

# Large Quantity Generator

Michigan Safety Conference 2025

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## Agenda

- 1 Am I a large quantity generator?
- Oh no, I am. Now what?
- Ok, That's not so bad.
- What should I look out for?
- If I need help...



Survey your facility and identify types and amounts of:

Waste Type	Counts towards LQG Status
Hazardous Wastes	Yes
Liquid Industrial By Product (Michigan)	No
Solid Waste	Maybe*
Recycled Materials	No
Other Wastes	Maybe*

- Check all areas of the facility production/process areas, office, maintenance, obsolete processes, labs, exterior
- Confirm the waste is classified appropriately



<sup>\*</sup> Ensure these are non-hazardous wastes

# Am I a Large Quantity Generator of Hazardous Waste?

## Don't forget to include

- Demolition waste
- Paint filters
- Activated carbon media
- Wastewater sludges/filter cakes
- Electronics
- Thermostats, thermometers
- Expired raw materials
- Expired products that can't be sold



Materials defined as recyclable are excluded from the waste regulations as long as you follow basic procedures such as not speculatively accumulating them.

- In Michigan these include:
  - ○Glass
  - OPaper
  - OPlastic
  - ○Metal
  - Untreated and Uncoated Wood
  - Textiles
  - **OYard Clippings**
  - Other items specifically approved by EGLE





## **Liquid Industrial Byproducts:**

- Discarded by non-households
- Fail the paint filter liquids test
- Are not exempted or excluded
- Are not regulated as hazardous waste or medical waste

## **Examples:**

- Storm sewer clean out wastewater
- Some off-spec commercial products
- Some unused liquid products







Non-Hazardous Solid Wastes are excluded from your Hazardous Waste Totals.

- Examples include:
  - Non-recyclable office paper
  - Food wrappers and waste
  - Non-recyclable packaging



Once you know how much of each type of waste you make, compare your hazardous waste totals to these cut offs.

## Large Quantity Generators Create Per Month

- 2200 lbs or more nonacute hazardous waste ~Five 55-gallon drums or 250 gallons AND/OR
- Greater than 2.2 lbs of acute or severely toxic hazardous waste AND/OR
- Greater than 220 lbs of contaminated soil, water, or debris from clean-up of acute or severely toxic hazardous waste



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## "Just Keep Swimming"

Dory



#### **Notification and Site Identification Number**

- Initial notification
- Renotification during Biennial Reporting every even number year
- Michigan Site ID Form (EQP5150)
- Federal Site Identification form (SI 8700-12)

## Offsite Treatment, Storage, or Disposal Facility

- Must use a licensed facility or exempt hazardous waste recycling facility
- Must use universal waste facility for hazardous waste managed as universal waste

Must use licensed and registered hazardous waste transporters



## Manifest for shipments

- Must use Uniform Hazardous Waste Manifest (EPA Form 8700-22)
  - Paper or Electronic (E-Manifest)
- If the waste meets the US DOT hazardous material definition, then the US DOT shipping document requirements must be met
- Can track through e-manifest

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## **Inspections**

- Written weekly container inspections and daily tank inspections.
- Keep records for 3 years
- Check labels are correct and legible, the state of the containers, dates within the accumulation time, and aisle spacing

