



Hazardous Waste Generators



**ENVIRONMENTAL
QUALITY**

WASTE MANAGEMENT & RADIATION CONTROL

Overview

- Generator Categories
- Requirements for VSQGs, SQGs, and LQGs
- Common violations



GENERATOR CATEGORY IS BASED ON MONTHLY GENERATION



**WASTE MANAGEMENT
& RADIATION CONTROL**

POLL



**WASTE MANAGEMENT
& RADIATION CONTROL**

Generator Category

R315-262-13

Hazardous Waste Generated in a Calendar Month	Very Small Quantity Generator (VSQG)	Small Quantity Generator (SQG)	Large Quantity Generator (LQG)
Acute Hazardous Waste	2.2 pounds/1 kg or less	2.2 pounds/1 kg or less	More than 2.2 pounds/1 kg
Non-acute Hazardous Waste	220 pounds/100 kg or less	More than 220 pounds/100 kg up to 2,200 pounds/1,000 kg	More than 2,200 pounds/1,000 kg



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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)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions	(H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from nonpurified 2,4,5-trichlorophenol as the sole component.)	(H)

Hazardous waste #	Chemical abstracts #	Substance
P003	107-02-8	Acrolein
P015	7440-41-7	Beryllium powder
P042	51-43-4	Epinephrine
P063	74-90-8	Hydrogen cyanide
P089	56-38-2	Parathion
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P108	157-24-9	Strychnine, & salts
P001	181-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P064	624-83-9	Methyl isocyanate
P075	154-11-5	Nicotine, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies).
P081	55-63-0	Nitroglycerine (R)

Generator Categories Waste Storage Limits

R315-262-16



Very Small Quantity Generators (VSQG) - No more than **2,200 lbs** (1,000 kg) of hazardous waste or **2.2 lbs** (1 kg) of acute HW onsite at any time

Small Quantity Generators (SQG) - No more than **13,228 lbs** (6,000 kg) of hazardous waste onsite or **2.2 lbs** (1 kg) of acute HW onsite at any time



**WASTE MANAGEMENT
& RADIATION CONTROL**

Generator Category

Monthly Generation

A gallon of water weighs 8.33 pounds

A 55 G drum of water weighs about 458 pounds

- ✓ ½ drum = VSQG
- ✓ >27 gallons = SQG
- ✓ 4 drums = SQG
- ✓ 5 drums = LQG



**WASTE MANAGEMENT
& RADIATION CONTROL**

QUIZ



**WASTE MANAGEMENT
& RADIATION CONTROL**

Generator Category Accumulation Onsite

A gallon of water weighs 8.33 pounds

A 55 G drum of water weighs about 458
pounds

VSQG 2,200 lbs at any time – 264 gallons

SQG 13,228 lbs at any time – 1588 gallons



**WASTE MANAGEMENT
& RADIATION CONTROL**

Generator Category Exercise

chemical	density (lbs/gal)	VSQG Monthly 220 lbs to gal	VSQG total 2200 lbs to gal	VSQG total in 55gal drums	SQG Monthly 2200 lbs to gal	SQG Monthly (drums)	SQG total 13228 lbs to gal	SQG total in 55 gal drums
gasoline	6.30	34.9	349.2	6.3	349.2	6.3	2099.7	38.2
acetone	6.64	33.1	331.3	6.0	331.3	6.0	1992.2	36.2
methyl ethyl ketone (MEK)	6.74	32.6	326.4	5.9	326.4	5.9	1962.6	35.7
isopropyl alcohol (IPA)	6.82	32.3	322.6	5.9	322.6	5.9	1939.6	35.3
toluene	7.18	30.6	306.4	5.6	306.4	5.6	1842.3	33.5
water	8.33	26.4	264.1	4.8	264.1	4.8	1588.0	28.9
glacial acetic acid	8.74	25.2	251.7	4.6	251.7	4.6	1513.5	27.5
hydrochloric acid	9.83	22.4	223.8	4.1	223.8	4.1	1345.7	24.5
methylene chloride	10.52	20.9	209.1	3.8	209.1	3.8	1257.4	22.9
nitric acid	11.70	18.8	188.0	3.4	188.0	3.4	1130.6	20.6
trichloroethylene (vinyl chloride)	12.51	17.6	175.9	3.2	175.9	3.2	1057.4	19.2
perchloroethyle/tetrachloroethylene	13.46	16.3	163.4	3.0	163.4	3.0	982.8	17.9
sulfuric acid	15.30	14.4	143.8	2.6	143.8	2.6	864.6	15.7





VSQGs:

Very Small Quantity Generators



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WASTE MANAGEMENT & RADIATION CONTROL

