RCRA 101 WEBINAR AT 10:00

Housekeeping Issues:

PLEASE PUT YOUR phone on "MUTE" because background noise IS VERY disruptive. Papers shuffling, keyboard clicks, etc. are picked up on phones.

PLEASE DO NOT put your phone on "hold" during the webinar, as much as we all love music, it's a bit distracting while conducting a webinar.

Please email me questions: Janine.Kraemer@state.nm.us

New Mexico Environment Department

RCRA 101

Janine Kraemer
Program Manager
Hazardous Waste Bureau

Environmental Rules

- **Clean Air Act (CAA) - 1970**
- **Clean Water Act (CWA) - 1972**
- **Safe Drinking Water Act (SDWA) - 1974**
- **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) - 1975**
- **Toxic Substances Control Act (TSCA)-1976**
- **Resource Conservation and Recovery Act (RCRA)-1976/1984**
- **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-1980**
- **SARA/EPCRA-1986 *"Community Right to Know"***

These are environmental laws under the jurisdiction of the U.S. Environmental Protection Agency

RCRA

- **Resource Conservation and Recovery Act- 1976**
- **Hazardous & Solid Waste Amendments Act - 1984**
- **Create cradle to grave liability**
- **Provide standards for hazardous waste generators, transporters, and treatment, storage and disposal facilities (TSD)**
- **Ensure wastes that are land disposed meet either concentration based or treatment based standards**

No, it is not an acronym for
"Really Confusing Regulations Act."

New Mexico Environment Department
Hazardous Waste Bureau

- **Hazardous Waste Act (HWA), New Mexico Statutory Authority (NMSA) 1978, 4-4-1 through 74-4-14**
- **Hazardous Waste Management Regulation, 20.4.1 New Mexico Administrative Code (NMAC) Amended 2018**
- **Annual Hazardous Waste Fees Regulation 20.4.3 NMAC**

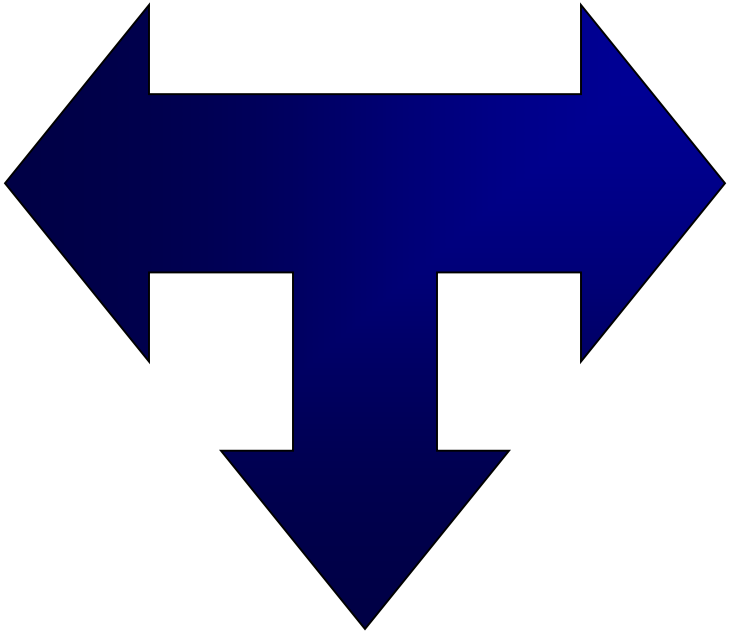
https://www.env.nm.gov/

What is a Waste?

Spent, can't be used again, inherently waste-like, or abandoned

TYPES OF WASTES

Trash, Garbage, Yard Waste



Regulated Non-Hazardous Wastes

Hazardous Wastes

Regulated Non-Hazardous Waste

Industrial waste water

Sewage

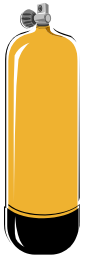
Storm water

Tires

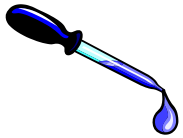
Solid Waste

IS A SOLID WASTE SOLID?

- Liquids



- Gases



- Solids

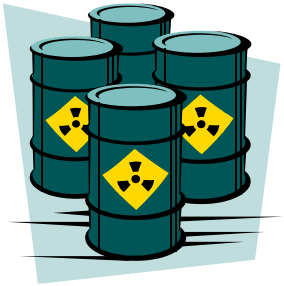
EXEMPTIONS

- Domestic sewage or if mixed with other wastes discharged to a POTW
- Industrial waste discharges regulated under Clean Water Act

Solid Wastes which are *not* Hazardous Wastes

Household Waste

Nuclear Waste



Bio Medical

Laboratory Samples

(until testing complete)

Some Mining Waste (Bevill)

Other Non-Hazardous Wastes when Recycled /Reclaimed ….

- **Universal Wastes Includes:**
  - **Light Bulbs Excluding Incandescent**
  - **Other Mercury Devices**
  - **Certain Pesticides**
  - **Batteries Excluding Alkaline**
- **Used Oil**
- **Aerosol Cans (NM)**

What is a Hazardous Waste?

- **Must be a solid waste (40 CFR 261.2)**
- **Not excluded from regulation (40 CFR 261.4)**
- **Listed**
  - **Non Specific Sources**
  - **Specific Sources**
  - **Commercial Chemicals**
- **Characteristic**
  - **Ignitability**
  - **Corrosivity**
  - **Reactivity**
  - **Toxicity**

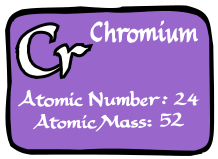
Characteristic Hazardous Waste (D-codes)

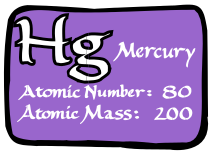
Ignitibility – D001: **Flash point less than140°F or greater than 24% alcohol**

Corrosivity – D002: **pH less than or equal to 2 or greater than or equal to 12.5**

Reactivity – D003: **Normally unstable readily undergoes violent change or reacts violently with water or explosive**

Toxicity -D004-D043: **Toxicity must be over TCLP levels. Toxicity is determined by TCLP test for presence of 40 chemicals.**



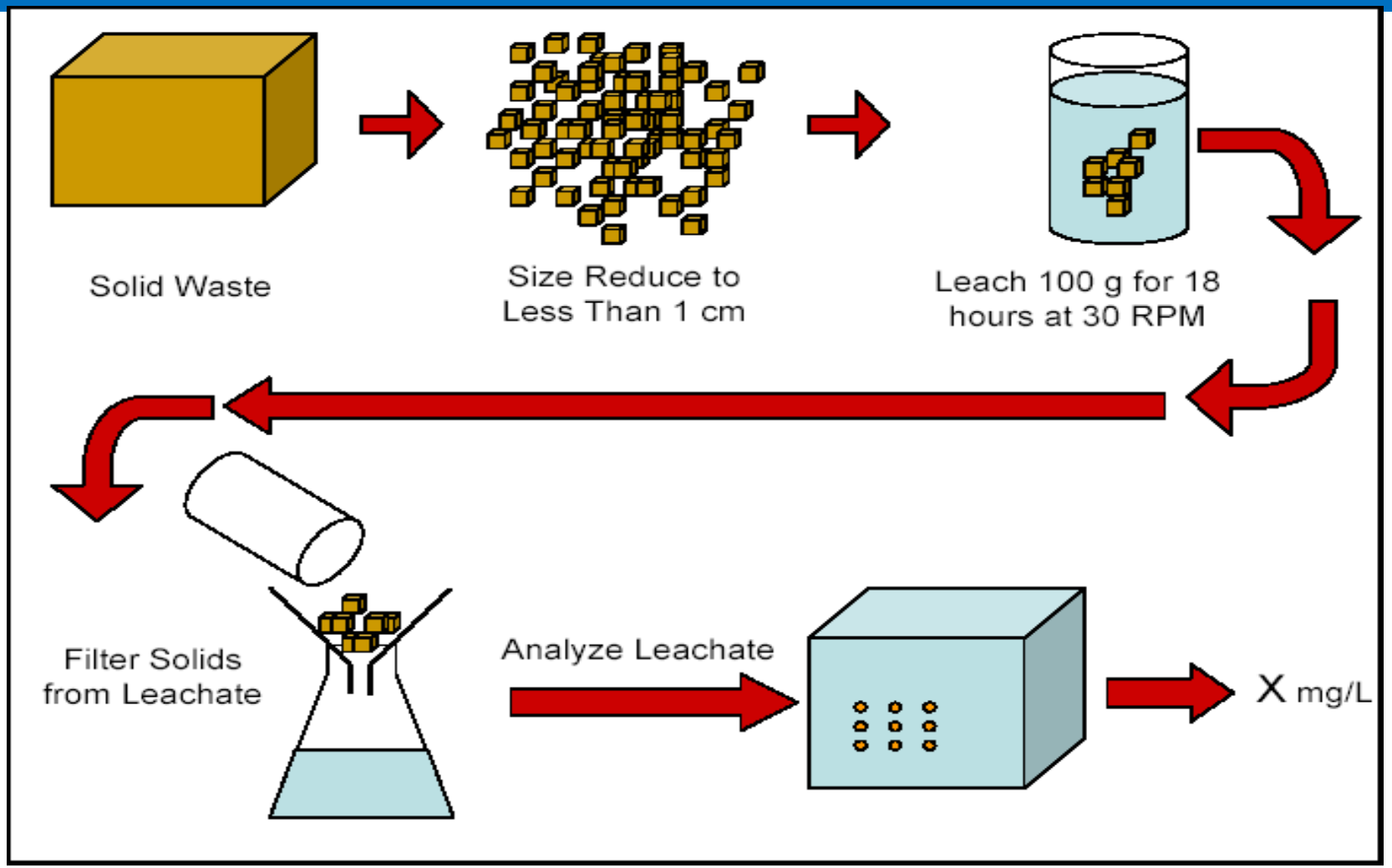


TCLP CONCENTRATIONS
40 CFR 261.24 (TABLE 1)

