



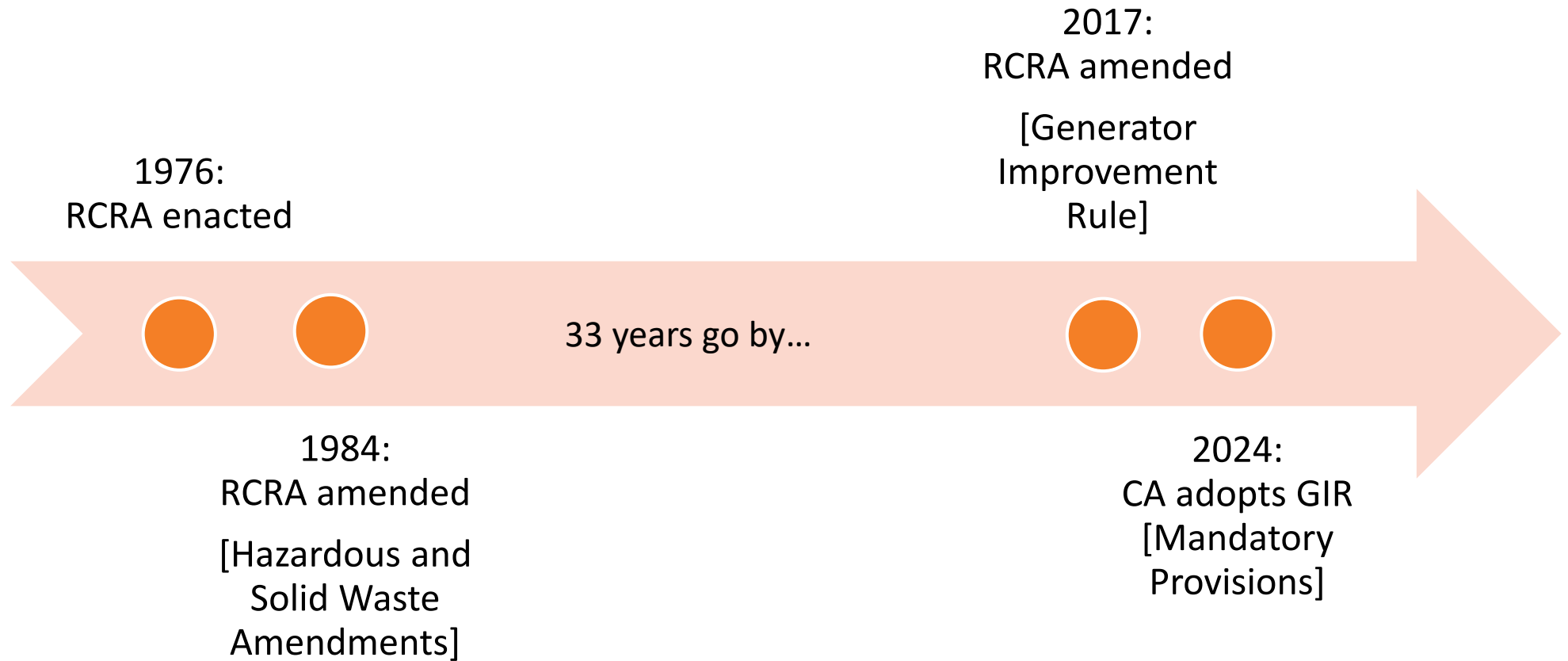
Generator Improvement Rule (GIR)

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Timeline



What is GIR?

- Generator Improvement Rule (GIR)
- GIR is an update to regulations that apply to generators of Hazardous Waste.
- Became effective federally on May 30, 2017, and is to become effective in CA on July 1st, 2024 (mandatory provisions).
- EPA's primary objectives: re-organization of regulations, providing clarity, strengthening environmental protection, and providing greater flexibility to generators.



Why do we need GIR?

From U.S. EPA analyses, HW generators **consistently fail to make accurate hazardous waste determinations**, leading to the mismanagement of hazardous waste.

