

RELEASE REPORTING

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Michigan

SARA Title III Program - DEQ

WHAT IS A RELEASE?

SPILL

LEAK

PUMP

POUR

EMIT

EMPTY



DISCHARGE

INJECT

ESCAPE

LEACH

DUMP

DISPOSE

RELEASE NOTIFICATION REQUIREMENTS TABLE

Included in your MECC Guidebook
www.michigan.gov/chemrelease

Ø *WHAT*

Ø *WHEN*

Ø *TO WHOM &*

Ø *HOW* releases must be reported in State & Federal
Regulations that apply in MI.

This table should be used as a tool to identify potential reporting requirements before a release occurs, and to identify follow-up reporting requirements based on the release.

REMEMBER - ACT & REGULATION

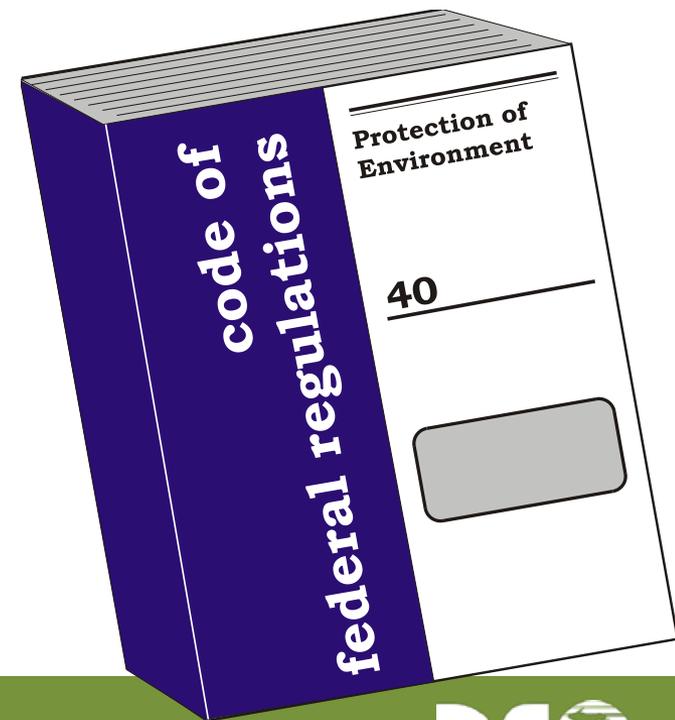
Ø FEDERAL = CFR

Code of Federal Regulations

Ø STATE = PA

Public Act

Ø OTHER REQUIREMENTS



RELEASE REPORTING

- Ø Chemical releases in Michigan are potentially reportable under one or more of twenty-seven different state and federal regulations.
- Ø Determining which regulations apply to a specific release can be an overwhelming task

REPORTING CRITERIA

A single release might be reportable (enforceable) under multiple regulations.



RELEASE REPORTING

Check your permits, licenses, registrations, pollution prevention plans, and local ordinances for additional release reporting requirements.

In particular, all National Pollutant Discharge Elimination System permits and most air permits have release reporting requirements in them that are not included on this table.

REPORTING CRITERIA

Ø Different regulations can have **different reportable quantities** for the same chemical.

Ø Research the regulations that apply to your facility.



WHEN DO YOU MAKE INITIAL NOTIFICATION?

Immediate (w/i 15 mins)

Within 24 hours

Within 30 days

As soon as practical

As soon as practicable

Promptly

As soon as possible

Within 8 hours

Earliest practicable moment



INITIAL NOTIFICATION

* Worst Case *

IMMEDIATE
MEANS
WITHIN 15 MINUTES
AFTER
DISCOVERY OF THE RELEASE

INITIAL NOTIFICATION – TO WHOM?