MAXIMUM CONCENTRATION OF CONTAMINANTS FOR TOXCITY CHARACTERISTICS

EPA HW Code	Contaminant	CAS No.	Regulatory level (mg/L)	EPA HW Code	Contaminant	CAS No.	Regulatory level (mg/L)
D004	Arsenic	7440-38-2	5.0	D032	Hexachlorobenzene	118-74-1	0.13
D005	Barium	7440-39-3	100.0	D033	Hexachlorobutadiene	87-68-3	0.5
D018	Benzene	71-43-2	0.5	D034	Hexachloroethane	67-72-1	3.0
D006	Cadmium	7440-43-9	1.0	D008	Lead	7439-92-1	5.0
D019	Carbon Tetrachloride	56-23-5	0.5	D013	Lindane	58-89-9	0.4
D020	Chlordane	57-74-9	0.03	D009	Mercury	7439-97-6	0.2
D021	Chlorobenzene	108-90-7	100.0	D014	Methoxychlor	72-43-5	10.0
D022	Chloroform	67-66-3	6.0	D035	Methyl ethyl ketone	78-93-3	200.0
D007	Chromium	7440-47-3	5.0	D036	Nitrobenzene	98-95-3	2.0
D023	o-Cresol	95-48-7	200.0	D037	Pentrachlorophenol	87-86-5	100.0
D024	m-Cresol	108-39-4	200.0	D038	Pyridine	110-86-1	5.0
D025	p-Cresol	106-44-5	200.0	D010	Selenium	7782-49-2	1.0
D026	Cresol (total)		200.0	D011	Silver	7440-22-4	5.0
D016	2,4-D	94-75-7	10.0	D039	Tetrachloroethylene	127-18-4	0.7
D027	1,4-Dichlorobenzene	106-46-7	7.5	D015	Toxaphene	8001-35-2	0.5
D028	1,2-Dichloroethane	107-06-2	0.5	D040	Trichloroethylene	79-01-6	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7	D041	2,4,5-Trichlorophenol	95-95-4	400.0
D030	2,4-Dinitrotoluene	121-14-2	0.13	D042	2,4,6-Trichlorophenol	88-06-2	2.0
D012	Endrin	72-20-8	0.02	D017	2,4,5-TP (Silvex)	93-72-1	1.0
D031	Heptachlor	76-44-8	0.008	D043	Vinyl Chloride	75-01-4	0.2

Basic TCLP
(Toxicity Characteristic Leaching Procedure)



From – Tim Townsend, Ph.D., P.E., University of Florida

Hazardous Wastes

Common Characteristic Wastes:

- Fixer waste (silver-D011)
- Spent solvents from parts washers (ignitability-D001)
- Incinerator ash (metals)
- Caustic/acid solutions (corrosivity-D002)
- Oxygen canisters (reactivity-D003, metals D005)
- Blasting media wastes (metals)


HAZARDOUS
WASTE
14 10:57 AM


14 11:47 AM


14 10:59 AM

Listed Hazardous Waste

- **F List – F001-F028: Wastes from non-specific sources, i.e. spent solvents.**

- **K List – K001-K172: Wastes from specific sources i.e. sludges and distillation bottoms from wood preserving and petroleum refining.**

- **P (acutely toxic) or U (toxic)List: Pure chemical that is discarded, spilled, off specification or container residue.**

Hazardous Wastes

Common Listed Wastes:

- Paint/debris related wastes (F001-F005)
- Spent solvents (F001-F005)
- Off-spec chemicals (laboratory) (P & U list)
- Rags contaminated with listed solvents (F001-F005)
- Electroplating sludges (F007-F019)

Entities in RCRA

- Generators
  - Conditionally Exempt Small Quantity Generators (CESQG)
  - Small Quantity Generators (SQG)
  - Large Quantity Generators (LQG)

- Transporters
- Transfer Facilities
- Treatment, Storage & Disposal Facilities (TSD)

Generator Status by Month

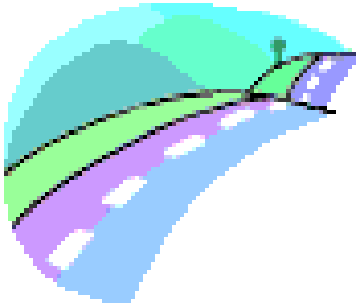
- **Must count the waste in the month it was generated**

CAN NOT BE AVERAGED

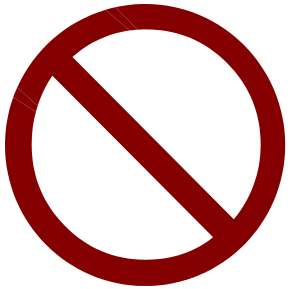
- **Must meet the standards for that generator size for that month**

To Determine Generator Size

Count Hazardous Waste That:



- Is Transported Off-Site for Treatment, Storage, or Disposal
- Is Treated On-Site
- Is Accumulated Prior to Recycling, Transporting, Treatment or Disposal

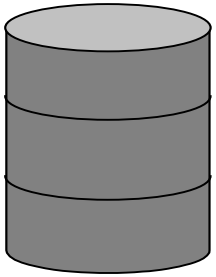


Don't Count:

- Spent Lead Acid Batteries sent for reclamation
- Used Oil that has not been mixed with Hazardous Waste and is recycled
- Fluorescent bulbs sent for recycling

Very Small Quantity Generators

- **Generates no more than 100 kg (220 lbs) of hazardous waste per month. Approximately half of a 55-gallon drum, or about 25 gallons.**
- **Generates less than 1kg (2.2 lbs) of acutely toxic hazardous wastes (P-listed) i.e. arsenic and cyanide compounds) per month**
- **Never accumulates on site more than 1000 kg (2200 lbs) of hazardous waste at any time.**



½ drum

VSQG

Important VSQG Requirements

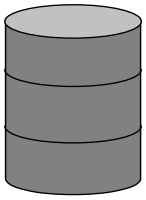
- **Perform Hazardous Waste Determination**
  - **Safety Data Sheets (SDS)**
  - **Laboratory analysis**
- **Ensure Delivery of Hazardous Wastes to Proper Handling Facility**
- **Generates less than 220 per month or accumulates less than 2200 pounds on site**

Examples of VSQG Facilities

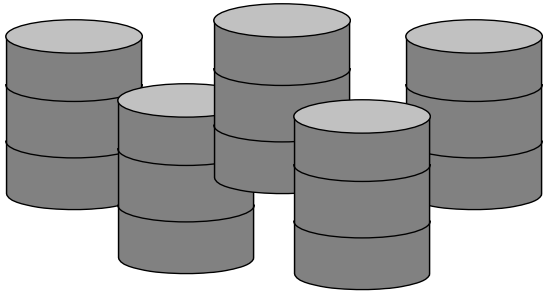
- Salvage Yards
- General Automotive Garages
- Retail Stores
- Middle and High Schools
- Dry Cleaners
- Printers
- Heavy Equipment Maintenance

Small Quantity Generators

- **Generates more than 100 kg (220 lbs), but less than 1000 kg (2200 lbs) of hazardous waste per month. Approximately one half of a drum to 5 drums.**
- **Generates less than 1 kg (2.2 lbs) of acutely toxic hazardous wastes per month.**
- **Never exceeds the 6000 kg (13,200 lbs)/ 180 day storage time limit.**



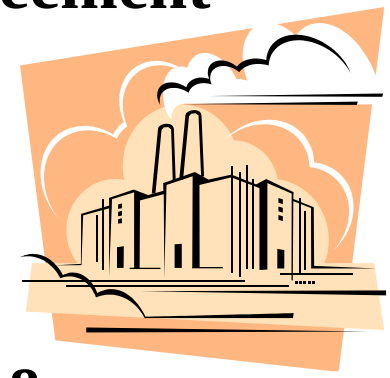
½ drum to 5 drums



SQG

Important SQG Management Standards

- Obtain EPA ID Number
- Use Manifest System Unless Reclamation Agreement Is Established
- Keep Records for Three Years
- Label & Date Hazardous Wastes Properly
- Have a Modified Contingency Plan
- Train Personnel About Proper HW Handling & Emergency Response
- Meet Tank Requirements
- Meet Satellite Accumulation Requirements
- Renotify every 4 years starting in 2021



