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
## Generator Category

**R315-262-13**

<table>
<thead>
<tr>
<th>Hazardous Waste Generated in a Calendar Month</th>
<th>Very Small Quantity Generator (VSQG)</th>
<th>Small Quantity Generator (SQG)</th>
<th>Large Quantity Generator (LQG)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute Hazardous Waste</strong></td>
<td>2.2 pounds/1 kg or less</td>
<td>2.2 pounds/1 kg or less</td>
<td>More than 2.2 pounds/1 kg</td>
</tr>
<tr>
<td><strong>Non-acute Hazardous Waste</strong></td>
<td>220 pounds/100 kg or less</td>
<td>More than 220 pounds/100 kg up to 2,200 pounds/1,000 kg</td>
<td>More than 2,200 pounds/1,000 kg</td>
</tr>
<tr>
<td>Hazardous waste #</td>
<td>Chemical abstracts #</td>
<td>Substance</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
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<td></td>
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<tr>
<td>P003</td>
<td>107-02-8</td>
<td>Acrolein</td>
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<td>P015</td>
<td>7440-41-7</td>
<td>Beryllium powder</td>
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<td>P042</td>
<td>51-43-4</td>
<td>Epinephrine</td>
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</tr>
<tr>
<td>P063</td>
<td>74-90-8</td>
<td>Hydrogen cyanide</td>
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</tr>
<tr>
<td>P089</td>
<td>56-38-2</td>
<td>Parathion</td>
<td></td>
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<tr>
<td>P094</td>
<td>298-02-2</td>
<td>Phosgene</td>
<td></td>
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<td>P095</td>
<td>75-44-5</td>
<td>Phosgene</td>
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<tr>
<td>P105</td>
<td>26628-22-8</td>
<td>Sodium azide</td>
<td></td>
</tr>
<tr>
<td>P106</td>
<td>143-33-9</td>
<td>Sodium cyanide</td>
<td></td>
</tr>
<tr>
<td>P108</td>
<td>157-24-9</td>
<td>Strychnine, &amp; salts</td>
<td></td>
</tr>
<tr>
<td>P001</td>
<td>181-81-2</td>
<td>Warfarin, &amp; salts, when present at concentrations greater than 0.3%</td>
<td></td>
</tr>
<tr>
<td>P064</td>
<td>624-83-9</td>
<td>Methyl isocyanate</td>
<td></td>
</tr>
<tr>
<td>P075</td>
<td>154-11-5</td>
<td>Nicotine, &amp; salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies).</td>
<td></td>
</tr>
<tr>
<td>P081</td>
<td>55-63-0</td>
<td>Nitroglycerine (R)</td>
<td></td>
</tr>
</tbody>
</table>
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

