy: Consignee/Facility Original • Yellow Copy: Consignee to Shipper • Pink Copy: Carrier/Transporter • Green Copy: Shipper Initial Copy

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- any record that includes required information
- Site notification of CESQG/VSQG or liquid industrial generator activity and Site ID also no longer required, unless **using Episodic Generator provisions soon to be effective**
- If using a Uniform Hazardous Waste Manifest for shipping LIB from a site without a Site ID, EGLE suggests using the following as share din our [LIB FAQs](#):
  - “MICESQG” for shipping CESQG hazardous waste
  - “MLIB” for shipping LIBs
  - “MICESQGLIB” for CESQG hazardous waste and LIBs
- The shipping document must include all of the following information:
  - Name and address of the generator
  - Name of the transporter
  - Type and volume of the liquid industrial by-product in the shipment
  - Date the liquid industrial by-product was shipped from the generator
  - Name, address, and Site ID number of the designated facility
- Generator or generator representative signs/certifies shipping document stating:
  - the shipping document fully and accurately describes the shipment
  - the shipment is in proper condition for transport
  - the shipping document information is factual
  - Individual Shipping Document Certification
- Transporter signs/certifies shipping document stating by-product listed on shipping document:
  - was received
  - will be delivered to the designated facility identified on the shipping document
- Individual shipping document distribution
  - Generator retains copy of shipping documents with generator and transporter signature
  - Transporter obtains copy of shipping document with both signatures which accompanies the shipment during transport
- Designated facility must:
  - provide confirmation of receipt to the generator or generator representative (may be written or electronic)
  - only accept delivery where accompanied by shipping document listing their facility as the designated facility

### **Consolidated Shipping Document**

- Consolidated shipping document may be used for a single shipment of uniform types of by-product collected from multiple pickups
- Transporter is listed as the generator
- Generator of waste remains responsible for proper handling of the shipment
- Transporter must leave the generator receipt at pickup that includes:
  - Transporter’s name
  - Driver’s signature
  - Date of pickup
  - Type and quantity of by-product (used oil) shipped
  - Consolidated shipping document number
  - Receiving designated facility name
- Designated facility must provide confirmation of receipt to the transporter
- Generators should obtain confirmation of receipt at the designated facility from the transporter in written or electronic (documented phone call, email, receipt, shipping document or manifest copy)
- Record of confirmation must be maintained for at least 3 years and made available upon inspection

### **Accumulation Requirements**

- Hazardous waste and/or LIB must be placed in containers or tanks in good condition, compatible with the waste
- Hazardous waste and/or LIB containers and tanks must:

- Have no visible signs of leaks
- Be labeled or marked to identify their contents
- If containing used oil, be labeled with the words “Used Oil” and fill pipes for underground storage tanks must be marked with the words “Used Oil”
- Hazardous waste and/or LIB containers and tanks must:
  - Be kept closed or covered when not in use and free of by-product or residues on the exteriors
  - Be protected from weather, fire, physical damage and vandals
  - Be managed to prevent release to the environment

### What is a Closed Container?

- Regulations do not define closed container
- Requiring containers to be closed is a means to minimize emissions of volatile wastes, to protect ignitable or reactive wastes from sources of ignition or reaction, to prevent spills, to reduce the potential for mixing of incompatible wastes and reduce direct contact of personnel with waste
- For liquid containers in storage:
  - Cover secured with snap rings bolted
  - Bung holes capped
  - If needed, pressure-vacuum relief valve to avoid explosions
- For liquid containers in use:
  - Lids properly affixed to prevent spills
  - Funnels with manual or spring-loaded lids or tightly screwed into bung hole with a one-way valve
- Non-pressurized mobile oil drain pans, at a minimum, must be emptied when not in use to be considered closed or at the end of the day generally

### Transport

- CESQGs/VSQGs can self-transport their own generated non-hazardous wastes if insured and have required MCS-90 form verifying coverage for spills
- Small and large quantity generators of hazardous waste CANNOT self-transport their own hazardous waste unless they are registered and permitted under Act 138 and have the required MCS-90 form verifying coverage for spills
- If not self-transporting waste, a CESQG/VSQG can only offer exempted hazardous waste and liquid industrial by-product for transport to Act 138 permitted and registered transporter
- All transport must meet any US DOT requirements that apply
- Used oil can only be self-transported in volumes of 55 gallons or less