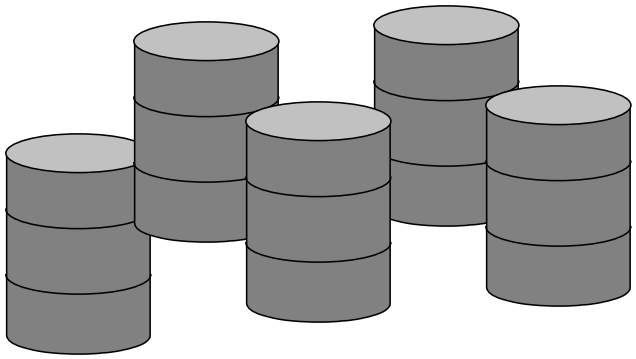
Examples of SQG Facilities

- Electroplaters
- Car Dealerships w/ Paint and Body Shops
- Hospitals
- Colleges and Universities
- Environmental Laboratories
- Pathology Laboratories

Large Quantity Generators

- **Generates more than 1000 kg (2200 lbs) of hazardous waste per month. Approximately greater than 5 drums.**
- **Generates more than 1 kg (2.2 lbs) of acutely hazardous waste per month.**
- **Never stores hazardous waste greater than 90 days.**

Over 5 drums



LQG

Important LQG Management Standards

- SQG requirements plus ……..
- Do Not Store HW > 90 Days
- Annual training for employees managing hazardous waste
- File Biennial Report by March 1 of each even numbered year
- Maintain Emergency Equipment
- Expanded Contingency Plan
- Quick Reference Guide

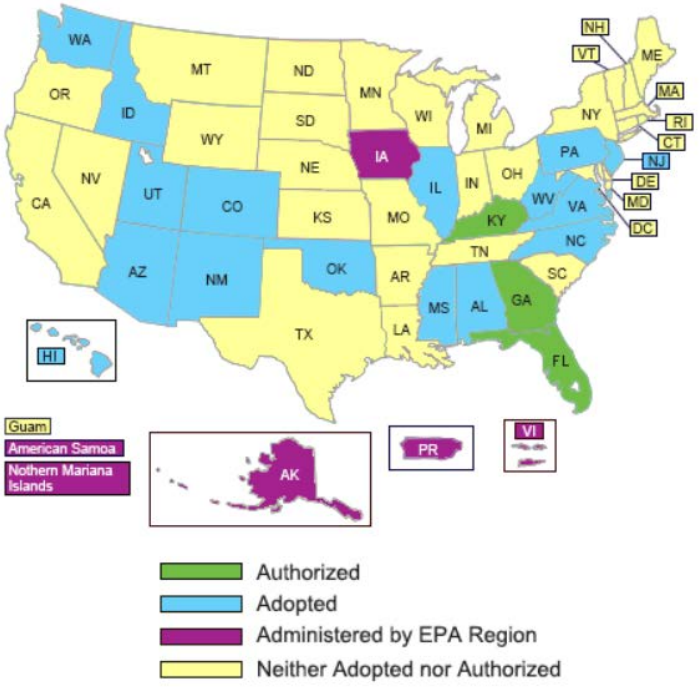
Examples of LQG Facilities

- Airplane Painting Companies
- Pharmaceutical Manufacturers
- Chemical Manufacturers
- Hospitals
- DOD Facilities
- Universities

Generator Improvement Rule

(GIR)

Adopted by NMED December 1, 2018



REORGANIZATION OF GENERATOR RULES

Provision	Previous Citation	New Citation
Generator Category Determination	§ 261.5(c)-(e)	§ 262.13
VSQG Provisions	§ 261.5(a), (b), (f), (g) (261.5 now Reserved status)	§ 262.14
SQG Provisions	§ 262.34(d)-(f) (All 262.34 Reserved status)	§ 262.16
LQG Provisions	§ 262.34(a), (b), (g)-(i), (m)	§ 262.17
EPA Identification Numbers	§ 262.12 (now Reserved status)	§ 262.18 (includes SQG Re-Notification)

Crosswalk of "Old" Regulations to Reorganized Regulations

Table 1-Definitions and General Standards

Regulation	Previous Citation	New Citation	Comment
Definitions of Generator Categories	§ 260.10, § 261.5 and § 262.34	§ 260.10	Previous definition of SQG in § 260.10 was outdated. Generator categories were based on § 261.5 and § 262.34.
Hazardous Waste Limits for VSQG	§ 261.5(a) and (e)	§ 260.10	Included in the new definition of VSQG
Purpose Scope, and Applicability	§ 262.10	§ 262.10	Not moved but expanded significantly
Hazardous Determination and Recordkeeping	§ 262.11 and § 262.40(c)	§ 262.11	Content in § 262.11 is expanded and § 262.40(c) is incorporated
Generator Category Determination	§ 261.5(c), (d), and (h)-(j)	§ 262.13	New section that explains how to count hazardous waste to determine generator category
EPA Identification Numbers	§ 262.12	§ 262.18	Re-notification requirements are also in this section
Landfill Ban for Liquids	§ 258.28	§ 262.35	For SQGs and LQGs

Crosswalk of "Old" Regulations to Reorganized Regulations

Table 2-Very Small Quantity Generator Regulations

Regulations	Previous Citation	New Citation	Comment
VSQG Definition	§ 261.5(a)	§ 260.10	Moved into new definition of VSQG
VSQG Mixtures	§ 261.5(h)-(j)	§ 262.13(f)	Moved into Generator category determination
Conditions for Exemption for a Very Small Quantity Generator	§ 261.5(b), (f), and (g)	§ 262.14	Included in VSQG conditions for exemption
VSQG Consolidation by LQGs within the Same Company	N/A	§ 262.14(a)(5)(viii)	New provision
Landfill Ban for Liquids	§ 258.28	§ 262.14(b)	Specific citation for VSQGs
Episodic Generation	N/A	Part 262 subpart L	New provision

Crosswalk of "Old" Regulations to Reorganized Regulations

Table 3-Satellelite Accumulation Area Regulations

Regulations	Previous Citation	New Citation	Comment
Satellite Accumulation Area Provisions	§ 262.34(c)	§ 262.15	Moved from § 262.34
Selected Part 265 Subpart I Provisions	§ 265.171	§ 262.15(a)(1)	Duplicated from part 265
Selected Part 265 Subpart I Provisions	§ 265.172	§ 262.15(a)(2)	Duplicated from part 265
Selected Part 265 Subpart I Provisions	§ 265.173(a)	§ 262.15(a)(4)	Duplicated from part 265

Crosswalk of "Old" Regulations to Reorganized Regulations

Table 4-Small Quantity Generator (SQG) Regulations

Regulations	Previous Citation	New Citation	Comment
Definition of SQG	§ 262.34(d)	§ 260.10	Moved into new definition of SQG
Accumulation Time Limit	§ 262.34(d)	§ 262.16(b)	Moved
Accumulation Limit	§ 262.34(d)(1)	§ 262.16(b)(1)	Moved
Accumulation in Containers-open, inspections, condition	§ 262.34(d)(2) references 265 subpart I	§ 262.16(b)(2)	Duplicated from part 265
Accumulation in Tanks	§ 262.34(d)(3) references 265 subpart J	§ 262.16(b)(3)	Duplicated from part 265
Accumulation in Containment Buildings	NA	§ 262.16(b)(5) references 265 subpart DD	No previous regulatory reference for SQGs using containment buildings
Marking of Tanks and Containers	§ 262.34(d)(4) references § 262.34(a)(2) and (3)	§ 262.16(b)(6)	Copied from § 262.34 with some changes
Preparedness and Prevention	§ 262.34(d)(4) references 265 subpart C and §262.34(d)(5)	§ 262.16(b)(8) and (9)	Duplicated from part 265 and moved from § 262.34
Land Disposal Restrictions	§ 262.34(d)(4) references § 268	§ 262.16(b)(7)	There is still a cross reference to part 268
Episodic Generation	N/A	Part 262 subpart L	New provision

Crosswalk of "Old" Regulations to Reorganized Regulations

Table 5-Large Quantity Generator (LQG) Regulations

Regulations	Previous Citation	New Citation	Comment
Definition of LQG	N/A	§ 260.10	New definition
Accumulation Time Limit	§ 262.34(a)	§ 262.17(a)	Moved from § 262.34
Accumulation in Containers-open, inspections, condition, etc.	§ 262.34(a)(l)(ii) references part 265 subparts I, AA, BB, CC	§ 262.17(a)(l) which also references part 265 subparts AA, BB, CC	Cross-reference to part 265 subparts AA, BB, CC because of the length of these regulations
Accumulation in Tanks	§ 262.34(a)(l)(ii) references part 265 subparts J, AA, BB, & CC	§ 262.17(a)(2) references part 265 subparts J, AA, BB, CC	Cross-reference to part 265 subparts J, AA, BB, CC because of the length of these regulations
Accumulation in Containment Buildings	§ 262.34(a)(l)(iv) which also references part 265 subpart DD	§ 262.17(a)(4) which also references part 265 subpart DD	Accumulation times, labeling, and recordkeeping in § 262.17. Technical standards remain in part 265
Marking and Labeling	§ 262.34(a)(2) and (3)	§ 262.17(a)(5)	Moved from § 262.34
Preparedness, Prevention, and Emergency	§ 262.34(a)(4) references 265 subparts C&D	§ 262.17(a)(6) references part 262 subpart M	Cross-references but to a new subpart of the generator regulations