911

LEPC

SERC

PEAS

NRC

DEQ-RRD (and other divisions)

MDARD

LARA



EMERGENCY RELEASE NOTIFICATION

§ LEPC (Contact your county LEPC)



§ SERC - DEQ **P**ollution **E**mergency **A**lerting **S**ystem
(PEAS) 1-800-292-4706 or **MDARD** (Agriculture)
Hotline 1-800-405-0101

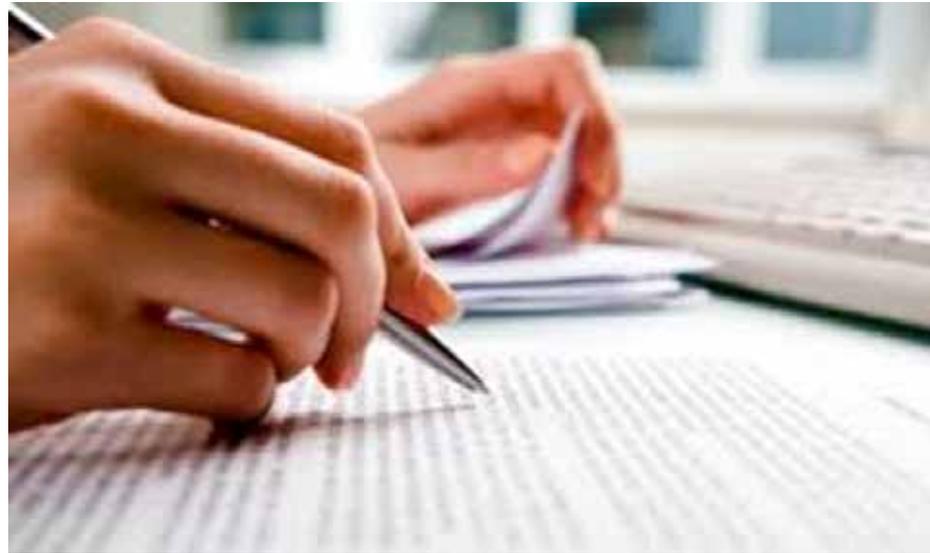
§ U.S. Coast Guard **N**ational **R**esponse **C**enter (**NRC**)
Follow-up report to SERC & LEPC 1-800-424-8802

Then assess the situation and make additional notifications as required.

FOLLOW-UP NOTIFICATION

DOCUMENT

YOUR RELEASE



WRITTEN FOLLOW-UP REPORT

REQUIRED BY REGULATION

- Ø Specified Form
- Ø Specified Information

DEQ general form:

“Spill or Release Report”

Also use to document initial notification

THERE ARE NO
PENALTIES FOR OVER-
REPORTING!!!

WRITTEN FOLLOW-UP REPORT

AS SOON AS PRACTICABLE
MEANS
WITHIN 30 DAYS
AFTER
DISCOVERY OF THE RELEASE

RELEASE REPORTING PREPARATION



- Ø Do a thorough inventory of your chemical and hazardous waste storage
- Ø Determine which State and Federal Release Reporting Regulations apply to your facility
- Ø Have an emergency plan in place for when a spill occurs
- Ø Create a list of officials and clean-up services who need to be immediately contacted (911, PEAS, NRC, and LEPC etc.)
- Ø Develop a checklist that can be used to help you document a spill should it occur.

RELEASE REPORTING and CHEMICAL LISTS

Ø Several Chemical Lists exist (both State and Federal) that contain thresholds for Release Reporting

EPA'S LIST OF LISTS

Ø CERCLA - Hazardous

Ø SARA Title III

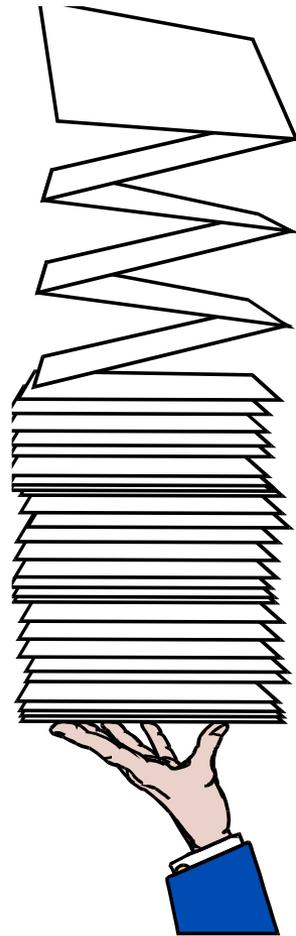
EHS

Toxic (section 313)