### Release Requirements

- Any release (fire, explosion or discharge) that could threaten the public health, safety, welfare, or the environment, or that reaches surface water or groundwater:
- Take immediate action to protect the public health, safety, and welfare, environment, and stop the release
- Notify local responders
- Notify the pollution emergency alerting system using the telephone number 800-292-4706
- Within 30 days of release, prepare and maintain (on-site) a written report documenting:
  - Name and telephone number of the person reporting the incident
  - Name, address, and telephone number where the fire, explosion, or discharge occurred, and any Site ID
  - Date, time, and type of incident
  - Name and quantity of material released
  - Extent of injuries if any
  - Estimated quantity and disposition of recovered materials that resulted from the incident
  - Assessment of actual or potential hazards to human health or the environment
  - Description of the response action taken
  - For more information on release requirements please see [Michigan.gov/ChemRelease](http://Michigan.gov/ChemRelease)

### Receiving Facility Options

- Disposal options will vary based on...
  - Type and amount of hazardous waste or liquid industrial by-product generated

- Regulatory disposal options
- Proximity of disposal facilities
- Cost of disposal
- On-site disposal authorizations (POTW)
- Waste hazards
- Liquid industrial by-products have more outlets - Any Michigan receiving facility accepting CESQG/VSQG liquids or liquid industrial byproducts **MUST** be notified as a liquid industrial by-products receiving facility
- CESQGs/VSQGs have the following 12 destination facility options under the new rules for hazardous waste exempted from full regulation:
  1. A Michigan facility licensed under Part 111 for that waste type or a facility operating under R 299.9502(3), (4), or (5) – *EGLE licensed or authorized interim status hazardous waste TSDF*
  2. An out-of-state facility authorized to manage hazardous waste by the state under a hazardous waste management program that is approved under 40 CFR Part 271 – *Out-of-state, other state licensed hazardous waste TSDF*
  3. An out-of-state facility permitted or licensed under 40 CFR Part 270 – *Out-of-state, EPA licensed hazardous waste TSDF*
  4. An out-of-state interim status facility under 40 CFR Parts 270 and 265 - *Out-of-state, other state or EPA authorized interim status hazardous waste TSDF*
  5. A Michigan facility that stores or treats the waste and that is in compliance with the applicable requirements of Parts 31, 55, 115, and 121 of the NREPA – *Michigan CESQG/VSQG storage and treatment facility meeting Michigan’s environmental regulations*
  6. A Michigan facility that disposes of the waste and that is in compliance with the applicable requirements of Parts 31, 55, 115, and 121 of the NREPA - *Michigan CESQG/VSQG disposal facility meeting Michigan’s environmental regulations*
  7. An out-of-state facility that is permitted, licensed, or registered by that state to manage municipal waste that, if managed in a municipal waste landfill, is subject to 40 CFR Part 258 - *Other state licensed municipal solid waste landfill providing waste approval*
  8. An out-of-state facility that is permitted, licensed, or registered by that state to manage nonmunicipal waste that, if managed in a nonmunicipal waste disposal unit after the effective date of these rules, is subject to 40 CFR 257.5 to 257.30 - *Other state licensed coal combustion residuals landfill providing waste approval*
  9. A facility that beneficially uses or reuses, or legitimately recycles or reclaims, the waste or treats the waste before the beneficial use or reuse or legitimate recycling or reclamation – *Facilities meeting the hazardous secondary materials exclusion verified by the receiving state or federal authorities*
  10. An off-site POTW, if the waste is in compliance with all federal, state, and local pretreatment requirements and, if the waste is shipped by vehicle, the conditions of R 299.9503(3)(b) are met – *POTWs meeting the Clean Water Act and state water regulations allowing acceptance/treatment*
  11. For universal waste that is managed under Rule 228, a universal waste handler or universal waste destination facility – *Universal waste destination facility meeting state or federal regulations*
  12. An LQG under the control of the same person as the VSQG. Control means the company has the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise. Contractors who operate generator facilities on behalf of a different person are not considered to "control" the generators – *A LQG that controls the VSQG and meets the receiving state’s requirements for VSQG consolidation*

#### **Liquid Industrial By-Product:**

- Can use the 12 CESQG/VSQG options and is notified as a liquid industrial by-products receiving facility
- Can send to a disposal site that manages liquid industrial by product and is notified as a liquid industrial by-products receiving facility
- All are required to be notified with the EGLE as a liquid industrial by-products accepting and legally processing liquid industrial by-product
- Used oil must be recycled, others may be solidified and landfilled

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## Episodic Generation - **NEW 2020**