- Non-compliance rates range from 10 to 30 percent
- Reasons vary from not understanding the laws to not even being aware of regulations

The GIR promulgated more than 60 revisions and some new requirements. It reorganized the HW regulations to make them more user-friendly and thus enables improved compliance by the regulated community.



Adopting GIR

- **Phase 1** – Adopt mandatory requirements = More stringent
 - Federal requirements that are more stringent/broader in scope than California's hazardous waste program
 - Required to maintain RCRA authorization (HSC 25159)
- **Phase 2** – Adopt optional requirements = Less stringent
 - Less stringent/equivalent to California's hazardous waste program
 - Not required to maintain authorization



7 Mandatory Provisions

1. New re-notification requirements
2. Additional labeling and marking requirements for containers and tanks
3. Enhanced pre-transportation marking for containers
4. Closure regulations for LQGs
5. New requirements for incompatible wastes in SAAs
6. New requirements for preparedness, prevention, and emergency procedures
7. Additional requirements for containers holding ignitable and reactive wastes for LQGs



Optional Provisions

1. Allowing VSQGs to send their hazardous waste to LQGs
2. Waiver to the 50 ft. rule for accumulating ignitable and/or reactive wastes at LQG facilities
3. Allowing generators to maintain their generator category during episodic generation
- 4. Changing the term CESQG to VSQG**
5. Adding new language for hazardous waste determination criteria
6. Distinguishing between independent requirements and conditions for exemption
7. Revisions to SAA requirements for SQGs and LQGs (9 changes in total)
- 8. Re-organization of the regulations to make them more user friendly**
- 9. Adding new definitions for CAA, VSQG, LQG, Non-Acute Hazardous Waste and modifying the definitions of SQG and Acute Hazardous Waste**
10. Mixing non-hazardous waste with hazardous waste
11. Requirement prohibiting generators from disposing of hazardous liquid in landfills



Mandatory Provisions



1. Re-notification

** Only applies to generators of RCRA hazardous waste*

- 1. RCRA SQGs must re-notify by September 1 every four years** starting in 2024 using EPA Form 8700-12.
 - Online option available
- 2. RCRA LQGs must re-notify by March 1 of each even number year.** LQGs may submit their re-notification as part of their biennial report required under 40 CFR 262.41.
 - LQGs must report all hazardous waste generated in a calendar year, even when it is managed the next year
 - LQGs must report for all months in the year, even if SQG for some of those months

Where is it located?

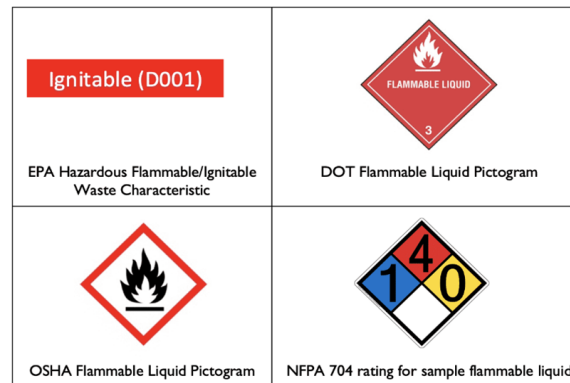
- Federal: 40 CFR 262.18(d)(1) & (d)(2)
- State: 22 CCR 66262.18(d)(1) & (d)(2)



2. Labeling and Marking for Containers and Tanks

Requires generators to mark their tanks and containers with the following:

1. The words “Hazardous Waste” (Existing California Requirement)
2. Words identifying the composition and physical state of the wastes (Existing California Requirement)
3. **An indication (symbols) of the hazards of the contents of the tank or container**



Where is it located?