Ø CAA - Extremely Hazardous Air

Pollutant - section 112(r)

Updated March 2015



EPA'S LIST OF LISTS

NAME	CAS/313 Category Codes	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA CODE	CAA 112(r) TQ
HCFC-142b	75-68-3				X		
CFC-11	75-69-4			5,000	X	U121	
Trichlorofluoromethane	75-69-4			5,000	313	U121	
Trichloromonofluoromethane	75-69-4			5,000	X	U121	
CFC-12	75-71-8			5,000	X	U075	
Dichlorodifluoromethane	75-71-8			5,000	313	U075	
CFC-13	75-72-9				X		
Chlorotrifluoromethane	75-72-9				313		
Plumbane, tetramethyl-	75-74-1	100	100				10,000
Tetramethyllead	75-74-1	100	100		313c		10,000
Silane, tetramethyl-	75-76-3						10,000
Tetramethylsilane	75-76-3						10,000
Silane, chlorotrimethyl-	75-77-4	1,000	1,000				10,000
Trimethylchlorosilane	75-77-4	1,000	1,000				10,000
Dimethyldichlorosilane	75-78-5	500	500				5,000
Silane, dichlorodimethyl-	75-78-5	500	500				5,000
Methyltrichlorosilane	75-79-6	500	500				5,000

LIST OF LISTS

Ø CAS = Chemical Abstracts Service number

Ø EHS = Extremely Hazardous Substance

Ø TPQ = Threshold Planning Quantity

Ø *RQ = Reportable Quantity*

Ø CAA = Clean Air Act

Ø TQ = Threshold Quantity

Ø *Amounts in POUNDS*

LIST OF LISTS Example

Look up:

Ammonia

CAS =

7664-41-7



EPA'S LIST OF LISTS

NAME	CAS/313 Category Codes	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA CODE	CAA 112(r) TQ
Ammonia	7664-41-7	500	100	100			
Ammonia (anhydrous)	7664-41-7	500	100	100	X		10,000
Ammonia (conc 20% or greater)	7664-41-7			See ammonium hydroxide	X		20,000
Ammonia (includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing)	7664-41-7				313		
Ammonium acetate	631-61-8			5,000			
Ammonium benzoate	1863-63-4			5,000			
Ammonium bicarbonate	1066-33-7			5,000			
Ammonium bichromate	7789-09-5			10	313c		
Ammonium bifluoride	1341-49-7			100			
Ammonium bisulfite	10192-30-0			5,000			
Ammonium carbamate	1111-78-0			5,000			
Ammonium carbonate	506-87-6			5,000			
Ammonium chloride	12125-02-9			5,000			

LIST OF LISTS EXAMPLE

Ammonia

Section 302 (EHS) TPOQ = 500

Section 304 EHS RQ = 100

CERCLA RQ = 100

Section 313 = 313

RCRA Code = none

CAA 112(r) TQ = none
10,000 if anhydrous

CHEMICAL LISTS - STATE

Ø NREPA Part 31

Water Resources Protection

Ø Part 5 Rules

Spillage of Oil & Polluting Materials

Ø Table 1: Polluting Materials

TRQ = Threshold Reporting Quantity

PART 5 RULES

POLLUTING MATERIALS Example

APPENDIX C: NREPA Part 31 – Part 5 Rules

Name	CAS	TRQ (lbs.)
dimethyl)benzenamine		
4,4'-Methylenedianiline	101779	10
4,4'-thiodianiline	139651	10
4,6-Dinitro-o-cresol and salts	534521	10
4-Aminobiphenyl	92671	1
4-Aminopyridine	504245	100
4-Bromophenyl phenyl ether	101553	10
4-chloro-m-phenylenediamine	5131602	10
4-chloro-o-phenylenediamine	95830	10

Name	CAS	TRQ (lbs.)
Ammonia	7884417	10
Ammonium acetate	631618	500
Ammonium benzoate	1863634	500
Ammonium bicarbonate	1066337	500
Ammonium bichromate	7789095	10
Ammonium bifluoride	1341497	10
Ammonium bisulfite	10192300	500
Ammonium carbamate	1111780	500
Ammonium carbonate	506876	500

Look up: Ammonia

TRQ = 10 lbs.