- Episodic Generation, New Rule 316:
  - Provides relief when all conditions for eligibility/exemption are met
  - One event per year unless generator petitions for a second and obtains EGLE approval
  - Includes notification, record keeping and timeline requirements for proper management
- VSQG must obtain [Site ID](#) if they do not have one
- Types of Episodic Events:
  - *Planned Event* – Activity the generator planned and prepared for. Includes tank cleanouts, short-term projects, and removal of surplus chemical inventory
  - *Unplanned Event* – Activity the generator did not reasonably expect to happen. Includes production process upset, product recalls, accidental spills, and acts of nature
- Episodic events require notification and has specific timelines that must be met:
  - Planned event: Notify 30 calendar days prior to event using Site ID form
  - Unplanned event: Notify within 72 hours of the event by phone/email/fax, followed by submittal of Site ID form
- If the generator petitions for a second episodic event, the second episodic event cannot be the same as the first episodic event
- Episodic hazardous waste:
  - Cannot be accumulated on drip pads and in containment buildings
  - Can be accumulated in containers or tanks
  - Containers or tanks must be marked and Labeled - "Episodic Hazardous Waste" and with hazards of the contents
  - If accumulated in tanks, must comply with SQG tank requirements
  - Must be transported by a hazardous waste transporter, on a manifest, to a licensed hazardous waste facility 60 calendar days from the start of the episodic event
  - Requires "cradle to grave" tracking of hazardous waste, records must be maintained 3 years from the date of event
- Episodic hazardous waste recordkeeping/reporting elements must share details on:
  - Beginning and end dates of the episodic event
  - A description of the episodic event
  - A description of the types and quantities of hazardous wastes generated
  - The name of the receiving designated facility(ies)
  - Name of the hazardous waste transporter(s)
  - EGLE approval if a petition was submitted and granted for a second event in a calendar year
  - Site ID Form aka EPA ID
  - The [EQP 5150 form](#) is used to notify of episodic event
  - Form and instructions are found at [Michigan.gov/EGLEWaste](https://Michigan.gov/EGLEWaste)

## VSQG Consolidation - **NEW 2020**

- LQG consolidation of VSQG exempted hazardous waste is a conditional relief
- All conditions of the consolidation provisions must be met to for consolidation to be authorized
- When an LQG and VSQG are under the control of the same person, the LQG can consolidate their VSQG's waste and send it for hazardous waste disposal
- Person means an individual, trust, firm, joint stock company, federal agency, corporation, including a government corporation, partnership, association, state, municipality, commission, political subdivision of a state, or any interstate body.
- Control means the power to direct policies at the facility.
- Contractors who operate generator facilities on behalf of a different person are do not control the generator.
- VSQGs must:

- 
- Characterize waste streams and keep records of the determinations for at least 3 years
  - Maintain information to verify the VSQG monthly generator category determination for at least 3 years
  - Mark each container of hazardous waste with the words "Hazardous Waste"
  - Mark each container of hazardous waste with a description of the waste and an indication of the hazards of the contents
  - Accumulate VSQG hazardous waste liquids in an area protected from weather, fire, physical damage, and vandals and prevents hazardous waste from escaping by gravity into the soils, directly or indirectly, into surface or groundwaters, or into drains or sewers and so that fugitive emissions do not violate the air pollution control regulations
  - Ensure no hazardous wastes with free liquids are landfilled
  - Use a shipping document and liquid industrial by-products transporter is for VSQG liquids
  - LQGs must:
    - Notify EGLE of the VSQG consolidation activities at least 30 days prior to receiving the first shipment using the Site ID Form
    - Label VSQG containers with the date accumulation starts, which is the date the hazardous waste was received from the VSQG
    - If the LQG consolidates hazardous waste from a VSQG with its own hazardous waste or with hazardous waste from other VSQGs, the LQG must label each container or tank with the earliest date any hazardous waste was placed in the container at the LQG location
    - Maintain adequate aisle space at all times for emergency personnel to access hazardous waste
    - Maintain records that provide the following details for each VSQG shipment for at least three years:
      - VSQG name and site address
      - VSQG contact, phone number and e-mail
      - Description of the hazardous waste received
      - the quantity and the date the hazardous waste was received
    - Manage consolidated waste as fully regulated LQG hazardous waste
    - Send the VSQG waste for treatment/disposal at a licensed TSDF within 90 days of the accumulation date
    - Use a permitted and licensed hazardous waste transporter
    - Document shipment for recycling/disposal on a Uniform Manifest
    - Report VSQG consolidation activities in Biennial Reporting using a G51 source code to distinguish from the LQG's own waste
    - EPA did not extend the VSQG consolidation option to SQGs; however, SQGs can participate if they notify and act as an LQG, meeting all LQG standards including getting the VSQG hazardous waste off-site in 90 days

### Revised Draft Guidance

- [Draft Very Small Quantity Hazardous Waste Generator Guidance](#)
- [Draft Hazardous Waste Generator Category and Summary Accumulation Requirements](#)
- Note, these guides are not longer draft once the new final rules become effective and are intended to help prepare for understanding the compliance requirements once the new rules are in place and eligible for use