Very Small Quantity Generators

R315-262-14

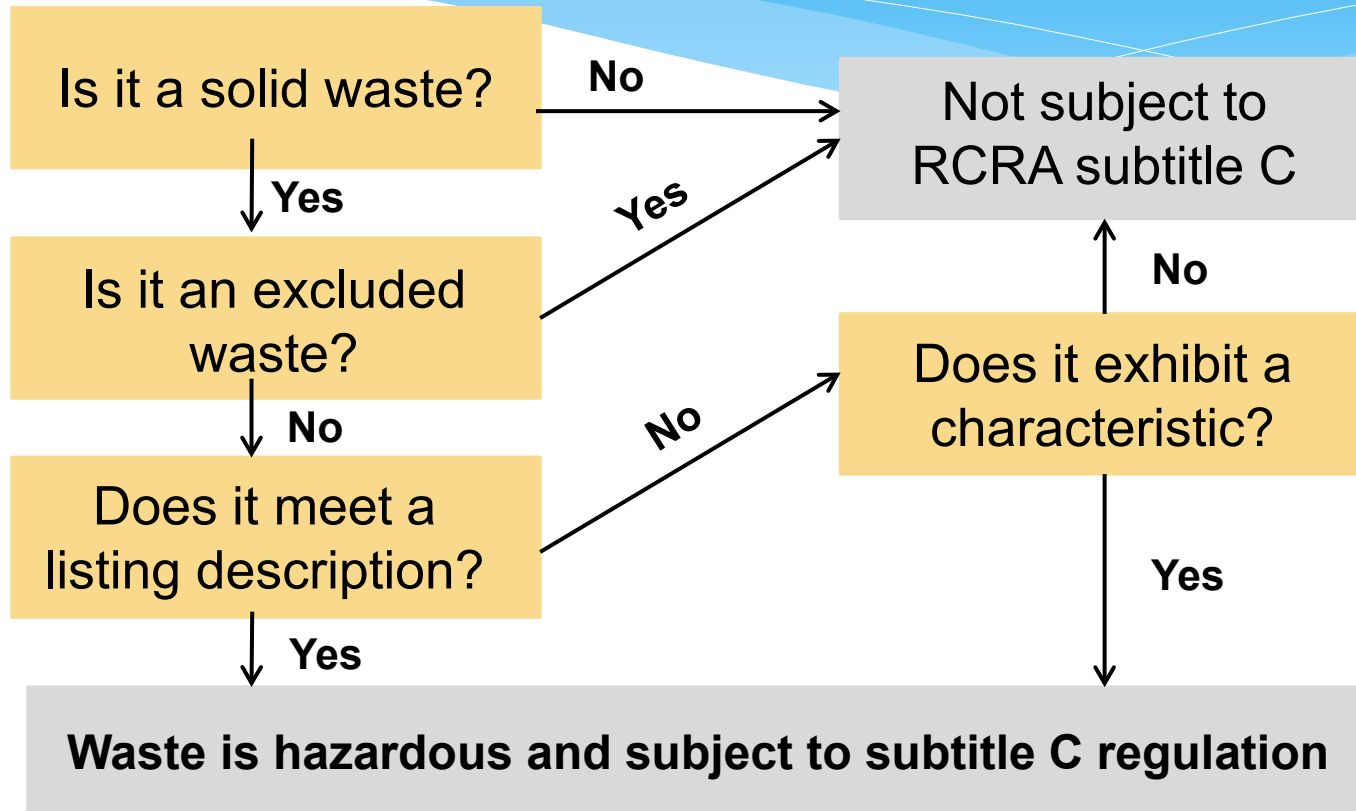
VSQG Must:

1. Identify its hazardous waste
2. Store no more than 2,200 lbs/1,000 kg of hazardous waste or 2.2 lbs/1 kg of acute HW onsite at any time
3. Ensure delivery to an off-site treatment, storage, or disposal facility authorized to manage VSQG waste



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Hazardous Waste Determination



Excess Storage

R315-262-14(a)(3)

More than 2,200 lbs/1,000 kg of hazardous waste

1. Ship offsite within 180/270 days of the date when 2,200 lbs/1,000 kg was exceeded
2. Comply with the small quantity generator requirements for that hazardous waste

More than 2.2 lbs/1 kg of acute hazardous waste

1. Ship offsite within 90 days of the date when 2.2 lbs/1 kg was exceeded
2. Comply with the large quantity generator requirements for that acute hazardous waste



Disposing of VSQG Hazardous Waste

R315-262-14(a)(5)

- Don't put it in the dumpster
- VSQGs can use solid waste facilities that are permitted to accept VSQG hazardous waste
 - Hazardous waste treatment, storage or disposal facility (TSDF)
 - Municipal or industrial solid waste management facility
- Consolidate to a Large Quantity Generator under the control of the same person as the VSQG



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VSQG Consolidation Option

R315-262-14(a)(5)(viii)

- There is no quantity limit for shipments from the VSQG to the LQG
- No hazardous waste manifest is required and hazardous waste transporters do not have to be used
- The VSQG and the LQG can be in different states



Consolidation Labeling Requirements

IGNITABLE
CORROSIVE
REACTIVE
TOXIC



EPA Characteristics

DOT Shipping Labels

OSHA GHS Pictograms

NFPA 704 Labels



**WASTE MANAGEMENT
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Shipping VSQG Hazardous Waste

Must comply with all DOT requirements:

