

JOB AID

**Resource Conservation and
Recovery Act (RCRA)**
Part 2

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Whenever you generate hazardous waste and accumulate it on-site, you must take the precautions and steps necessary to prevent any sudden or accidental release into the environment. This means you must carefully operate and maintain your facility to reduce the possibility of fire, explosion or release of hazardous wastes.

Preparing for and Preventing Accidents

Install and maintain the appropriate types of emergency communication and fire and spill containment equipment for the quantity and kinds of waste handled at your site:

- Alarms
- Telephones or two-way portable radios
- Fire extinguishers (using water, foam, inert gas or dry chemicals as appropriate to your waste types)
- Hoses
- Automatic sprinklers
- Spray equipment
- Spill containment and control materials

Include instructions on proper use of the equipment.

Make arrangements with local fire, police or hospital officials to ensure they will be able to respond to any potential emergencies at your facility. Provide ample room for emergency response teams and their equipment to reach all areas in your facility during an emergency.

Emergency Planning and Response

Establish a contingency plan. A contingency plan attempts to look ahead and document ways to prepare for possible accidents. If you are a large quantity generator (LQG), you are required to have a written contingency plan. Think of it as a series of "what if" questions. For example: What if there is a fire in the area where hazardous waste is stored? What if I spill hazardous waste or find that one of my containers leaks?

Develop emergency procedures. All facilities are required to have written waste handling and emergency procedures. Post emergency phone numbers along with the locations of emergency equipment. At a minimum, emergency contact information and other response information should be posted next to phones in areas where waste is generated and managed.

Appoint an employee and several alternates to act as the emergency coordinator who will be available 24 hours a day (at the facility or by phone). In the event of a fire, explosion or other release, immediately notify the:

- Emergency coordinator
- National Response Center (failure to do so may result in fines, jail or both)

Fires

Attempt to extinguish a fire only if:

- It's very small and contained

- You have received proper training
- There is a clear path of egress or exit

If you have a large fire that endangers life or property, evacuate and call the fire department immediately.

In the event of a fire, remember these acronyms:

RACE

- **R**emove everyone from the area
- **A**ctivate the fire alarm
- **C**onfine the fire
- **E**xtinguish the fire or evacuate

PASS

To use a fire extinguisher:

- **P**ull the pin
- **A**im at the base of the fire
- **S**queeze the top handle or lever
- **S**weep from side to side

Spills

In the event of a dangerous spill, move a safe distance away from the spill, notify responders and await help. Your employer may train you to assist with cleanup of small "incidental" spills and even take certain actions to contain the flow of larger spills. Always act according to the training you have been provided.

Training

Personnel at facilities who work with hazardous waste must be trained to comply with requirements of the RCRA hazardous waste rules. The training program must be designed to ensure that facility personnel are able to respond effectively to emergencies. Training accomplishes this by familiarizing personnel with emergency procedures, emergency equipment and emergency systems.

Training should also cover:

- Safe evacuation and accounting for all persons
- Key parameters for automatic waste feed cutoff systems
- Communications and alarm systems
- Response to fires or explosions
- Response to groundwater contamination incidents
- Shutdown of operations

Waste Management Strategies

To help you remember the four most important waste management strategies, think of the acronym **RC³**

1. **R**educe the amount of your hazardous waste.
2. **C**onduct your own self-inspection.
3. **C**ooperate with state and local inspectors.
4. **C**all your state hazardous waste management agency or the U.S. Environmental Protection Agency (EPA) if you have questions.

Effective hazardous waste management and good housekeeping share a number of techniques:

- **Recycling** and/or reclaiming waste
- **Treating** waste to reduce its hazards
- **Reducing** the amount of waste you generate

To reduce the amount of waste you generate, do not mix nonhazardous and hazardous wastes. By doing so, the contents become subject to hazardous waste regulations. Avoid mixing several different hazardous wastes. Avoid spills or leaks of hazardous products. Materials used to clean up such spills or leaks will become hazardous. Limit your use of hazardous products (for example, use no more degreasing solvent or pesticide than you need to do the job). Do not throw away a container with unused solvent, chemicals or pesticide in it.

RCRA Empty

For containers less than 119 gallons (450 liters), the term "RCRA empty" means removing as much waste as possible by normal process methods for containers less than 119 gallons (450 L) that have less than 1 inch (2.5 cm) of residue or 3% by weight of the container's capacity.

For containers greater than 119 gallons (450 liters), the ratio is 0.3% by weight of the container's capacity.

A container that has held hazardous waste that is **compressed gas** is empty when the pressure in the container approaches atmospheric pressure.

For **acutely hazardous wastes**, the container or inner liner must be triple rinsed by a solvent capable of removing the residue or cleaned by another documented method to achieve equivalent removal. It is empty when the inner liner that prevented the contact can be removed from the container.

Additional information on what it means for **pharmaceutical hazardous waste** containers to be considered empty can be found in EPA 40 CFR 266.507.

Inspection

Prepare for an inspection by first conducting your own **self-inspection**. See Appendix A for a list of questions to answer as part of your self-inspection.

Use a visit by a state or local inspector as an opportunity to identify and correct problems as well as build relationships with hazardous waste professionals.

Accompanying inspectors on a tour of your facility will enable you to ask questions and receive advice on more effective ways of handling your hazardous products and wastes.

Appendix A: RCRA Self-Inspection Questions

☐ Do you have some documentation of the amounts and kinds of hazardous wastes you generate? How did you determine the wastes were hazardous?

☐ Do you have an EPA hazardous waste generator ID number?

☐ Do you ship waste off-site? If so, by which hauler and to which designated hazardous waste management facility? _____

☐ Do you have copies of the last 3 years' manifests used to ship your hazardous waste off-site?

☐ Are they filled out correctly?

☐ Have they been signed?

☐ Is your hazardous waste stored in the proper containers?

☐ Are the containers properly dated and marked?

☐ Are containers kept closed? Note: The container is considered closed if the lid covers the container top securely. For solid and semi-solid hazardous wastes, EPA considers the container closed as long as there is complete contact between the lid and the rim all around the top of the container.

☐ Are employees thoroughly familiar with proper waste handling and emergency procedures?

☐ Do you understand when you may need to contact the National Response Center?

☐ Have you designated an emergency coordinator and alternates?

☐ Have you posted emergency telephone numbers and the location of emergency equipment?