

Part 5 Rules: Spillage of Oil and Polluting Materials

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Part 5 Overview

- Promulgated under Part 31, Water Resources Protection, of the NREPA
- Self-implementing - no permits issued
- Main Components of Part 5
 - Spill Prevention and Control
 - Secondary containment
 - Spill Notification
 - Pollution Incident Prevention Plan (PIPP)

Part 5 Rules - Applicability

**Who is Regulated
&
What Materials are Regulated**



Part 5 Rules – Applicability (Who)

Who is regulated?

- Temporary or Permanent Facilities
- Land-based Facilities
- Receives, uses, stores, ships, manufactures or processes ***Polluting Materials*** in excess of ***Threshold Management Quantities***.

Part 5 Rules – Applicability (Who)

Who is **not** regulated?

Exemptions:

- Recreational marinas
- Oil Fields – petroleum & brine storage
- Transportation related facilities (as defined by 40 CFR Part 112)
- Electrical equipment – Installed and In Use

Part 5 Rules – Applicability (What)



What is regulated?

Polluting Materials:

- Oil
- Salt
- Table 1
Compounds

Part 5 Rules – Applicability (What)

❖ Oils

- Petroleum
- Fuel Oil
- Oily sludges
- Oil mixed w waste
- Synthetic oil
- Grease
- Oil refuse
- Hydraulic oil
- Vegetable oils

❖ Salts

- sodium chloride
- potassium chloride
- calcium chloride
- magnesium chloride
- solutions of mixtures of these salts

Part 5 Rules – Applicability (What)

Table 1: Polluting Materials

Name	CAS	(TRQ - lbs.)
Acetaldehyde, trichloro-	75876	(500)
Acetamide	60355	(10)
Acetic acid	64197	(500)
Acetic anhydride	108247	(500)
Acetone	67641	(500)
Acetonitrile	75058	(500)
...	...	...

Part 5 Rules – Applicability (What)

Threshold Management Quantities (TMQ):

- Oil
 - >1,320 gallons
 - Single tank >660 gallons
- Salt
 - Solid >5 Tons
 - Liquid >1,000 gallons
- Table 1 Compounds
 - Indoor >2,200 lbs (as defined in Part 5)
 - Outdoor > 440 lbs

Note: Solutions 1% or more by weight

Part 5 Rules – Applicability (What)

What is **not** regulated?

Exemptions:

- Manufactured Items - solids
- Small containers (indoors) < 10 gallons or 100 lbs
- Oils subject to SPCC *
- Hazardous Waste subject to Part 111
- Flammables & Combustibles subject to Act 207, Fire Prevention Code
- Underground storage tanks subject to Part 211/213
- Oil & Gas production wells subject to Part 615

* SPCC regulations have been changed since Part 5 rules were implemented.

Part 5 Rules - Facility Type



On-land facility

- Salt
- Chemicals

Oil Storage Facility

- Oil

Part 5 – Facility Compliance Requirements

4 - Main Components of Part 5

- Surveillance
- Secondary Containment
 - Includes Use area and Indoor Storage Requirements
- Pollution Incident Prevention Plan
- Release Reporting

Part 5 Requirements

Surveillance

(Oil and On-land)

- Maintain adequate surveillance of processes and storage areas to detect and respond to spills to prevent a release to public sewers and waters of the state.
- No specific frequency or methods required
- Recommend documenting inspections

Part 5 Requirements

Secondary Containment

3 Categories of Storage

- Liquids – outdoor storage
- Liquids – indoor storage & use areas
- Solids

Part 5 Requirements

Secondary Containment

Liquid - outdoor storage (On-land)

- Compatible & Impervious
- Greater of 10% total volume or 100% of largest tank
- Surveillance, leak detection
- Precipitation removal

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Part 5 Requirements

Secondary Containment

Indoor storage & use areas (On-land & Oil Storage)

- Designed, constructed & maintained to prevent a release, directly or indirectly, into a public sewer system or to waters of the state.
- No specific containment or volume specified.