Marking, Placarding, Shipping papers

Shipping on an electronic manifest:

- If your transporter uses e-manifests, you will need an EPA ID number
- Fill out form 8700-12 and send it to Kaci McNeill



**WASTE MANAGEMENT
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SQG

Small Quantity Generators



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WASTE MANAGEMENT & RADIATION CONTROL

SQG Requirements

R315-262-16(a)

Waste Generation and Storage Limits

- Generate more than 220 lbs (100 kg) but less than 2,200 lbs (1,000 kg) hazardous waste in a month
- Generate up to 2.2 lbs (1kg) pounds acute hazardous waste in a month
- No more than 13,228 pounds (6,000 kg) of hazardous waste onsite
- May accumulate onsite for 180 days or 270 days if transported more than 200 Miles



Generator Category Exercise

chemical	density (lbs/gal)	VSQG Monthly 220 lbs to gal	VSQG total 2200 lbs to gal	VSQG total in 55gal drums	SQG Monthly 2200 lbs to gal	SQG Monthly (drums)	SQG total 13228 lbs to gal	SQG total in 55 gal drums
gasoline	6.30	34.9	349.2	6.3	349.2	6.3	2099.7	38.2
acetone	6.64	33.1	331.3	6.0	331.3	6.0	1992.2	36.2
methyl ethyl ketone (MEK)	6.74	32.6	326.4	5.9	326.4	5.9	1962.6	35.7
isopropyl alcohol (IPA)	6.82	32.3	322.6	5.9	322.6	5.9	1939.6	35.3
toluene	7.18	30.6	306.4	5.6	306.4	5.6	1842.3	33.5
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glacial acetic acid	8.74	25.2	251.7	4.6	251.7	4.6	1513.5	27.5
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methylene chloride	10.52	20.9	209.1	3.8	209.1	3.8	1257.4	22.9
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perchloroethyle/tetrachloroethylene	13.46	16.3	163.4	3.0	163.4	3.0	982.8	17.9
sulfuric acid	15.30	14.4	143.8	2.6	143.8	2.6	864.6	15.7



SQG Requirements

R315-262-18

- EPA Identification Number
- Hazardous Waste Transporter and TSD
- Re-notification



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SQG Requirements

R315-262-20, R315-262-23, R315-262-24, R315-262-40, R315-262-42

Manifest Requirements

- Use
- Recordkeeping
- Exception Reporting



WASTE MANAGEMENT
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SQG Requirements

Containers

- Compatible with the Waste and In Good Condition
- Keep Containers Closed
- Label Containers with the Words “Hazardous Waste”
and an Indication of the Hazards of the Contents
- Not Handle or Store Containers so that They Might Rupture, Leak or Be Damaged
- Inspect Central Accumulation Areas Weekly



Acceptable Open Container



**WASTE MANAGEMENT
& RADIATION CONTROL**

WHEN DUMPING
INK OR SOLVENT,
EMPTY
CONTAINERS AND
THROW THEM
AWAY. DO NOT
LEAVE
CONTAINERS
FOR OTHERS TO
EMPTY.

IF THE WASTE INK OR THE
WASTE SOLVENT BARRELS
ARE FULL THE ROLL TENDER
WORKING AT THE TIME IS
RESPONSIBLE TO CHANGE
THEM.

**WASTE
SOLVENT**



**HAZARDOUS
WASTE**
FEDERAL LAW PROHIBITS THE DISPOSAL
OF HAZARDOUS WASTE IN LANDFILLS
UNLESS THE WASTE IS FIRST TREATED
IN ACCORDANCE WITH THE RCRA
REGULATIONS.
HAZARDOUS WASTE
HANDLE WITH CARE

03/14/2011



SQG Requirements

Accumulation of Incompatible Wastes

- ❑ Not Placed in Same or Unwashed Containers
- ❑ Separated by Dike, Berm, Wall or Other Device



**WASTE MANAGEMENT
& RADIATION CONTROL**

Labeling Requirements At the Point of Generation

IGNITABLE

CORROSIVE

REACTIVE

TOXIC



EPA Characteristics

DOT Shipping Labels

OSHA GHS Pictograms

NFPA 704 Labels



**WASTE MANAGEMENT
& RADIATION CONTROL**

HAZARDOUS WASTE

#1431

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.

IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:

NAME _____

PHONE _____

ADDRESS _____

STATE _____

UT ZIP _____

CITY _____

OGDEN

MANIFEST
TRACKING NO. _____

ACCUMULATION
START DATE 1-4-21

EPA
ID NO. _____

EPA
WASTE NO. _____

D001, D058, F005,
F005

RQ, UN1263, WASTE PAINT RELATED MATERIAL, 3, PG III
(WASTE PAINT RELATED MATERIALS - LIQUID)

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

STYLE WHITE

LABELMASTER® (800) 621-5808 www.labelmaster.com

FLAMMABLE LIQUID

3

Labeling Requirements Prior to Shipping

**HAZARDOUS
WASTE**

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR INFORMATION:

NAME Generic College
ADDRESS 123 College Street PHONE (800)123-4567
CITY College Town STATE CT ZIP 06032
MANIFEST TRACKING NO. 123456789ABC ACCUMULATION START DATE 12/10/2007
EPA ID NO. CTD000123456 EPA WASTE NO. D002

[Waste Corrosive Liquids, N.O.S., 8, UN1760,
III (Sulfuric Acid, Hydrochloric Acid)]

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

STYLE WMB

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**WASTE MANAGEMENT
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SQG Central Accumulation Area

R315-262-16(b)

- 180/270-Day Areas
- Container Storage
 - Labeling – accumulation start date
 - Inspect Weekly
 - Preparedness & Prevention
 - Emergency Procedures



**WASTE MANAGEMENT
& RADIATION CONTROL**

What do you see wrong?

- Not closed
- Hazardous waste not contained (on outside of container)
- Spill on the ground





SQG Preparedness and Prevention

R315-262-16(b)(8)

Must be Equipped with:

- Internal Communication or Alarm System
- Device Capable of Summoning Emergency Assistance
- Portable Fire Extinguishers
- Spill Control and Decontamination Materials
- Water at Adequate Volume and Pressure

Must Test and Maintain All Equipment

* Must Have Sufficient Aisle Space



**WASTE MANAGEMENT
& RADIATION CONTROL**

AISLE SPACE

Inadequate



Adequate



**WASTE MANAGEMENT
& RADIATION CONTROL**

SQG Preparedness and Prevention

R315-262-16(b)(8)

- Notify Local Fire, Police, Emergency Response Teams and Hospitals **or LEPCs**
- Waiver for 24 Hour Internal Response
- Ensure that Employees are Familiar with Proper Waste Handling and Emergency Procedures
- Emergency Coordinator On Site or On Call



ARRANGEMENTS WITH LOCAL AUTHORITIES: EXAMPLE LETTER

(Insert Company Letterhead)

Date

Name of Local Police Department / Fire Department / Other Emergency Response Team / Emergency Response Contractors or Suppliers / Local Hospitals / (if applicable) Local Emergency Planning Committee

Attn: Local Authority Contact

Street Address

City, State, Zip code

Dear Local Authority Contact:

This letter is written as a requirement of the Hazardous Waste Rules adopted by the State of Utah. The purpose of this letter is to document arrangements to familiarize (Name of Local Authority) with the following information:

- The layout of the facility showing areas where hazardous waste is generated and accumulated, places where facility personnel would normally be working, entrances to roads inside the facility and possible evacuation routes. (Attach information)
 - A description of the types, quantities, and properties of hazardous waste handled at the facility and associated hazards; (Attach information)
 - A description of the types of injuries or illnesses which could result from fires, explosions, or releases at the facility. (Attach information or describe here).

We are requesting that your organization provide the following services in the event of an emergency regarding hazardous waste generation and accumulation at the facility: (Describe/specify the requested services) (Where more than one police or fire department might respond, facility must have agreements designating primary emergency authority to a specific police/fire department, and agreements with any others to provide support to the primary emergency authority)

If you cannot provide the requested services or do not agree with the arrangements, have questions, or need additional information please call me at (phone number of facility contact).

Sincerely,

Facility Contact signature and printed name

SQG Preparedness and Prevention

R315-262-16(b)(8)

Posted Near the Phone

- Name and Number of Facility Emergency Coordinator(s)
- Location of Fire Extinguishers
- Location of Spill Control Equipment
- Location of Fire Alarms
- Telephone Number of the Fire Department



**WASTE MANAGEMENT
& RADIATION CONTROL**

Emergency Contact(s) Telephone Posting

This information is to be posted next to telephones or in areas of a small quantity generator of hazardous waste (SQG) directly involved in the generation and accumulation of hazardous waste. [R315-262-16(b)(9)(ii)]

Emergency Coordinator(s):

Emergency Coordinator Name	Emergency Telephone Number

Emergency Contacts:

Emergency Contact	Phone Number
Fire Department (<i>unless direct alarm</i>)	
The following emergency contact information is not required but is recommended.	
Police Department	
Hospital	
State Emergency/Spill Notification or Reporting	801-536-0200/801-536-4123
Local/Regional Notification or Reporting (<i>e.g., LEPC</i>)	
National Response Center (<i>24-Hour</i>)	1.800.424.8802

Location of Emergency Response Equipment:

Fire extinguishers	
Spill control material	
Fire alarm (<i>if present</i>)	

SQG Training

R315-262-16(b)(9)(iii)

*The small quantity generator shall ensure that all employees are thoroughly familiar with **proper waste handling and emergency procedures**, relevant to their responsibilities during normal facility operations and emergencies.*



**WASTE MANAGEMENT
& RADIATION CONTROL**

SQG Tank Requirements

R315-262-16(b)(3)