Crosswalk of "Old" Regulations to Reorganized Regulations

Table 5-Large Quantity Generator (LQG) Regulations (continued)

Regulations	Previous Citation	New Citation	Comment
Personnel Training	§ 262.34(a)(4)	§ 262.17(a)(7)	Moved from § 262.34
Closure	§ 262.34(a)(l)(iv)(B) references § 265.111 and **§** 265.114. **§** 265.111 references other parts in 265	§ 262.17(a)(8)	Duplicated from § 265.11 and 114 with some revisions
Land Disposal Restrictions	§ 262.34(a)(4) references part 268	§ 262.17(a)(9)	There is still a cross-reference to part 268
Extension of Accumulation Times	§ 262.34(b)	§ 262.17(b)	Moved from § 262.34
Accepting waste from VSQGs under control of the same person	N/A	§ 262.17(f)	New provision

Major Changes:

More stringent provisions:

- **SQG re-notification starting in 2021 every 4 years**
- **Satellite Accumulation Areas subject to emergency preparedness & prevention requirements**
- **Hazards must be identified on wastes being accumulated with labels on containers**
- **RCRA waste codes added to labels prior to shipment**
- **Notification of closure**
- **Closure as a landfill for LQGs accumulating hazardous wastes in containers that cannot meet closure performance standards**
- **Biennial reporting for whole year, not just months the generator is an LQG**
- **Quick Reference Guide requirement**
- **Placement of any liquids in a landfill is prohibited**

Major Changes (continued):

Less stringent provisions:

- VSQG consolidation
- Episodic generation
- Waiver from 50-foot rule for ignitable or reactive waste storage from the authority having jurisdiction over the fire code (e.g., fire marshal or fire department).

Misc. changes:

- Conditionally Exempt Small Quantity Generator (CESQG) renamed Very Small Quantity Generator (VSQG)
- Conduct proper waste determination and document it
- Central Accumulation Areas (CAA) = 90-day or 180-day Storage Areas
- LQGs can use on-line/computer based training

§ 262.35
Liquids in a Landfill

The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

Hazardous Waste Determinations
40 CFR § 262.11

Hazardous Waste Determinations: What Changed?

- Clarifies and emphasizes that waste determinations must be accurate!
- Confirms <u>when</u> a generator's hazardous waste determination must be made
- Elaborates on <u>how</u> to determine if a solid waste is either a listed and/or characteristic hazardous waste
- Reiterates <u>what</u> waste determination records must be kept
- Small quantity generators and large quantity generators must identify all applicable EPA hazardous waste codes in subparts C and D of § 261

§ 262.11(a): Hazardous Waste Determination

The hazardous waste determination must be made at the point of waste generation.

The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.

Hazardous Waste Determinations (continued):

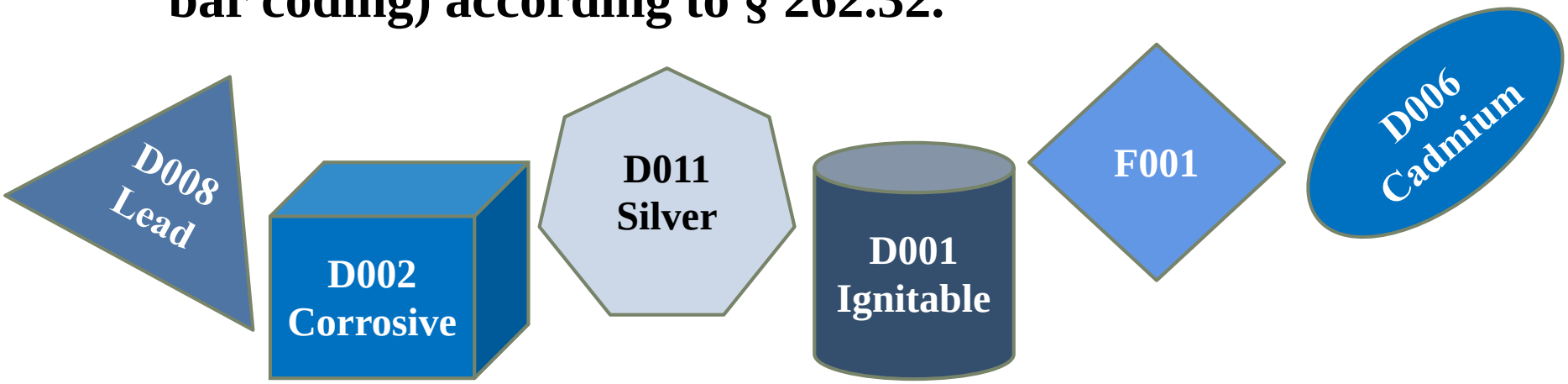
- Generators may also take conservative approach and manage non-HW as HW if they so choose
- For waste where they are awaiting test results, the generator needs to manage as HW until they get confirmation

➡ If it's not HW, simply remove the labels and manage as non-hazardous solid waste

§ 262.11(g): Hazardous Waste Determination

RCRA Waste Codes

- If the waste is determined to be hazardous, small quantity generators and large quantity generators must identify all applicable EPA hazardous waste codes in subparts C and D of § 261.
- Prior to shipping the waste off site, the generator also must mark its containers with all applicable EPA hazardous waste codes or use electronic means (such as bar coding) according to § 262.32.



Marking and Labeling
SQGs: 40 CFR § 262.16(b)(6)
LQGs: 40 CFR § 262.17(a)(5)

Marking and Labeling What Changed?

Containers and tanks labels must have the words "Hazardous Waste" and also indicate the hazards of the contents of the accumulation units.

Some flexibility as to how to comply with this new provision. The hazards of the contents of the container can be demonstrated by using any of several established labeling methods such as:

- **DOT hazard communication**
- **OSHA hazard statement or pictogram**
- **NFPA chemical hazard label**
- **RCRA characteristic**

Marking and Labeling: Examples that indicate the "Hazards"

Global Harmonizing System labels:
(OSHA 29 CFR 1910.1200)

Use applicable hazardous waste characteristic labels (i.e., ignitable, corrosive, reactive, toxic)

Marking and Labeling: Examples that indicate the "Hazards"

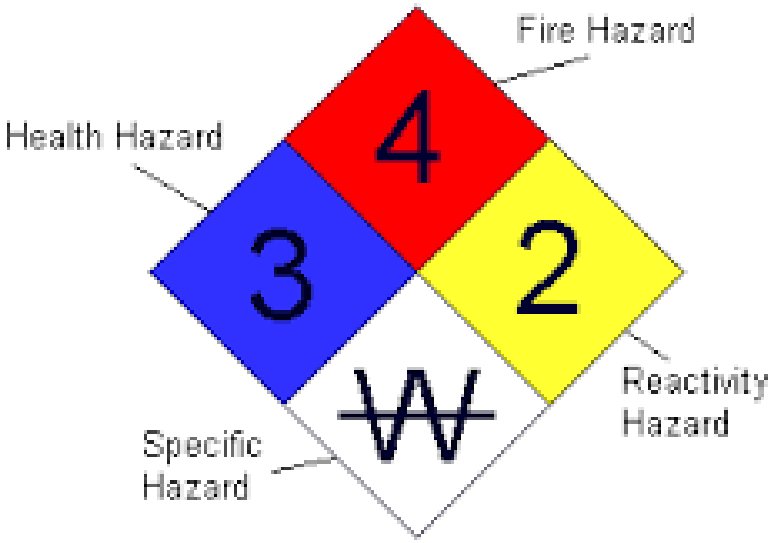
Department of Transportation labels
(49 CFR172 subpart E – labeling/subpart F – placarding)

Use applicable hazardous waste characteristic labels (i.e., ignitable, corrosive, reactive, toxic)

Marking and Labeling: Examples that indicate the "Hazards"

National Fire Protection Association labels

(Code 704)



Use applicable hazardous waste characteristic labels (i.e., ignitable, corrosive, reactive, toxic)

Marking and Labeling (continued)

Some clarifications:

- **Labeling should occur at the initial point of generation**
- **For containers with small containers inside (e.g., tubes, vials, etc.), generators can mark the outer/ secondary container or attach a tag with the required information**
- **Containers must have hazard labels related the actual hazards of the chemicals in the container**
- **For wastes in a container that already has appropriate labeling (e.g., a commercial chemical product in its original container with an intact label), the existing labeling is sufficient, provided it indicates the hazards of the chemical and the words "Hazardous Waste"**

Satellite Accumulation Areas
“SAA”
40 CFR § 262.15

Satellite Accumulation Area
What Changed?