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Part 5 Requirements

Secondary Containment

Solids (On-land)

- Enclosed, covered, contained or otherwise protected to prevent run-on, run-off, seepage, or leakage.
- Stream/Wetland isolation – 50 ft
- 100-year floodplain

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Part 5 Requirements

Pollution Incident Prevention Plan

On-land Facilities only

- Basic facility info including Designated Spill Prevention and Control Coordinator
- Detailed site map
- Emergency notification procedures
- Spill control and cleanup procedures
- Polluting material inventory
- Secondary containment description
- Precipitation management
- Security measures

Part 5 Requirements

Pollution Incident Prevention Plan

Notification Requirements

- EGLE Water Resource Division District Office
 - 30 days to submit notification upon completion
- Local Health Department (LHD)
- Local Emergency Planning Committee (LEPC)

Part 5 Requirements

Pollution Incident Prevention Plan

IPP Updates

- Review/Revise every 3 years
- Review/Revise after any release
- Re-notify EGLE, HD, LEPC

Part 5 Requirements

Release Reporting

All Releases over **TRQ** – *On-land and Oil*

- Call PEAS 1-800-292-4706
- 9-1-1
- Written Report – 10 days
 - cause, discovery, response, prevention

Part 5 Requirements

Release Reporting

What is a release?

As defined under Part 201: Spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing, or abandonment...into the environment

Part 5 Requirements

Release Reporting

Exemptions: Not a reportable release

- Permitted discharges
- Air emissions
- <1,000 gallons of polluting material into secondary containment
- <55 gallons oil to ground or water
 - Special conditions must be met

Part 5 Requirements

Release Reporting

Threshold Reporting Quantities (TRQs)

- **Oil**
 - To the Ground > 50 lbs
 - To Waters of the State - any quantity that causes a sheen, turbidity, foams, solids...

Part 5 Requirements

Release Reporting

Threshold Reporting Quantities

Salt

- Solid > 50 lbs
- Liquid > 50 gallons



Part 5 Requirements

Release Reporting

Threshold Reporting Quantity

Table 1 Compounds

- Chemical Specific TRQs



Part 5 Rules – Applicability (What)

Table 1: Polluting Materials

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Pounds to Gallons Conversion

$\text{Lbs} = \text{Specific Gravity} \times 8.34 \text{ lbs/Gallon} \times \text{Gallons of Material}$

Example: Acetone: TRQ = 500lbs, Specific Gravity = .79

$0.79 \times 8.34 \text{ lbs/gal} \times X \text{ Gallons} = 500\text{lbs}$

$6.6\text{lbs/gal} \times X \text{ Gallons} = 500\text{lbs}$

$X \text{ gallons} = 500 \text{ lbs} \div 6.6 \text{ lbs/gal}$

$X = 75.75 \text{ gallons spilled to exceed TRQ}$

Find Specific Gravity of a chemical

- SDS
- Internet Search

Calculate TRQ for Solutions

Example: Sulfuric Acid, TRQ = 100 lbs

From SDS, Specific Gravity = 1.84

$1.84 \times 8.34 \text{ lbs/gal} \times X \text{ gallons} = 100 \text{ lbs}$

$X = 6.5 \text{ gallons spilled to exceed TRQ}$

BUT – You store a 20% solution

$1.84 \times 8.34 \text{ lbs/gal} \times 0.20 \times X \text{ gallons} = 100 \text{ lbs}$

$X = 32 \text{ gallons of solution spilled to exceed TRQ for sulfuric acid}$

Enforcement

- A person who violates any provision of Part 31 is subject to the procedures and penalties prescribed in section 3115 and 3115a of Part 31 of the NREPA.
- The maximum fine imposed by the court shall be not more than \$25,000.00 per day of violation.
- For failure to report a release [under Part 5] the court shall impose a fine of not more than \$2,500.00 per day.