- Do not use for hazardous wastes that may damage the tank or an inner liner
- Allow 2 feet freeboard for uncovered tanks
- Waste feed cutoff system
- Inspect daily:
 - Tank level
 - Discharge control equipment
 - Data from monitoring equipment
- Inspect weekly:
 - Tank integrity
 - Surrounding area within berms or dikes for leaks



Large Quantity Generators LQG



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WASTE MANAGEMENT & RADIATION CONTROL

LQG Requirements

R315-262-17, R315-262-18, R315-262-41

- LQGs Must Obtain an EPA Identification Number
- Re-Notify
- Biennial Report
- Accumulate Hazardous Waste Onsite for No More than 90 Days



**WASTE MANAGEMENT
& RADIATION CONTROL**



LQG Container Requirements

R315-262-17

Containers

- Compatible with the Waste and In Good Condition
- Keep Containers Closed
- Label Containers with the Words “Hazardous Waste”
- Mark or label with an Indication of the Hazards of the Contents
- Not Handle or Store Containers so that They Might Rupture, Leak or Be Damaged
- Inspect Central Accumulation Areas Weekly



**WASTE MANAGEMENT
& RADIATION CONTROL**

Labeling Requirements At the Point of Generation

R315-262-15(a)

IGNITABLE
CORROSIVE
REACTIVE
TOXIC



EPA Characteristics

DOT Shipping Labels

OSHA GHS Pictograms

NFPA 704 Labels



WASTE MANAGEMENT
& RADIATION CONTROL

Labeling Requirements Prior to Shipping

R315-262-31 & 32

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR INFORMATION:

NAME Generic College
ADDRESS 123 College Street PHONE (800)123-4567
CITY College Town STATE CT ZIP 06032
MANIFEST TRACKING NO. 123456789ABC ACCUMULATION START DATE 12/10/2007
EPA ID NO. CTD000123456 EPA WASTE NO. D002

[Waste Corrosive Liquids, N.O.S., 8, UN1760, III (Sulfuric Acid, Hydrochloric Acid)]

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

STYLE WMB

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**WASTE MANAGEMENT
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LQG Central Accumulation Area Container Storage

R315-262-17(a)(5)

- Labeling
 1. Hazardous Waste
 2. Indication of Hazards
 3. Accumulation Start Date
- Special requirements for Ignitable & Reactive Waste
- Inspect Weekly
- Preparedness & Prevention
- Emergency Procedures
- Training



LQG Container Storage

R315-262-17(a)(1)(vi)

Conditions for Accumulation of Ignitable and Reactive Wastes

- 50 Feet from Property Line **Approved in Writing**
- Prevent Accidental Ignition or Reaction
 - Protect from sources of ignition
 - No Smoking signs posted





UN2924
UN2924
UN2924



HAZARDOUS WASTE

UN2924
UN2924
UN2924

ALCO
1-800-777-6782

CAUTION! THIS TANK
MUST BE VENTED PRIOR
TO DISCHARGE

CAUTION! THIS TANK
MUST BE VENTED PRIOR
TO DISCHARGE

PRECISION
iBC

2725 kg max

LQG Tank Requirements

R315-262-17(a)(2)

- Tank Labeling: R315-262-17(a)(5)(ii)
- Tank System Design & Integrity: R315-262-17(a)(2)
- Tank System Installation: R315-265-192(g)
- Containment & Release Detection: R315-265-193(c)(1)
- Operating Requirements: R315-265-194
- Inspections: R315-265-195
- Response to Leaks or Spills: R315-265-196
- Requirements for Ignitable or Reactive Wastes: R315-265-198



LQG Preparedness & Prevention

R315-262-17(a)(6); R315-262-252 & 253

- Must be Equipped with:
 - Internal Communication or Alarm System
 - Device Capable of Summoning Emergency Assistance
 - Portable Fire Extinguishers/Fire Control Equipment
 - Spill Control and Decontamination Materials
 - Water at Adequate Volume and Pressure
- Must Test and Maintain All Equipment
- Must Have Sufficient Aisle Space



LQG Preparedness & Prevention

R315-262-256, R315-262-254

- Attempt to Make Arrangements with Local Fire, Police, Emergency Response Teams and Hospitals or LEPCs
 - Determine potential need
 - Familiarize with facility layout
 - Document attempts and arrangements
- Emergency Coordinator On Site or On Call



WASTE MANAGEMENT
& RADIATION CONTROL

LQG HW Contingency Plan

R315-262-261

Written Hazardous Waste Contingency Plan must include:

- Description of Actions to be Taken
- Descriptions of Arrangements Agreed to by Local Emergency Responders **or LEPCs**
- Names and Phone Numbers of Emergency Coordinators or **Position Title and Phone Number**
- List of Emergency Equipment
- Evacuation Plan



**WASTE MANAGEMENT
& RADIATION CONTROL**



LQG Hazardous Waste Contingency Plan

R315-262-261, R315-262-262, R315-262-263

- Spill Prevention, Control and Countermeasures Plan (SPCC) or “One Plan”
- Copies of the Contingency Plan
- Amendment of the Plan



**WASTE MANAGEMENT
& RADIATION CONTROL**

Quick Reference Guide

R315-262-262(b)

- Types/Names of Hazardous Waste and Hazards
- Estimated Maximum Amounts of Waste
- Wastes Where Exposure Would Require Unique/Special Medical Treatment
- Maps of Waste Locations and Routes of Access and Evacuation
- Location of Water Supply
- Identification of On-Site Notification Systems
- Names and Phone Numbers of Emergency Coordinators



EXAMPLE QUICK REFERENCE GUIDE

This example was created by EPA Region 7 to be used as a guide to assist the regulated community with compliance. It does not substitute for or replace any regulatory requirements.