- **SAA standards are now in own part of the rule - §262.15**
- **Hazardous wastes cannot be mixed or placed in a container with other hazardous wastes that are incompatible**
- **Allow containers to remain open temporarily under limited circumstances, when necessary for safe operations**
- **Provides maximum weight (1 kg) in addition to volume (1 quart) for acute hazardous waste**
- **Required safety equipment and testing**
- **Labeled with the words “Hazardous Waste” and the hazards**

Satellite Accumulation Area
What Changed (continued)?

- **Emergency Coordinator (EC) posting**
- **Training required for proper waste handling and emergency procedures**
- **Internal communications, alarms, phones, hand-held radios**
- **Clarifies “three days” means three consecutive calendar days for when waste must be moved to CAA**
- **Rescinds memo allowing reactive hazardous waste to be stored away from the point of generation. If waste is so dangerous it needs to be stored separately, then it needs to go directly to the CAA**
- **Basically, manage SAA like the central accumulation area**

Preamble Clarifications for SAAs

"Under the Control of the Operator" means:

- The operator is someone familiar with the operations generating the HW
- Is aware of and able to attend to these operations, if needed
- Provides some measure of controlled access

Examples of under the control of an operator:

- The operator controls access to SAA by access card, key, or lock box
- The operator accumulates waste in a locked cabinet and controls access to the key (even if access to the room is not controlled)
- The operator is regularly in view of the SAA
- The operator is able to see if anyone enters or exits the SAA

*** There can be more than one operator having control of the SAA**

Unplanned

NEW

Planned

Episodic Generation
40 CFR Subpart L
262.230-262.233

Unplanned

Planned

Planned

Unplanned

Planned

40 CFR Part 262 Subpart L: Episodic Generation

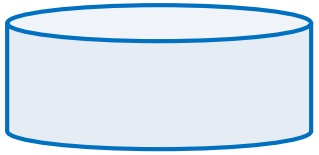
- **Applicable to VSQGs and SQGs.**
- **§ 262.13(c)(8) states that hazardous waste managed as part of an episodic event does not have to be counted toward a generator's category**
- **Allows generators to temporarily change their generator category as a result of an episodic event and operate under streamlined regulations.**
- **All hazardous waste from episodic events must be shipped by hazardous waste transporter with a hazardous waste manifest to a RCRA-designated facility.**

Part 262 Subpart L: Episodic Generation

What is an Episodic Event (§ 262.231)?

An activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.

- ***Planned episodic event:*** **means an event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory**



- ***Unplanned episodic event:*** **means an event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or "acts of nature," such as tornado, hurricane, or flood**

Part 262 Subpart L: Episodic Generation

Events Per Year

- One episodic event per year + one opportunity to petition EPA/ authorized state for a second event
- A generator can complete multiple projects during the time limit for the episodic event
- Petition process allows a <u>total of 1 unplanned and 1 planned event per year</u>.

  For example:

  - A generator conducts a clean out in the spring and then has an unexpected recall in October
  - A generator plans a small episodic project for the fall but a hurricane causes facility damage in July

Part 262 Subpart L: Episodic Generation

Duration of an Episodic Event

- The first day of an episodic event is the first day of generation of waste for the event - for an unplanned event, this is the first day of the storm, spill, other unexpected event. An episodic event can last 60 days
- All hazardous waste must be shipped off site by the end of 60 days or that waste counts toward the generator's category and must be managed under the regulations for that category of generator
- Time frame should allow waste from unplanned events to be characterized and allow arrangements for disposal to be made

Part 262 Subpart L: Episodic Generation

Notification

- Both VSQGs and SQGs must notify about episodic events using Site ID form (EPA form 8700-12)
- Planned event: notify 30 or more days prior to the episodic event on Site ID form
- Unplanned event: notify within 72 hours of the event by phone or email and follow up with Site Id form

Part 262 Subpart L: Episodic Generation

Notification elements

- A VSQG must get an EPA ID number
- Start and end dates of the episodic event (no more than 60 calendar days)
- Reason for the event
- Types of hazardous waste
- Estimated quantities of hazardous waste
- Emergency coordinator contact information

Part 262 Subpart L: Episodic Generation

VSQGs-Hazardous Waste Accumulation Standards

- Marking and labeling:
  - "Episodic hazardous waste;"
  - An indication of the hazards of the contents; and the date the episodic event began
- Minimize the possibility of an accident or release
- Containers should be in good condition, chemically compatible with contents, and kept closed
- Treatment is not allowed by VSQGs (except in an on-site elementary neutralization unit).

Part 262 Subpart L: Episodic Generation

SQGs-Hazardous Waste Accumulation Standards

- **Marking and labeling:**
  - **"Episodic Hazardous Waste;"**
  - **An indication of the hazards of the contents and the date the episodic event began**
- **All conditions of § 262.16 (e.g., container and tank standards, employee training, emergency preparedness and prevention)**

Part 262 Subpart L: Episodic Generation

VSQG and SQG-Recordkeeping:

Records must be kept for 3 years from the completion of each event that include the following:

- **Beginning and end date of the episodic event**
- **A description of the episodic event**
- **Types of hazardous wastes generated**
- **Quantities of hazardous wastes generated**
- **The name of the RCRA-designated facility or facilities that received the hazardous waste**
- **Name of the hazardous waste transporter(s)**
- **Approval letter from EPA if a petition was submitted and approved for a second event**

Copies of the notification form and the hazardous waste manifest cover most of the elements.

Part 262 Subpart L: Episodic Generation

Petition Requirements for a Second Event:

- **Made in writing**
- **Include the following information:**
  - **reason for the event;**
  - **nature of the event;**
  - **estimated amount of hazardous waste to be managed;**
  - **how the waste will be managed;**
  - **estimated length of the episodic event; and**
  - **information about the previous event in the calendar year**

Part 262 Subpart L: Episodic Generation

Petition Requirements for a Second Event (continued):

Planned event

- Petition submitted to NMED 30 or more days prior to the event
- Generator may not manage hazardous waste from a planned second episodic event until approval is received on its petition

Unplanned event

- NMED must be notified within 72 hours by phone or email, followed by submittal of 8700-12 and an indication that this is a petition for a second event
- Generators can manage hazardous waste from an unplanned second episodic event under subpart L while waiting for approval of its petition
- If petition is denied, generator must manage hazardous waste under the regulations for the applicable generator category.

NEW

VSQG Waste Consolidation at LQGs § 262.14(a)(5)(viii)

§ 262.14(a)(5)(viii): VSQG Waste Consolidation at LQGs

Consolidate waste at LQG under the control of the same person:

- **Person – as defined under RCRA in § 260.10 - means an individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body**
- **Control – means the power to direct policies at the facility**

§ 262.14(a)(5)(viii): VSQG Waste Consolidation at LQGs

VSQG requirements:

- **Labels waste containers as "Hazardous Waste" and the hazards**

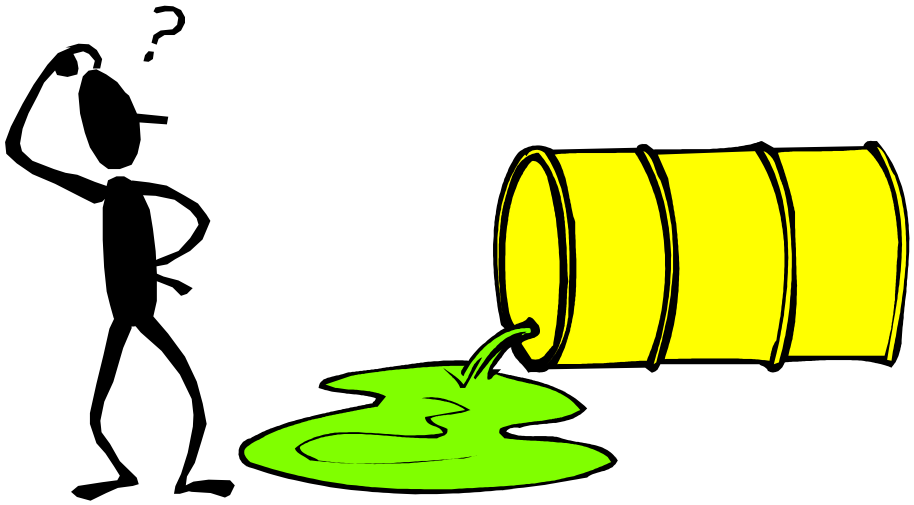
LQG requirements:

- **Notifies NMED on Site ID Form and identifies which VSQGs are participating**
- **Recordkeeping for each shipment – normal business records**
- **Adds accumulation start date to VSQG HW labels when arrives at LQG facility**
- **Manages consolidated waste as LQG hazardous waste including ensuring final treatment or disposal is at a RCRA-designated facility**
- **Reports in Biennial Report – there will be a different source code (G51) for the VSQG consolidated waste to distinguish from the LQG's own generated waste**

Does not allow SQGs to consolidate VSQG waste; however, an SQG can participate if they notify and meet all LQG regulations including getting the VSQG waste off-site in 90 days