- Federal: 40 CFR 262.15(a)(5), 262.16(b)(5) & (b)(6), 262.17(a)(4) & (a)(5)
- State: 22 CCR 66262.15(a)(5), 66262.16(b)(6), 66262.17(a)(5)



2. Labeling and Marking for Containers and Tanks (continued..)

The only difference between marking and labeling containers in Satellite Accumulation Areas (SAAs) or Central Accumulation Areas (CAAs) is:

- Containers in SAAs must be marked or labeled with the date the maximum volume capacity of containers is reached; and
- Containers in CAAs must be marked or labeled with the date the hazardous waste first began accumulating

Both dating requirements are existing requirements that remain unaffected by this rule.



3. Enhanced Pre-Transportation Marking

Requires generators to mark their containers with the **applicable EPA hazardous waste number(s) prior to shipping** their containers off site to a RCRA-permitted TSDF (e.g. F001, D001, D002, U121, etc.)

- Simplifies the consolidation process at the TSDFs
- Allows TSDFs to operate more efficiently
- Codification of an existing good management practice

Where is it located?

- Federal: 40 CFR 262.32(b) and (c)
- State: 22 CCR 66262.32(b)



4. LQG Closure Regulations

Revisions to the **closure regulations for RCRA LQGs**

1. Consolidating the closure regulations into one section
2. These regulations consist of two components:
 - i. Closure of a waste accumulation unit, such as a tank, container, or containment building; and
 - ii. Closure of a generator's facility
3. LQGs must notify EPA or the authorized state using the Site ID form (EPA Form 8700–12) at least 30 days prior to closing their facility, and
4. LQGs must notify EPA or the authorized state within 90 days after closing the facility

The regulations identify **clean close requirements** and expand the applicability of closure regulations to containers in CAAs.

Where is it located?

- Federal: 40 CFR 262.17(a)(8)
- State: 22 CCR 66262.17(a)(8)



5. Incompatible Wastes in Satellite Accumulation Areas (SAAs)

Three special requirements for incompatible wastes in SAAs:

1. Incompatibles must not be placed in the same container;
2. Hazardous waste must not be placed in an unwashed container that previously held an incompatible; and
3. A container holding an incompatible must be separated from the other material by means of a dike, berm, wall, or other device

Where is it located?

- Federal: 40 CFR 262.15(a)(3)
- State: 22 CCR 66262.15(a)(3)



6. New requirements for Preparedness, Prevention, and Emergency Procedures

A. Attempting to Make Contact with Local Authorities

- SQGs and LQGs are now required to document their attempt to make arrangements with local authorities for the mitigation of emergencies.

Where is it located?

- Federal: 40 CFR 262.16(b)(8)(vi) & 262.256
- State : 22 CCR 66262.256



6. New requirements for Preparedness, Prevention, and Emergency Procedures

B. Quick Reference Guide (QRG)

- Requires new LQGs to develop a quick reference guide that summarizes their contingency plan for emergency responders
- Requires existing LQGs to develop a quick reference guide when revising their contingency plan

Where is it located?

- Federal: 40 CFR 262.262(b)
- State: 22 CCR 66262.262(b)



Example QRG

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.



7. Ignitable & Reactive wastes for LQGs

- LQG must place "No Smoking" signs wherever there is a hazard from ignitable or reactive wastes.

Where is it located?

- Federal: 40 CFR 262.17(a)(1)(vi)(B)
- State: 22 CCR 66262.17(a)(1)(F)(2)



Optional Provisions



Optional Provisions

1. Allowing VSQGs to send their hazardous waste to LQGs
2. Waiver to the 50 ft. rule for accumulating ignitable and/or reactive wastes at LQG facilities
3. Allowing generators to maintain their generator category during episodic generation
4. **Changing the term Conditionally Exempt Small Quantity Generator (CESQG) to Very Small Quantity Generator (VSQG)**
5. Adding new language for hazardous waste determination criteria
6. Distinguishing between independent requirements and conditions for exemption
7. Revisions to SAA requirements for SQGs and LQGs (9 changes in total)
8. **Re-organization of the regulations to make them more user friendly**
9. **Adding new definitions for CAA, VSQG, LQG, Non-Acute Hazardous Waste and modifying the definitions of SQG and Acute Hazardous Waste**
10. Mixing non-hazardous waste with hazardous waste
11. Requirement prohibiting generators from disposing of hazardous liquid in landfills



4. Conditionally Exempt Small Quantity Generator (CESQG) to Very Small Quantity Generator (VSQG)

- Previous term: CESQG
- New term: VSQG
- The thresholds for VSQG will not change.