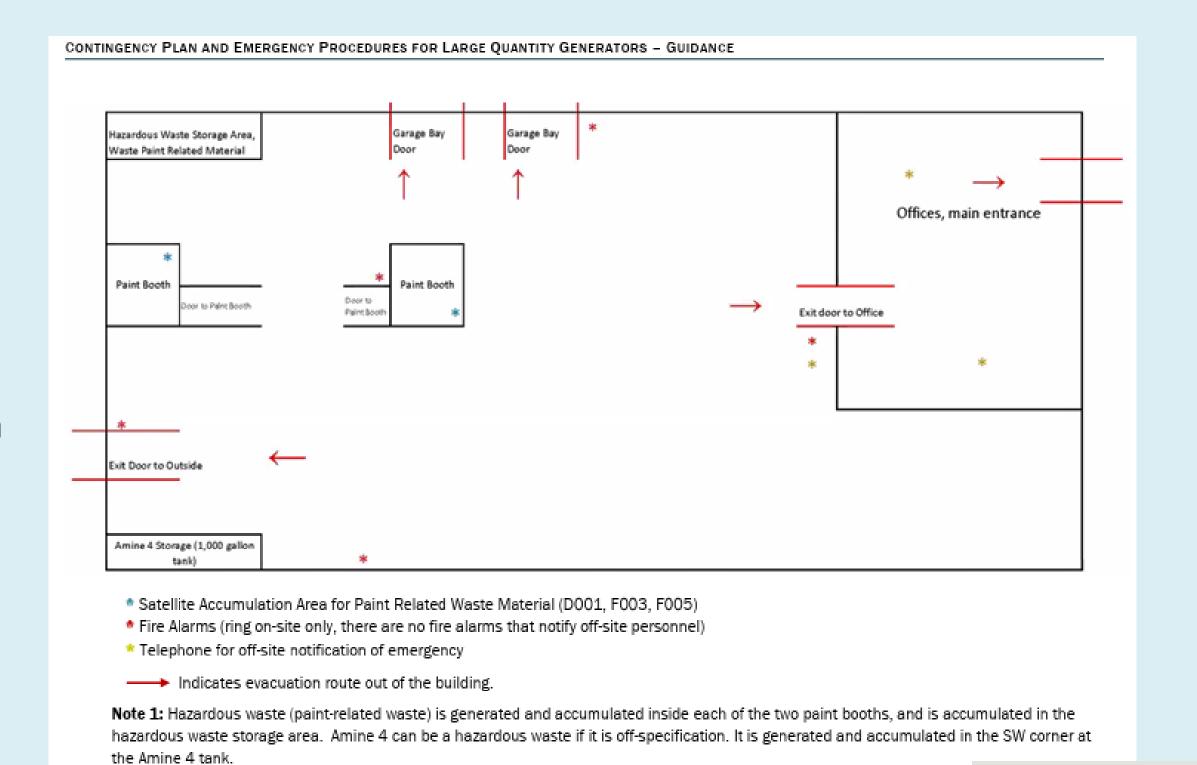
#### **Accumulation time**

• 90 days



#### **Quick Guide**

- Types of waste and hazards with maximum amounts
- Identify any special treatment by medical facilities
- Site map showing generation, accumulation, treatment
- Street map including fire hydrants
- Notification systems (fire alarm, speakers, etc.)
- Names and phone numbers of emergency coordinators



**Note 2:** Smoke detectors are located throughout the office and main warehouse on the ceiling, in a grid about every 25 feet.

are connected to an automatic sprinkler system.

## **Contingency Plan**

## In addition to the quick guide, the plan should include:

- How to minimize hazards to human health
- Your attempt to make arrangements with emergency services
- Copy sent to local response agencies
- The plan should include:
  - Name and telephone of emergency coordinators
  - List of all emergency equipment
  - Evacuation plan



## Ensure waste is properly labeled

- "Hazardous Waste"
- Waste code or descriptive name
- Must have hazards indicated
  - DOT hazard communication label
  - OSHA/MIOSHA hazard statement or pictogram
  - NFPA-compliant labeling

Satellite containers moved to the central accumulation area must be labeled with the accumulation start date.









### **Storage Rules**

- Containers need to be compatible with waste type.
- Containers must be closed.
- No material spilled on the outside of the container.
- No leaks, bulges, or other indications of poor condition.
- No evidence of leaks, spills, or staining in the storage area.
- Secondary containment is needed.
  - Ensure no cracks, damaged coating, etc., to the secondary containment.
- Protected from weather, fire, physical damage, and vandals.
- Adequate aisle space to reach all containers.
- Proper distance from property line.
- Separate incompatible wastes.



## Record Keeping

- Land disposal restriction records
- Annual Handler Fee
- Waste Minimization Plan
- Biennial Report
- Notification of closure
- Manifest Tracking
- Exception Reporting
- Waste Characterization





 Training Program must be directed by a person trained in hazardous waste management procedures

• Training can be in the classroom, on the job, or both.