Contingency plan quick reference guide

ABC FACILITY

1000 SW Main Street

Anytown, Iowa 50000

Facility Contacts:

Primary Emergency Coordinator: George Washington Mobile Number (24/7): 515-555-0000

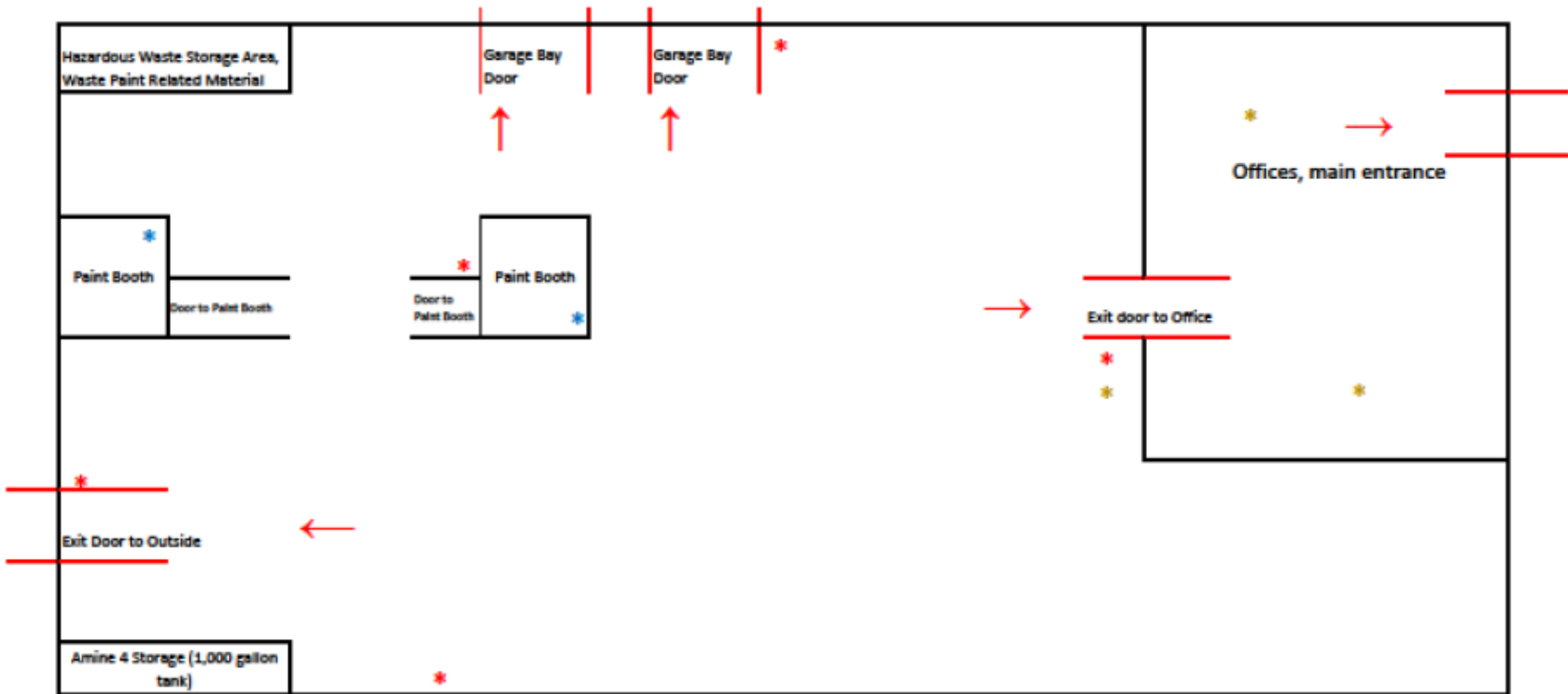
Secondary Emergency Coordinator: Abraham Lincoln Mobile Number (24/7): 515-555-0001

Tertiary Emergency Coordinator: Martha Washington Mobile Number (24/7): 515-555-0002

Note: ABC Facility operates 3 shift, 24/7, but the order of contact during an emergency is listed above.