Part 5 Summary

Is the facility regulated (Who and What)

What is the nature of the business?

- Temp or perm, Land-based

Any exemption?

- Marinas, Oil field petro or brine storage, transportation related facility, electrical equipment

What materials?

- Oil, Salt, Table 1

How much?

- TMQ

Part 5 Summary – cont.

Regulated Thresholds

- Solid salt >5 tons
- Liquid salt >1,000 gal
- Oil storage *capacity* >1,320 gal or one tank >660 gal
- Listed Chemicals
 - Indoors > 2,200 lbs
 - Outdoors > 440 lbs

Part 5 Summary – cont.

What are the Requirements?

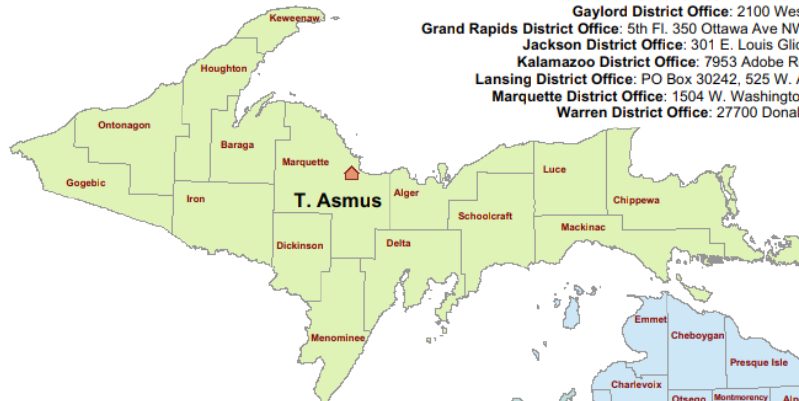
- Surveillance (On-land and Oil)
- Secondary Containment (On-land and Oil)
 - Use area and Indoor Storage also applies to Oil Storage facilities
- Pollution Incident Prevention Plan (On-land)
- Release Reporting (On-land and Oil)

Part 5 Resources

- Part 5 Rules
- Part 5 Guidance Document
- Salt & Brine Storage Guidance
 - For Road Agency Maintenance and Other Facilities
 - For Small Commercial Snow Removal Services
- Release Notification Requirements for Michigan
- Secondary Containment Guidance
- Part 5 - Policy and Procedure Guidance Documents
 - WRD-035: Railcars and Trucks
 - WRD-036: Rules for Oil
 - WRD-037: Reporting Spills Involving Oil-Containing Electrical Equipment
 - WRD-038: Battery Sulfuric Acid

Pollution Incident Prevention Plans (PIPP) & Part 5 Rules Staff

Michigan.gov/Part5



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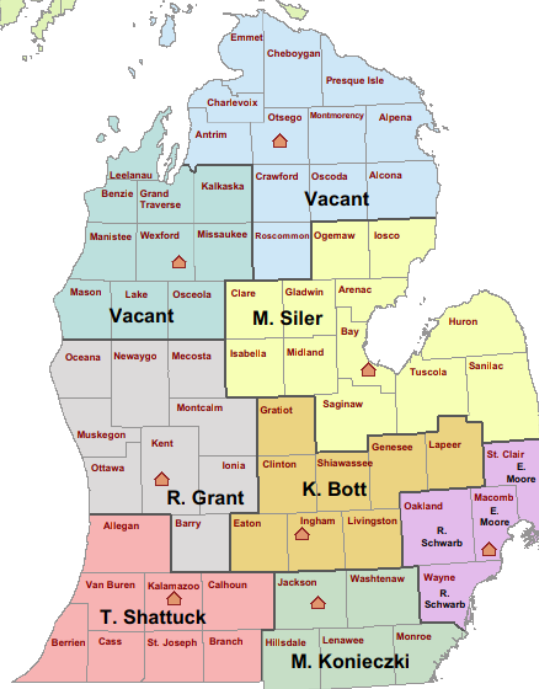
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Questions?

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