GALLONS TO POUNDS FORMULA FOR CONVERSION

Gallons of Substance

X

Weight of Water (8.34 lbs. per gal)

X

Specific Gravity (Relative Density) from MSDS

=

Pounds of Substance

CONVERSION EXAMPLE

1000 gallons of Gasoline

X

Weight of water 8.34 lbs./gal

X

Specific gravity from SDS 0.72 - 0.75

=

6255 pounds of Gasoline

EXAMPLE 1

Ammonia Release

When is a release of ammonia subject to reporting?



SARA Title III Section 304 **Ammonia Release**

**CERCLA Hazardous substance
Extremely Hazardous Substance (EHS)**

**100 lbs. Ammonia released to the
environment that migrates beyond facility
boundaries.**

NREPA Part 31

Ammonia Release

Polluting Materials (Part 5 Rules)

**10 lbs. Ammonia released to
water or sewage system**

EXAMPLE 2

A textile company had a release of 860 gallons of sodium hydroxide solution to the soil. Of this, 15% reached the river.



EXAMPLE 2

1.a. Notify

- 911
- PEAS
- NRC

1.b. Respond

2. Follow-up

- Investigate
- Calculate
- Report

EXAMPLE 2

Calculate Release

1. Identify the hazardous ingredients and weight % in the sodium hydroxide solution.
2. Calculate the weight of the released sodium hydroxide solution.
3. Calculate the weight of the released hazardous ingredients.
4. Compare to Reportable Quantity (RQ). (The RQ depends on the regulation.)

1. Identify hazardous ingredients
and weight %
in sodium hydroxide solution

Sodium Hydroxide

CAS = 1310-73-2

Weight % = 50% (0.5)



2. How many pounds of sodium hydroxide solution were released to the soil?

860 gal of NaOH Solution

X

Weight of Water: **8.34 lbs./gal**

X

Specific gravity on SDS: **1.52**

=

NaOH Solution Released: **10902 lbs.**

3(a). How many pounds of sodium hydroxide were released to the soil?

$$\begin{array}{r} \underline{10902 \text{ lbs.}} \text{ NaOH solution} \\ \times \\ \underline{0.5 \text{ or } 50\%} \text{ NaOH concentration} \\ = \\ \underline{5451 \text{ lbs.}} \text{ NaOH} \end{array}$$



3(b). How many pounds of sodium hydroxide reached the river?

5451 lbs. NaOH released to soil

X

0.15 or 15 % reached the river

=

817.7 lbs. NaOH reached the river

4. Compare to the RQ

Sodium Hydroxide

CAS No. = **1310-73-2**

Released to soil = **5451 lbs**

Released to river = **818 lbs**

CERCLA RQ = **1000 lbs**

SARA EHS RQ = **none**

SARA Toxic? **no**

Part 5 Rules TRQ = **100 lbs**

5. What regulations apply to this release of sodium hydroxide solution?

- Ø SARA sect 304
- Ø CERCLA sect 103
- Ø NREPA Part 201
- Ø Fire Prevention Code sect 29.5g
- Ø NREPA Part 31, Part 5 Rules

EXAMPLE 2

Post script

This company reported the release 2 days after it was discovered. The proposed penalty for late reporting and violating the NPDES permit requirements was \$38,540.

IMPORTANT !

ALL RELEASES MUST
BE CLEANED UP

– even if not
reportable.



MICHIGAN SARA TITLE III DEQ PROGRAM STAFF

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SARA TITLE III: REPORTING QUESTIONS?

Michigan SARA Title III Program

517-284-SARA (284-7272)

deq-sara@michigan.gov

www.michigan.gov/sara

SARA TITLE III: LEPC AND EMERGENCY PLAN QUESTIONS?

Michigan State Police

Emergency Management and Homeland Security Division

517-284-3982

Jay Eickholt: eickholtj1@michigan.gov

www.michigan.gov/emhsd

ENVIRONMENTAL PROGRAM QUESTIONS

MDEQ Environmental Assistance Center

Your Index to the DEQ

800-662-9278

deq-assist@michigan.gov

www.michigan.gov/deq