Hazardous Waste Information:

Name of Waste	Waste Codes/Hazards	Location Accumulated	Maximum Amounts Present	Response Notes	Special Notes to Hospital/Treatment personnel
Paint Related Wastes (liquid)	D001 (ignitability, flash point <140 °F); F003, F005 (Benzene, Methyl Ethyl Ketone, Toluene, Toxicity)	NW corner of Warehouse, hazardous waste storage area	Five, 55-gallon drums (2,065 pounds)	If personnel come into direct contact with material, decontamination at the hospital may be required prior to treatment.	None
Paint Related Wastes (liquid)	D001 (ignitability, flash point <140 °F); F003, F005 (Benzene, Methyl Ethyl Ketone, Toluene, Toxicity)	Two Satellite Accumulation Areas as noted with blue asterisks on the attached map.	One, 55-gallon drum (440 pounds)	If personnel come into direct contact with material, decontamination at the hospital may be required prior to treatment.	None
Off-specification 2, 4-D , a herbicide, (brand name is Amine 4) (liquid)	D016 (toxicity); Flashpoint 190 °F.	SW corner of warehouse near new product storage of Amine 4.	Off-Spec – 1 tank, 1,000 gallons New product – 1 tank (same tank as off-spec), 1,000 gallons	Use PPE to prevent contact with skin and eyes. Immediately prevent spills from entering drains and waterways. Prevent sources of ignition and open flames.	Contact Chemtrac for emergency medical treatment information at 1-800-424-9300. If in eyes, wash eyes for several minutes.



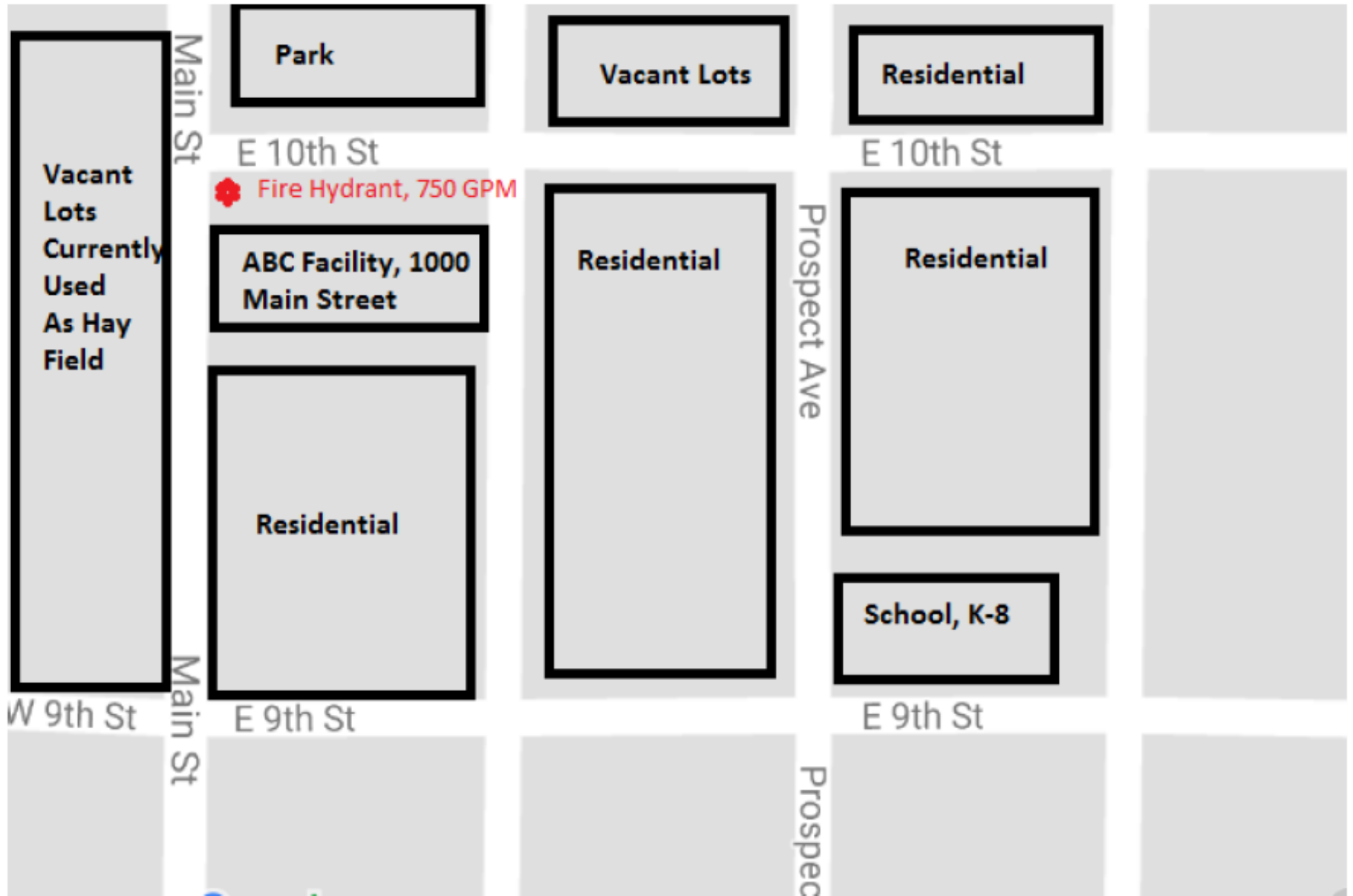
- * Satellite Accumulation Area for Paint Related Waste Material (D001, F003, F005)
- * Fire Alarms (ring on-site only, there are no fire alarms that notify off-site personnel)
- * Telephone for off-site notification of emergency

→ Indicates evacuation route out of the building.