8. Reorganization

Hazardous waste regulations are restructured and reorganized as follows:

Existing Location	Description	Proposed Relocation
Section 66262.34	Hazardous waste counting	Section 66262.13
	Satellite accumulation area (SAA)	Section 66262.15
	Conditions for exemption for small quantity generator	Section 66262.16
	Conditions for exemption for large quantity generator	Section 66262.17
Section 66262.12	ID Number and renotification	Section 66262.18
Articles 3 and 4 of Chapter 15	Preparedness, prevention, and emergency planning procedures	Article 9 in Chapter 12



Preparedness, Prevention and ER

Table D: Crosswalk of Previous Citations to New Citation in proposed title 22, California Code of Regulations for Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators

Regulation	Old CFR Citation	New CFR Citation	Old CCR Citation	New CCR Citation
<i>Preparedness and prevention</i>	265 Subpart C	262 Subpart M	Chapter 15, Article 3	Chapter 12, Article 9
<i>Applicability</i>	265.30 and 265.50	262.250	66265.30 and 66265.50 from 66262.34(a)(4)	66262.250
<i>Maintenance and operation of facility</i>	265.31	262.251	66265.31 from 66262.34(a)(4)	66262.251
<i>Required equipment</i>	265.32	262.252	66265.32 from 66262.34(a)(4)	66262.252
<i>Testing and maintenance of equipment</i>	265.33	262.253	66265.33 from 66262.34(a)(4)	66262.253
<i>Access to communications or alarm system</i>	265.34	262.254	66265.34 from 66262.34(a)(4)	66262.254
<i>Required aisle space</i>	265.35	262.255	66265.35 from 66262.34(a)(4)	66262.255
<i>Arrangements with local authorities</i>	265.37	262.256	66265.37 from 66262.34(a)(4)	66262.256



9. Adding and Modifying Definitions

Added definitions:

- Central accumulation area (CAA)
- Very small quantity generator (VSQG)
- Large quantity generator (LQG)
- Non-acute hazardous waste

Modified definitions:

- Small quantity generator (SQG)
- Acute hazardous waste

Where is it located?

- Federal: 40 CFR 260.10
- State: 22 CCR 66260.10



9. Adding and Modifying Definitions

NEW: “Central Accumulation Area.” 66260.10

Historically, uncodified terms such as “90-day” or “180- day” accumulation areas have been used depending on the generator’s category.

These accumulation areas are proposed to be called central accumulation areas, consistent with the federal definition. The change only defines a name for a specific area, as the 90-day and 180-day requirements already exist in regulations (old section 66262.34; new sections 66262.16 and 66262.17).

“Central Accumulation Area” means any on-site hazardous waste accumulation area with hazardous waste accumulating in units subject to either section 66262.16 (for small quantity generators) or section 66262.17 of this division (for large quantity generators).



9. Adding and Modifying Definitions

NEW: “Very Small Quantity Generator” 66260.10

The GIR changed the generator previously referred to as “conditionally exempt small quantity generator” to “very small quantity generator.”

This term defines one of the three generator types in the federal program, but this generator category is not functionally very different than SQGs in California, nor does California regulate this category of generators any differently than small quantity generators (SQGs). CESQG definition/terminology is removed from regulations.

“Very small quantity generator” means a generator who generates less than or equal to the following amounts in a calendar month:

- 1) ≤ 100 kilograms (≤ 220 lbs) of non-acute hazardous waste; and
- 2) ≤ 1 kilogram (≤ 2.2 lbs) of acute hazardous waste listed in section 66261.31 or section 66261.33(e) of this division; and
- 3) ≤ 1 kilogram (≤ 2.2 lbs) of extremely hazardous waste.