• Training is relevant to the position.

e.g., a dock fork truck operator's training may be different than an operator who generates and places waste into a container.



## **Training Should Cover:**

- How to respond to emergencies, including where and how to use equipment such as alarm systems.
- Contingency plan procedures
- Response to unplanned sudden or non-sudden releases
- Other procedures needed for the position:
  - How to safely handle the waste.
  - How to properly label containers.

This training is more than right-to-know or hazard communication training.



#### **Training Records**

- Document job title, job description, and names for each position that needs training.
- Written description of what training is needed by position.
- When training occurs keep written records.
- Inspectors will compare the records of training given to those positions and employees that need training.



## Oh No, I am.

## Now What?

## Who Needs Training?

- Personnel that manage, handle, or move hazardous waste
  - At the point of generation
  - Supervisors
  - Fork truck drivers who move waste
  - Shipping or dock employees
  - Emergency coordinators
  - Waste handlers
- Follow the waste from point of generation to removal offsite to determine who needs training



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## "In three words, I can sum up everything I've learned about life. It goes on."

Robert Frost



## OK. That's not so bad.

- Consistency is key.
- •Set up a good filing system.
- •Utilize existing procedures or systems to help.
  - •ISO
  - Quality
  - •Lean



#### OK. That's not so bad.

LQG must have a program to reduce amounts and toxicity level of wastes as economically practicable. This waste minimization program should:

- Consider process changes to produce less scrap
- Ability to use materials that are less toxic
- Have materials shipped in returnable containers
- Encourage continuous improvement including:
  - Workers suggestions on how to minimize waste
  - Employee training in waste reduction
  - Researching other ways to recycle and reuse materials



#### OK. That's not so bad.

Some facilities may be able to reduce the waste produced enough to no longer be large quantity generator in future years.



#### Consider the following:

- Can you substitute materials for a non-hazardous version?
- Can you recover and reuse materials in house to decrease amounts needing disposal?
- Are non-hazardous wastes being mixed with hazardous wastes?
- Can inventory systems be improved to limit obsolete materials?



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## State of accumulation areas

- Weekly inspections should be used to ensure waste is stored appropriately
  - Lids closed
  - Legible labels
  - Aisle space to be able to check containers
  - No mystery materials in the area



## Make it Easy on the Generators

























Protect the hazardous waste from weather or vandals

- If waste must be stored outside, make sure it's compatible for the weather
- Ensure only authorized personnel have access to the waste
  - May need ability to lock
- What happens if there is a spill or leak? Where will the material go?









You are responsible Cradle to Grave including:

- Generation
- Transportation
- Treatment
- Storage
- Disposal of hazardous waste

Track your waste through the process.

At 45 days If no confirmation from designated facility you must contact the transporter and/or designated facility to determine status of the waste.

At 60 days an exception report must be submitted electronically.

https://www.michigan.gov/egle/about/organization/materials-management/hazardous-waste/liquid-industrial-byproducts

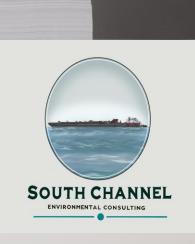
#### Forms

- Site ID, EQP 5150
- Hazardous Waste Biennial Reporting
- Hazardous Waste Program Forms and License Applications
- Hazardous Waste Program Inspection Forms
- Part 111 Corrective Action Restrictive Covenant Template
- · Uniform Manifest Information
- Hazardous Waste Monthly-Quarterly Operating Report EQP 5142
- Generator Notification of Non-Receipt of Hazardous Waste



Make sure Records are in order

- Biennial hazardous waste reports
- Manifests signed by designated facility
- LDR notices
- Weekly inspections
- Waste Characterization documentation
- No or outdated written contingency plan
- No or outdated quick reference guide
  - Contacts. Contacts.



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## EGLE has LOTS of help

Waste Webinar
Series

Waste Characterization
Record

**Contingency Plan** 

Inspection Checklist