For a typical liquid hazardous waste, 100 kg (220 lbs) equals about half of a 55-gallon drum.
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
QUIZ
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
<table>
<thead>
<tr>
<th>chemical</th>
<th>density (lbs/gal)</th>
<th>VSQG Monthly 220 lbs to gal</th>
<th>VSQG total 2200 lbs to gal</th>
<th>VSQG total in 55 gal drums</th>
<th>SQG Monthly 2200 lbs to gal</th>
<th>SQG Monthly (drums)</th>
<th>SQG total 13228 lbs to gal</th>
<th>SQG total in 55 gal drums</th>
</tr>
</thead>
<tbody>
<tr>
<td>gasoline</td>
<td>6.30</td>
<td>34.9</td>
<td>349.2</td>
<td>6.3</td>
<td>349.2</td>
<td>6.3</td>
<td>2099.7</td>
<td>38.2</td>
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<tr>
<td>acetone</td>
<td>6.64</td>
<td>33.1</td>
<td>331.3</td>
<td>6.0</td>
<td>331.3</td>
<td>6.0</td>
<td>1992.2</td>
<td>36.2</td>
</tr>
<tr>
<td>methyl ethyl ketone (MEK)</td>
<td>6.74</td>
<td>32.6</td>
<td>326.4</td>
<td>5.9</td>
<td>326.4</td>
<td>5.9</td>
<td>1962.6</td>
<td>35.7</td>
</tr>
<tr>
<td>isopropyl alcohol (IPA)</td>
<td>6.82</td>
<td>32.3</td>
<td>322.6</td>
<td>5.9</td>
<td>322.6</td>
<td>5.9</td>
<td>1939.6</td>
<td>35.3</td>
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<tr>
<td>toluene</td>
<td>7.18</td>
<td>30.6</td>
<td>306.4</td>
<td>5.6</td>
<td>306.4</td>
<td>5.6</td>
<td>1842.3</td>
<td>33.5</td>
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<tr>
<td>water</td>
<td>8.33</td>
<td>26.4</td>
<td>264.1</td>
<td>4.8</td>
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<td>4.8</td>
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<td>28.9</td>
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<tr>
<td>glacial acetic acid</td>
<td>8.74</td>
<td>25.2</td>
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<td>methylene chloride</td>
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<td>trichloroethylene (vinyl chloride)</td>
<td>12.51</td>
<td>17.6</td>
<td>175.9</td>
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<td>perchloroethylene/tetrachloroethylene</td>
<td>13.46</td>
<td>16.3</td>
<td>163.4</td>
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VSQGs: Very Small Quantity Generators

ENVIRONMENTAL QUALITY
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
Hazardous Waste Determination

- Is it a solid waste?
  - Yes: Waste is hazardous and subject to subtitle C regulation
  - No: Is it an excluded waste?
    - Yes: Not subject to RCRA subtitle C
    - No: Does it meet a listing description?
      - Yes: Not subject to RCRA subtitle C
      - No: Does it exhibit a characteristic?
        - Yes: Waste is hazardous and subject to subtitle C regulation
        - No: Not subject to RCRA subtitle C
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
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
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 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
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SQG Requirements
R315-262-18

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

Manifest Requirements

- Use
- Recordkeeping
- Exception Reporting
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
SQG Requirements

Accumulation of Incompatible Wastes

- Not Placed in Same or Unwashed Containers
- Separated by Dike, Berm, Wall or Other Device
Labeling Requirements
At the Point of Generation

IGNITABLE
CORROSIVE
REACTIVE
TOXIC

EPA Characteristics
DOT Shipping Labels
OSHA GHS Pictograms
NFPA 704 Labels
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     PHONE
ADDRESS   STATE UT ZIP
CITY      
MANIFEST TRACKING NO.
MANIFEST TRACKING NO.
EPA WASTE NO.
EPA ID NO.

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

HANDLE WITH CARE!

ORANGE LABEL INDICATES THE CONTAINER IS A FLAMMABLE LIQUID.
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
ACUMULATION START DATE: 12/10/2007

EPA ID NO.: CTD000123456
EPA WASTE NO.: D002

WASTE: Corrosive Liquids, N.O.S. 8, UN 1700
III. (Sulfuric Acid, Hydrochloric Acid)

HANDLE WITH CARE!

WASTE MANAGEMENT & RADIATION CONTROL
SQG Central Accumulation Area
R315-262-16(b)

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

Inadequate

Adequate
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
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):

<table>
<thead>
<tr>
<th>Emergency Coordinator Name</th>
<th>Emergency Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Emergency Contacts:

<table>
<thead>
<tr>
<th>Emergency Contact</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Department <em>(unless direct alarm)</em></td>
<td></td>
</tr>
<tr>
<td>Police Department</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
</tr>
<tr>
<td>State Emergency/Spill Notification or Reporting</td>
<td>801-536-0200/801-536-4123</td>
</tr>
<tr>
<td>Local/Regional Notification or Reporting <em>(e.g., LEPC)</em></td>
<td></td>
</tr>
<tr>
<td>National Response Center <em>(24-Hour)</em></td>
<td>1.800.424.8802</td>
</tr>
</tbody>
</table>