9. Adding and Modifying Definitions

NEW: “Large Quantity Generator” 66260.10

The definition of a large quantity generator has been understood but not officially defined in federal or state hazardous waste regulations.

California hazardous waste requirements are more stringent than federal requirements because the federal requirements do not identify extremely hazardous waste (EHW). This requirement is retained and included in the proposed definition of a large quantity generator.

“Large quantity generator” means a generator who generates any of the following amounts in a calendar month:

- 1) $\geq 1,000$ kilograms ($\geq 2,200$ lbs) of non-acute hazardous waste; or
- 2) > 1 kilogram (> 2.2 lbs) of acute hazardous waste listed in section 66261.31 or section 66261.33(e) of this division; or
- 3) > 1 kilogram (> 2.2 lbs) of extremely hazardous waste



9. Adding and Modifying Definitions

NEW: “Non-acute hazardous waste” 66260.10

The GIR adds a new definition for “non-acute hazardous waste” so that generators can appropriately apply the counting requirements to identify their monthly generator category.

The proposed state regulations add the definition to clarify that non-acute hazardous waste is hazardous waste that is **not** acutely hazardous waste or extremely hazardous waste.

“Non-acute hazardous waste” means all hazardous wastes that are not acute hazardous waste or extremely hazardous waste, as defined in this section.



9. Adding and Modifying Definitions

MODIFIED: “Small Quantity Generator” 66260.10

The GIR amended the definition for small quantity generator to ensure that only generators that generate greater than 100 kilograms but less than 1,000 kg of non-acute hazardous waste, and less than or equal to 1 kg of acute hazardous waste and extremely hazardous waste in a calendar month are subject to less stringent standards.

The new federal definition now specifies the type of waste being generated (acute or non-acute hazardous waste).

“Small quantity generator” means a generator who generates the following amounts in a calendar month:

- 1) < 1,000 kilograms (< 2,200 lbs) of non-acute hazardous waste; and
- 2) ≤ 1 kilogram (≤ 2.2 lbs) of acute hazardous waste listed in section 66261.31 or section 66261.33(e) of this division; and
- 3) ≤ 1 kilogram (≤ 2.2 lbs) of extremely hazardous waste.



9. Adding and Modifying Definitions

MODIFIED: “Acute hazardous waste” 66261.31

“‘Acutely hazardous waste’ or ‘Acute hazardous waste.’” The federal regulations added a new definition for “acute hazardous waste,” which was already defined in California Code of Regulations, title 22.

In California’s regulations, acute hazardous wastes are those listed in section 66261.31 with the hazard code “(H)” and those listed in section 66261.33(e) – ‘P Listed’ HW.

- There is no change to which specific wastes are identified as acutely hazardous.
- There is no change to the extremely hazardous waste regulations for California title 22.



9. Adding and Modifying Definitions

Quantity of Hazardous Waste Generated in a Calendar Month			Generator Category
Acute hazardous waste	Extremely hazardous waste	Non-acute hazardous waste	
> 1 kg	Any amount	Any amount	LQG
Any amount	> 1 kg	Any amount	LQG
Any amount	Any amount	≥ 1,000 kg	LQG
≤ 1 kg	≤ 1 kg	< 1,000 kg	SQG

Where is it located?

- Federal: 40 CFR 262.13
- State: 22 CCR 66262.13



9. Adding and Modifying Definitions

To determine your generator category, count ALL waste generated in a calendar month

VSQG	SQG	LQG
≤100 kg	100-1,000 kg	≥1,000 kg
<27 gallons	27-275 gallons	>275 gallons
<220 pounds	220-2,200 pounds	>2,200 pounds
<½ drum	½-5 drums	>5 drums

55 Gallon Drum ~ 440 lbs ~ 200 kg



Resources

- [Frequent Questions About Implementing the Hazardous Waste Generator Improvements Final Rule | US EPA](#)
- <https://dtsc.ca.gov/generator-improvements-rule/>

*DTSC is still finalizing FAQ's and additional resources



Thank you!

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