Emergency Preparedness & Planning

LQG regulations: § 262.17(a)(6) refers generators to Part 262 Subpart M



262 Subpart M
Emergency Preparedness & Planning

- **The Quick Reference Guide is a new part of an LQG's contingency plan designed to provide easy access for emergency responders to the most critical information for an immediate response to an event.**
  - **New LQGs submitting contingency plans must also include a Quick Reference Guide**
  - **Existing LQGs to include a Quick Reference Guide when they otherwise update and submit their contingency plan**

- **LQGs can eliminate unnecessary employee personal information in the contingency plan (§ 262.261(d))**
  - **No home addresses or phone numbers of ECs as long as the number listed in the contingency plan is staffed at all times.**

262 Subpart M
Emergency Preparedness & Planning

Quick Reference Guide:

Eight elements:

1) **Types/names of hazardous waste and associated hazards**
2) **Estimated maximum amounts of hazardous wastes**
3) **Hazardous wastes requiring unique/special treatment**
4) **Map showing where hazardous wastes are generated, accumulated or treated at the facility**
5) **Map of facility and surroundings to identify routes of access and evacuation**
6) **Location of water supply**
7) **Identification of on-site notification systems**
8) **Name of emergency coordinator(s) or listed staffed position(s) and the 7/24-hour emergency telephone number(s)**

Check with local emergency authorities to identify additional information that could be included

Quick Reference Guide Example (pg 1)

Contingency Plan - Quick Reference Guide

ABC FACILITY
1000 SW Main Street
Anytown, NM 87000

8) Facility Contacts:

Primary Emergency Coordinator: George Washington
Mobile Number: 505-555-0000
Secondary Emergency Coordinator: Abraham Lincoln
Mobile Number: 505-555-0001
Tertiary Emergency Coordinator: Martha Washington
Mobile Number: 505-555-0002

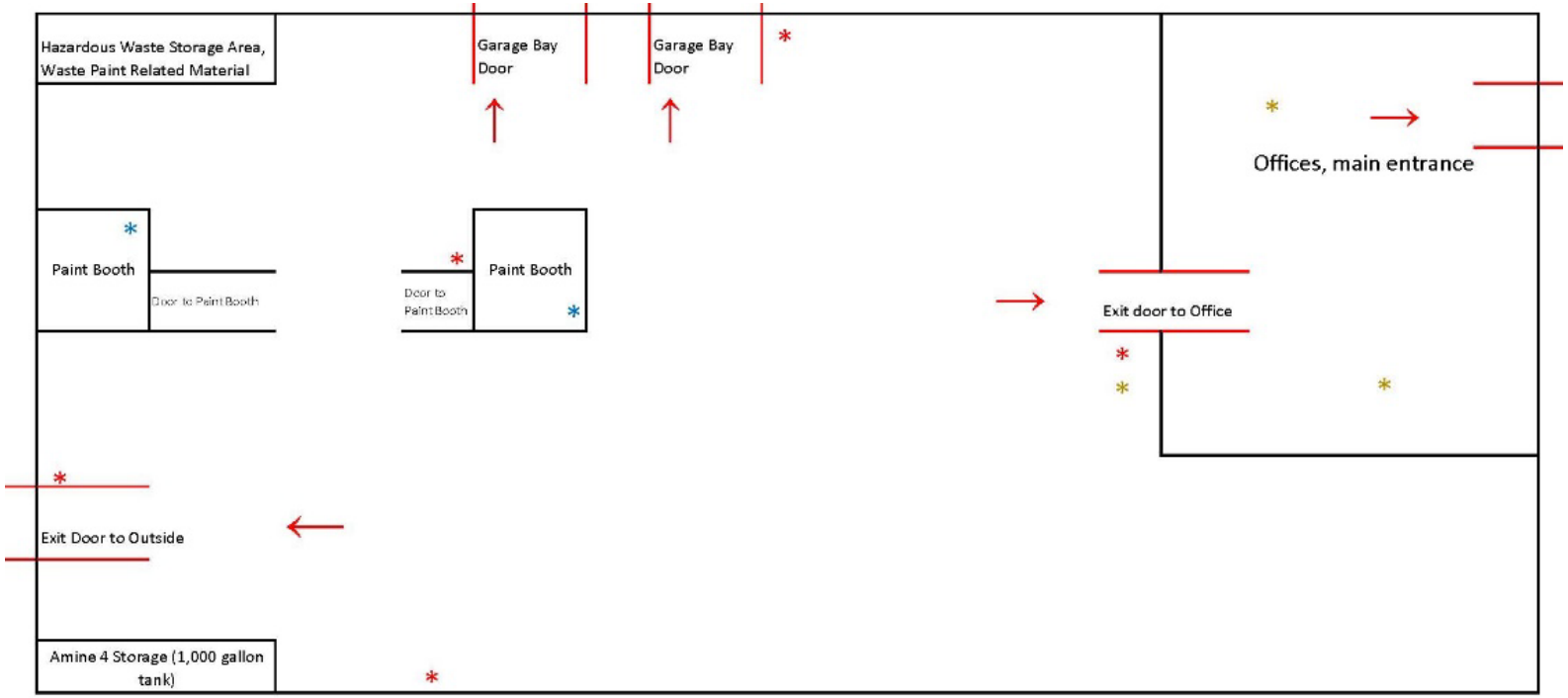
Note: ABC Facility operates 24/7, but the order of contact during an emergency is above.

Quick Reference Guide Example (pg 1) (continued)

1) Waste	1) Waste Codes/Hazards	Location Accumulated	2) Maximum Amounts Present	3) Response Notes	3) Special Notes to Hospital 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 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 asterisks on the attached map.	One, 55-gallon drum (440 pounds)	If personnel come into contact with material, decontamination at the hospital may be required prior to treatment.	None
Off-spec 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.	Off-Spec – 1 tank, 1,000 gallons New product – 1 tank, 1,000 gallons	Use PPE to prevent contact with skin and eyes. Prevent spills from entering drains and waterways. Prevent sources of ignition and open flames.	Contact Chemtrac for emergency treatment information at 800-424-9300. If in eyes, wash eyes for several minutes.

Quick Reference Guide Example (pg 2)

4)
5)
7)



* 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.

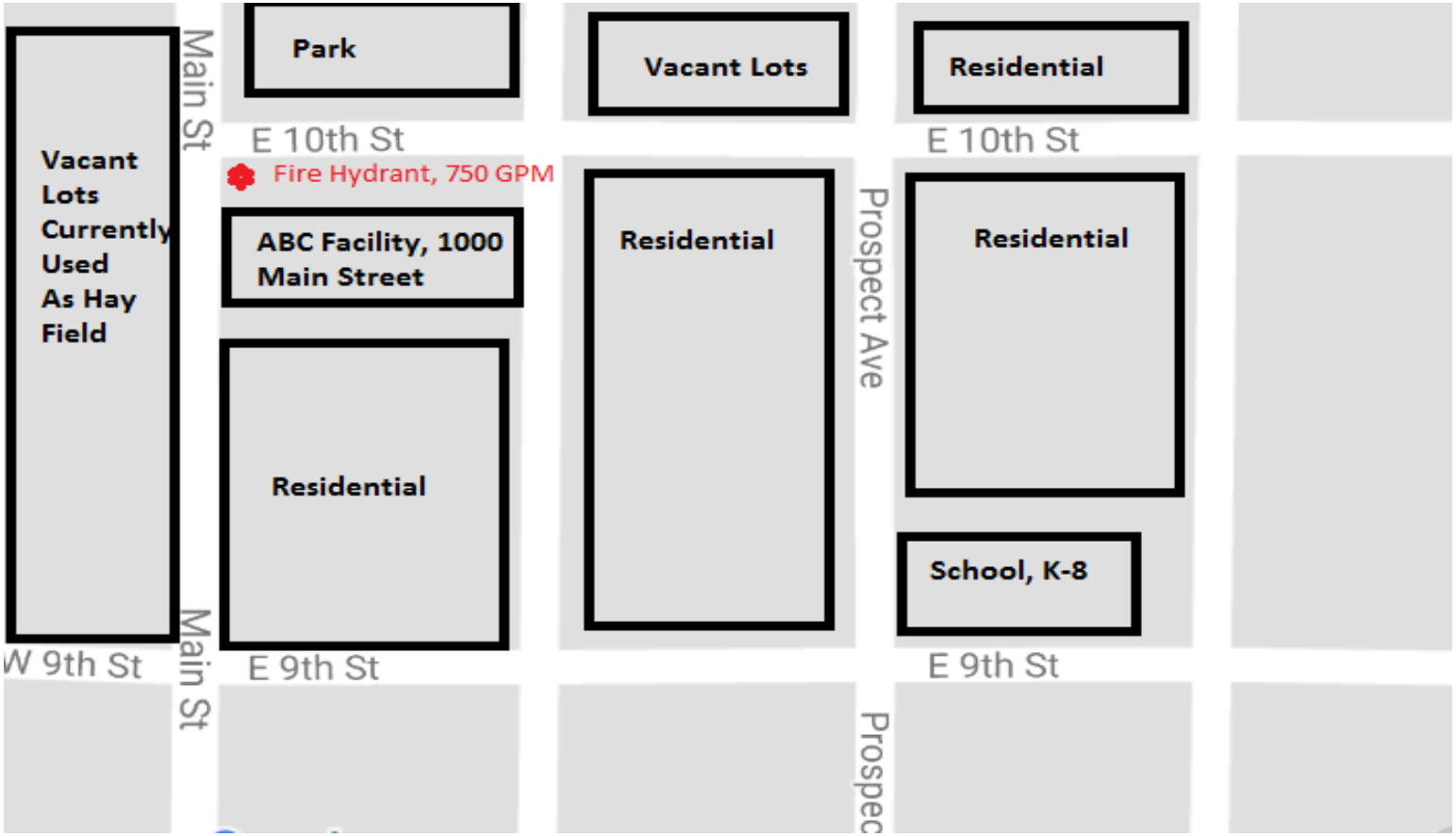
Note 2: Smoke detectors are located throughout the office and main warehouse on the ceiling, in a grid about every 25 feet. Smoke detectors are connected to an automatice sprinkler system.