Note 1: Hazardous waste (paint related waste) is generated and accumulated inside each of the two paint booths, and is accumulated in the hazardous waste storage area. Amine 4 can be a hazardous waste if it is off-specification and it is generated and accumulated in the SW corner at the Amine 4 tank.

Note 2: Smoke detectors are located throughout the office and main warehouse on the ceiling, in a grid about every 25 feet. Smoke detectors are connected to an automatic sprinkler system.

Street Map



Emergency Procedures

R315-262-265

Emergency Procedures Performed by Emergency Coordinator

- Imminent or Actual Emergency Situation
 - Activate Alarms, Notify Agencies
 - Identify Character, Source, Amount and Extent of Release
- Assess Hazards to Human Health and Environment
- Report and Notify
 - Don't leave out Waste Management and Radiation Control at 801-536-0200; after hours 801-536-4123
- Take Reasonable Measures to Prevent Spread
- Document in Operating Record and Submit Final Report



**WASTE MANAGEMENT
& RADIATION CONTROL**

LQG Training

R315-262-17(a)(7)

Facility Personnel Must Successfully Complete Training

- Relevant Hazardous Waste Management Procedures
- Response to Emergencies
- HAZWOPER Can be Used
- Complete Within Six Months and Annually
- Rules Explicitly Allow Computer-Based Training



Job Title / Environmental Responsibilities	General Awareness	Job Specific RCRA	Job Specific Other"	Emergency Response	Employee
ENVIRONMENTAL MANAGER Primary HW emergency coordinator; sampling and characterizing wastes; hazardous waste handling and cleanup; prepare drums and shipping papers and manifests for shipment; recordkeeping; training.	New Hire RCRA; Annual Onsite RCRA	Initial 40 hr RCRA		Annual Emergency Contingency Plan (ECP) Training	
ENVIRONMENTAL ENGINEER Alternate HW emergency coordinator; sampling and characterizing wastes; hazardous waste handling and cleanup; prepare drums and shipping papers and manifests for shipment; recordkeeping; training.	New Hire RCRA; Annual Onsite RCRA	Initial 40 hr RCRA	Full DOT HAZMAT-every 3 years	Annual ECP Training; HAZWOPER w/Annual refresher	
OPERATORS Hazardous waste handling and cleanup; prepare hazardous waste for shipment; prepare shipping papers and manifests for shipment; recordkeeping.	New Hire RCRA; Annual Onsite RCRA	Annual (job-specific) training	Full DOT HAZMAT-every 3 years	Annual ECP Training; HAZWOPER or RCRA training w/Annual refresher	
WATER TREATMENT OPERATORS Emergency Response	New Hire RCRA; Annual Onsite RCRA		DOT- Warehouse-every 3 years	Annual ECP Training; HAZWOPER w/Annual refresher	
ENVIRONMENTAL SPECIALIST Sampling and characterizing wastes; hazardous waste handling and cleanup; prepare drums and shipping papers and manifests for shipment; recordkeeping; training.	New Hire RCRA; Annual Onsite RCRA	Initial 40 hr RCRA Annual RCRA Refresher	Full DOT HAZMAT-every 3 years	Annual ECP Training; HAZWOPER w/Annual refresher	
ENVIRONMENTAL Technician Prepare shipping papers and manifests for shipment; recordkeeping; training.	New Hire RCRA; Annual Onsite RCRA		Full DOT HAZMAT-every 3 years	Annual ECP Training; HAZWOPER w/Annual refresher	

LQG Central Accumulation Closure

R315-262-17(a)(8)

- Rules for individual units and entire facility
- Notification
- Closure Performance Standards
- Post-closure care



**WASTE MANAGEMENT
& RADIATION CONTROL**

VSQG Consolidation

R315-262-17(f)

- Notifies the Director Using EPA Form 8700-12 and Identifies Which VSQGs are Participating
- Recordkeeping for Each Shipment – Normal Business Records
- Manages Consolidated Waste as LQG Hazardous Waste
- Adds Accumulation Start Date to Container Labels
- Biennial Reporting Will Use a Different Source Code for the VSQG Consolidated Waste to Distinguish from the LQG's Own Generated Waste



Frequent Hazardous Waste Violations

- * No Waste Determination – commercial products, unknowns, antifreeze
- * Containers – open, labeling
- * Training – not documented, no job descriptions or don't include hazardous waste duties, manifest signers not trained, type & amount of initial and continuing training not documented
- * Contingency Plan not current because emergency coordinator changed; contingency plan missing various elements
- * No quick reference guide
- * Manifest and LDR records incomplete



Questions?

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**WASTE MANAGEMENT
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