Location of Emergency Response Equipment:

<table>
<thead>
<tr>
<th>Fire extinguishers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spill control material</td>
</tr>
<tr>
<td>Fire alarm <em>(if present)</em></td>
</tr>
</tbody>
</table>
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.
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

ENVIRONMENTAL QUALITY
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
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
Labeling Requirements At the Point of Generation
R315-262-15(a)

EPA Characteristics

DOT Shipping Labels

OSHA GHS Pictograms

NFPA 704 Labels
Labeling Requirements Prior to Shipping
R315-262-31 & 32
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
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 or Ignitable or Reactive Wastes: R315-265-198
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
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
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
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:

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

LQG Training
R315-262-17(a)(7)
<table>
<thead>
<tr>
<th>Job Title / Environmental Responsibilities</th>
<th>General Awareness</th>
<th>Job Specific RCRA</th>
<th>Job Specific Other*</th>
<th>Emergency Response</th>
<th>Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENTAL MANAGER</td>
<td>New Hire RCRA; Annual Onsite RCRA</td>
<td>Initial 40 hr RCRA</td>
<td>Full DOT HAZMAT-every 3 years</td>
<td>Annual Emergency Contingency Plan (ECP) Training</td>
<td></td>
</tr>
<tr>
<td>Primary HW emergency coordinator; sampling and characterizing wastes; hazardous waste handling and cleanup; prepare drums and shipping papers and manifests for shipment; recordkeeping; training.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL ENGINEER</td>
<td>New Hire RCRA; Annual Onsite RCRA</td>
<td>Initial 40 hr RCRA</td>
<td>Full DOT HAZMAT-every 3 years</td>
<td>Annual ECP Training; HAZWOPER w/Annual refresher</td>
<td></td>
</tr>
<tr>
<td>Alternate HW emergency coordinator; sampling and characterizing wastes; hazardous waste handling and cleanup; prepare drums and shipping papers and manifests for shipment; recordkeeping; training.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPERATORS</td>
<td>New Hire RCRA; Annual Onsite RCRA</td>
<td>Annual (job-specific) training</td>
<td>Full DOT HAZMAT-every 3 years</td>
<td>Annual ECP Training; HAZWOPER or RCRA training w/Annual refresher</td>
<td></td>
</tr>
<tr>
<td>Hazardous waste handling and cleanup; prepare hazardous waste for shipment; prepare shipping papers and manifests for shipment; recordkeeping.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATER TREATMENT OPERATORS</td>
<td>New Hire RCRA; Annual Onsite RCRA</td>
<td></td>
<td>DOT-Warehouse-every 3 years</td>
<td>Annual ECP Training; HAZWOPER w/Annual refresher</td>
<td></td>
</tr>
<tr>
<td>Emergency Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL SPECIALIST</td>
<td>New Hire RCRA; Annual Onsite RCRA</td>
<td>Initial 40 hr RCRA</td>
<td>Full DOT HAZMAT-every 3 years</td>
<td>Annual ECP Training; HAZWOPER w/Annual refresher</td>
<td></td>
</tr>
<tr>
<td>Sampling and characterizing wastes; hazardous waste handling and cleanup; prepare drums and shipping papers and manifests for shipment; recordkeeping; training.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL Technician</td>
<td>New Hire RCRA; Annual Onsite RCRA</td>
<td></td>
<td>Full DOT HAZMAT-every 3 years</td>
<td>Annual ECP Training; HAZWOPER w/Annual refresher</td>
<td></td>
</tr>
<tr>
<td>Prepare shipping papers and manifests for shipment; recordkeeping; training.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LQG Central Accumulation Closure

R315-262-17(a)(8)

- Rules for individual units and entire facility
- Notification
- Closure Performance Standards
- Post-closure care
VSOQG Consolidation
R315-262-17(f)

- Notifies the Director Using EPA Form 8700-12 and Identifies Which VSOQGs 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 VSOQG 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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(801)-536-0255