Quick Reference Guide Example (pg 3)

Street Map

5)

6)



So What Do We Look for During an Inspection……?

- ✓ **NMED inspectors look at “all” processes and procedures performed on a contiguous piece of property.**
- ✓ **Inspectors look at what chemicals are used, how they are used, and the waste streams expected from each process.**

#1 Citation
Waste Determination

- **Failure to perform hazardous waste determination and/or a *proper* waste determination.**

UNKNOWNS

#2, 3, 4 Most Common Citation: Labeling

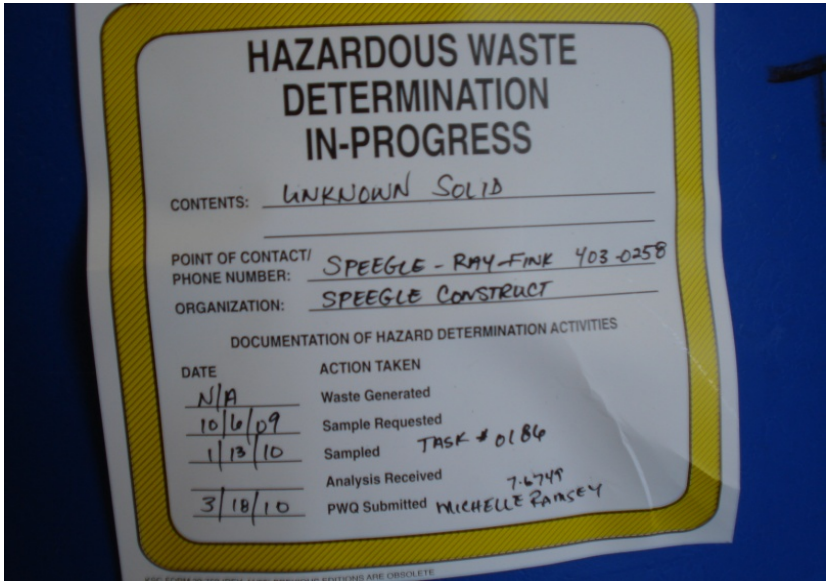
- **Failure to label drums/containers with the words “Hazardous Waste”.**
- **Failure to label used oil containers**
- **Failure to apply an accumulation start date to a hazardous waste container.**


USED
OIL
30 12:28PM


TOXIC
WASTE


ACETONE

LABELING


HAZARDOUS WASTE
DETERMINATION
IN-PROGRESS
CONTENTS: UNKNOWN SOLID
POINT OF CONTACT/
PHONE NUMBER: SPEEGLE - RAY-FINK 403-0258
ORGANIZATION: SPEEGLE CONSTRUCT
DOCUMENTATION OF HAZARD DETERMINATION ACTIVITIES
DATE
ACTION TAKEN
N/A
Waste Generated
10/6/09
Sample Requested
1/13/10
Sampled
TASK # 0184
Analysis Received
3/18/10
PWQ Submitted
MICHELLE RAMSEY
7-6749

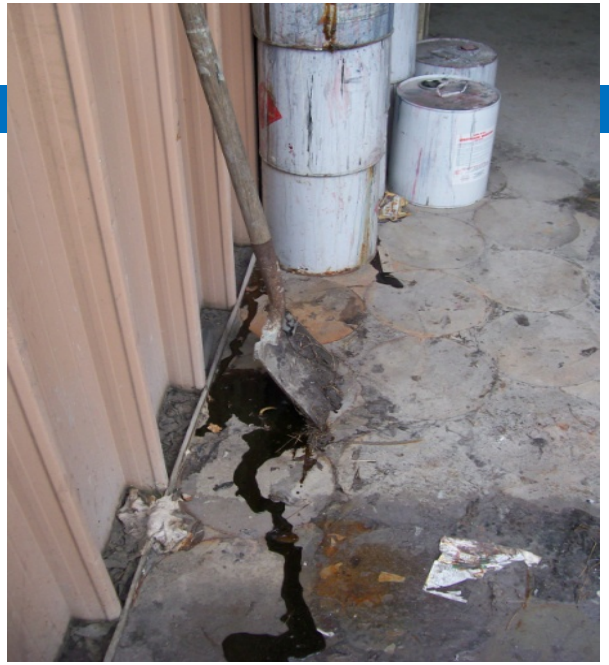

HAZARDOUS WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
MTS Profile # 0612 - 18102
Generator Name: Millennium Transit Services, LLC
EPA ID #: NM0001001320
Address: 42 Earl Cummings Loop West
City: Roswell
State: NM
ZIP: 88203
RQ Waste Paint Related Material
UN1263
Paint
Hazard Class: 3
REPORTABLE QUANTITIES
"RQ" IN POUNDS
"RQ" 100 LBS
D001
D035
F003
F005

5th Most Common Citation: Open Containers

Failure to maintain a container of hazardous waste closed unless adding or removing waste.

EVAPORATION

RELEASES



THE GOOD, THE BAD AND THE UGLY (as it relates to hazardous waste)

The Good, The Bad and The Ugly

GOOD

Open containers

BAD

UGLY

The Good, The Bad and The Ugly

Storage of containers

UGLY

BAD

GOOD

The Good, The Bad and The Ugly

Used oil storage

GOOD

BAD

UGLY

The Good, The Bad and The Ugly

Fluorescent bulb management

GOOD

BAD

UGLY

The Process

In Compliance:

- Inspection Report
- Pictures
- Letter

Non-Compliance:

- Inspection Report
  - Pictures
  - Violations
- Notice of Violation
  - Penalties
- Informal Conference
  - Chance to respond
  - Discuss alleged violations
- Stipulated Final Order
- Administrative Order

Penalty Guidance Spreadsheet

Index	Generator Status	Focus Area	Rule Cite	Potential for Harm	Extent of Deviation	Notes	Significantly Detrimental	Economic Benefit Calculation	Multiday or Counts Calculation	Regulation Description
1	VSQG/SQG/LQG/TRA/TSD	General	74-4-13(B) NMSA	Major	Major	Varies depending on facts of case			M	It is unlawful for any hazardous waste generator, transporter, or facility owner or operator to fail to comply with the provisions of this act or departmental orders
2	VSQG/SQG/LQG/TRA/TSD	General	270.1(c) NMAC 20.4.1.900 and 901;	Major	Major	Varies depending on facts of case	X	X	M	It is unlawful for any hazardous waste generator, transporter, or facility owner or operator to operate without a valid permit
3	VSQG/SQG/LQG/TRA/TSD	General	270.30(a) NMAC 20.4.1.900 and 901;	Major	Major	Varies depending on facts of case	X	X	M	It is unlawful for any hazardous waste generator, transporter, or facility owner or operator to fail to comply with a permit
4	VSQG/SQG/LQG/TRA/TSD	General	74-4-13(B) NMSA	Major	Major	Varies depending on facts of case	X	X	M	It is unlawful for any hazardous waste generator, transporter, or facility owner or operator to cause, authorize, create, suffer, or allow an imminent hazard to occur or continue
5	VSQG/SQG/LQG/TRA/TSD	General	74-4-4.3(A)(1)(a) NMSA	Minor	Major	Varies depending on facts of case				It is unlawful for any hazardous waste generator, transporter, or facility owner or operator to refuse lawful inspection / Failure to allow lawful inspection
6	VSQG/SQG/LQG	Waste Management	262.11	PH Ranking System	Major=Percentage of the facility's hazardous waste streams with no WD exceeds 75% or NMED requested WD and facility failed to comply or Waste disposed as non-haz without WD Moderate= Percentage of the facility's hazardous waste streams with no WD is 25% to 75% or Facility has only one waste stream and no WD Minor= Percentage of facility's hazardous waste streams with no WD is less than 25%			X		Failure to perform an accurate waste determination
7	VSQG	Waste Management	262.14(a)(5)	PH Ranking System	Major	Varies depending on facts of case		X		VSQG improper treatment or disposal of hazardous waste
8	VSQG	Consolidation	262.14(a)(5)(viii)(A)	PH Ranking System	Major	Varies depending on facts of case		X		Failure to be under the control of the LQG
9	VSQG	Consolidation	262.14(a)(5)(viii)(B)(1)	PH Ranking System	Based on % of unlabeled containers Major=60-100% Moderate=11-59% Minor=0-10%	Enforcement discretion advised on small volumes				Failure for VSQG to label containers as hazardous waste
10	VSQG	Consolidation	262.14(a)(5)(viii)(B)(2)	PH Ranking System	Based on % of unlabeled containers Major=60-100% Moderate=11-59% Minor=0-10%	Enforcement discretion advised on small volumes				Failure of VSQG to include hazards of contents
11	VSQG/SQG/LQG	Waste Management	262.14(b)/262.35	PH Ranking System	Major			X		Disposal of free liquids in a landfill
12	SQG	Waste Management	262.16 (b)	PH Ranking System	Major			X	M	SQG storage of hazardous waste for greater than 180 days without applying for, and receiving, a RCRA permit.
13	LQG	Waste Management	262.17(a)	PH Ranking System	Major			X	M	Generator storage of hazardous waste for greater than 90 days without applying for, and receiving, a RCRA permit
14	SQG / LQG	SAA Container Management	262.15(a)(1)	PH Ranking System	Major	Multiday if well documented			M/C	Failure to transfer the contents of a container that is not in good condition or is leaking
15	SQG / LQG	SAA Container Management	262.15(a)(2)	PH Ranking System	Major				M/C	Failure to use a container that is made of, or lined with, materials compatible with the waste to be stored
16	SQG/LQG	SAA Container Management	262.15(a)(3)	PH Ranking System	Major					Storing incompatibles
17	SQG / LQG	SAA Container Management	262.15(a)(4)(I)	PH Ranking System	Major					Failure to keep a container holding hazardous waste closed during storage, except when adding or removing waste
18	SQG / LQG	SAA Container Management	262.15(a)(5)(I)	Minor	Minor				C	Waste accumulation containers must be clearly marked or labeled 'Hazardous Waste' and an indication of the hazards on the container.
19	SQG / LQG	SAA Container Management	262.15(a)(6)	Minor	Minor					Waste satellite accumulation in excess of 55 gallons or 1 quart of acutely toxic waste must be dated
20	SQG / LQG	Container Management	[SQG] 262.16(b)(2)(I) [LQG] 262.17(a)(1)(ii)	PH Ranking System	Major	Multiday if well documented			M/C	Failure to transfer the contents of a container that is not in good condition or is leaking
21	SQG / LQG	Container Management	[SQG] 262.16(b)(2)(ii) [LQG] 262.17(a)(1)(iii)	PH Ranking System	Major				M/C	Failure to use a container that is made of, or lined with, materials compatible with the waste to be stored
22	SQG / LQG	Container Management	[SQG] 262.16(b)(2)(iii)(A) [LQG] 262.17(a)(1)(iv)(A)	PH Ranking System	Major					Failure to keep a container holding hazardous waste closed during storage, except when adding or removing waste
23	SQG / LQG	Container Management	[SQG]262.16(b)(2)(iii)(B) [LQG]262.17(a)(1)(iv)(B)	PH Ranking System	Major					Failure to open, handle, or store a container in a manner that will not cause the container to rupture or leak
24	SQG / LQG	Container Management	[SQG]262.16(b)(2)(iv) [LQG]262.17(a)(1)(v)	Minor	Major					Generators shall conduct inspections
25	SQG / LQG	Container Management	[SQG]262.16(b)(2)(v)(A) [LQG]262.17(a)(1)(vii)(A)	PH Ranking System	Major					Failure of a generator to ensure incompatible wastes are not placed in the same container
26	SQG / LQG	Container Management	[SQG]262.16(b)(2)(v)(B) [LQG]262.17(a)(1)(vii)(B)	PH Ranking System	Major					Failure of a generator to ensure hazardous waste is not placed in a container that previously held incompatible waste

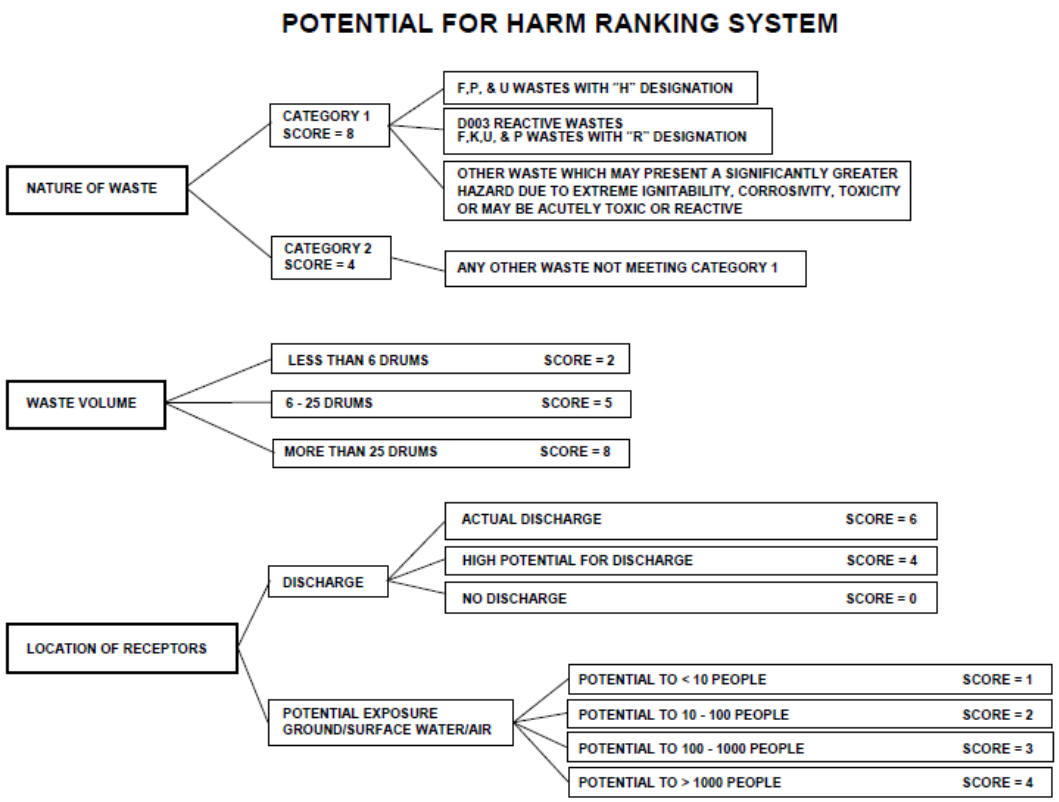
Penalty Example: Waste Determination

Line 6 of the Penalty Guidance Spreadsheet:

Potential for Harm: based on the number of unknown containers, type of waste, possibility of release and number of people who could be effected by release.

Extent of Deviation:
Major: Percentage of facility's hazardous waste streams that needs a WD exceeds 75% or WD requested and facility failed to do so
Moderate: Percentage of facility's hazardous waste streams that needs a WD is between 25% and 75%
Minor: Percentage of facility's hazardous waste streams that needs a WD is less than 25%.

Potential for Harm Calculation



Penalty adjustments

- **<u>Counts:</u> Each separate citation could be a separate count**
- **<u>Economic Benefit:</u> The estimated amount of money saved by not being in compliance**
- **<u>Multi-day:</u> The number of days the violation has occurred.**
- **<u>History of Non-Compliance:</u> A % increase based on the number of previous instances of the violation.**

Gravity Based Component

POTENTIAL FOR HARM	EXTENT	OF	DEVIATION
	MAJOR	MODERATE	MINOR
MAJOR	$10,000	$9,000	$7,500
MODERATE	$6,500	$5,000	$3,500
MINOR	$2,000	$1,300	$600

Memorandum of Agreement with USEPA

- **RCRA Program has been delegated to NMED**
- **Workplan commitments:**
  - **Permitted Federal Facilities – yearly inspections**
  - **LQGs – inspected every 5 years**
  - **LQGs – 20% of the universe inspected yearly**
  - **Expectations of conducting a specific number of inspections yearly**
- **NMED has 360 days from the date of the inspection to settle a case**
- **EPA requires penalties for certain violations**

NMED
Resources and Guidance Documents

Factsheets and GIR Crosswalk can be found at:

https://www.env.nm.gov/hazardous-waste/guidance-documents/

Penalty guidance documents can be found at:

https://www.env.nm.gov/hazardous-waste/penalty-policy/

Main NMED Website:

https://www.env.nm.gov/

EPA Resources

Main generator website: https://www.epa.gov/hwgenerators

Generator Improvements Rule website:
https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements

Link to the map of states that have adopted the new rule:
https://www.epa.gov/hwgenerators/where-hazardous-waste-generator-improvements-rule-effect

FAQs for implementing the new rule:
https://www.epa.gov/hwgenerators/frequent-questions-about-implementing-hazardous-waste-generator-improvements-final-rule

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