



## Hazardous Waste Survival Tips

The surface finishing industry has made a lot of progress in complying with the complex regulations of the Resource Conservation and Recovery Act (RCRA). This action, along with the Common Sense Initiative (CSI), has helped the U.S. Environmental Protection Agency's (EPA) perception of our industry. The following is a list of the most common RCRA violations and how they can be prevented. With the widespread access to the Internet, many regulatory agencies have placed guidance documents where they can be downloaded with a few keystrokes. Because the worldwide web has no state boundaries, you may choose to add these guidance documents to your resource library from my favorite site at [www.state.in.us/idem/olq/docs](http://www.state.in.us/idem/olq/docs).

**Hazardous waste containers not closed—40 CFR 262.34/265.173(a) 264.173(a).** A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. This sounds pretty straightforward. However, one would be amazed at the way it has been interpreted by the folks accumulating hazardous waste. Just a reminder that even though your hazardous waste roll-off hopper may be inside the building and protected from the elements, it must still be covered with a cover or tarp. It can only be open during the process of adding to the tank. Waste can be reactive and must be protected from exposure to a dripping water pipe, a spark, or other things that could cause disastrous results. Another misunderstood practice is that of adding spent

solvents to a tank. The tank must have a closing device and cannot have a funnel left in the top to add to it. The funnel must be a closing variety, or the drum or tank is considered to be open. Guidance Document: *Guidance on "Closed Containers."*

**Lack of training or training documents—40 CFR 262.34/265.16; 264.16.** All persons involved in hazardous waste management at Large Quantity Generator (LQG) and Treatment, Storage, and Disposal (TSD) facilities are required to receive annual training and documentation of that training. Training for hazardous waste workers is more difficult to comply with because it must be specialized for each company, and few commercially prepared programs meet this challenge. The trainer must also be qualified. This is one of the few regulations that addresses the qualifications of the trainer. During the training, the contingency plan must be reviewed, as well as emergency response to spills and events. One frequently overlooked individual to include in this training is the person who signs the hazardous waste manifest. This person must also be trained. It can be very efficient to overlap the Department of Transportation (DOT) HM-126F, HM-181 and RCRA training requirements. Guidance Document: *Hazardous Waste Personnel Training.*

**Using improper containers that do not meet DOT performance-oriented packaging standards or that are not in good condition—CFR 49 100-177.** If one is using

packaging that doesn't comply with DOT performance-oriented standards there is a good chance the facility has not conducted the mandatory training required by DOT every three years. This is one area that has not received proper attention by the industry. Probably, one of the reasons is that there are no DOT inspectors visiting facilities like the RCRA and OSHA inspectors.

**Lack of a proper contingency plan—40 CFR 262.34/265.52; 264.52.** Large quantity generators must have an up-to-date contingency plan that spells out what would be done if there was a hazardous waste spill, fire, or explosion, including the location of the emergency equipment and the procedures for emergency response. The plan should be kept where it would be accessible in an emergency. This may include a copy in your automobile, because in the event of an emergency, you may not be able to get to the one in the plant. As personnel change, the emergency contact list must be revised. This is a good place to address incompatibilities, or what would evolve from combining certain chemicals that are present in your facility. Here are a few incompatibles that could evolve toxic gas:

- cyanide + acid = hydrogen cyanide gas
- sodium sulfide + acid = hydrogen sulfide gas
- sodium hypochlorite + ammonia = chlorine gas
- sodium metabisulfite + acid = sulfur dioxide

- hydro sulfite + water = fire

Guidance Document: *Hazardous Waste Contingency Plan*.

**Lack of a proper waste determination—40 CFR 262.11.** While this is the most frequently cited violation, it is also the most fundamental management issue. Failure to properly identify a waste stream leads to numerous additional violations. Examples of when this is cited include drums with an unknown substance such as contaminated wipes, filters or discarded fluorescent light bulbs. Guidance Documents: *Understanding the Hazardous Waste Determination Process*; *Indiana's Universal Waste Rule*; and *Management of Contaminated Wipes*.

**Hazardous waste containers not marked with the start of accumulation date—40 CFR 262.34(a)(2).** Hazardous waste containers must be marked with the date when waste first began accumulating. This is generally

the date waste was first placed in a container, or when a satellite container reaches 55 gal. Guidance Documents: *Understanding the Hazardous Waste Rules: A Handbook for Small Businesses*; also *Satellite Accumulation of Hazardous Waste by Generators*.

**Satellite containers of hazardous waste not properly managed—40 CFR 262.34(c)(1).** The use of satellite containers to accumulate hazardous waste is common. However, it is a violation of regulations to find satellite containers stored in areas that are not “at or near” the process, under the control of the operator or with an amount greater than 55 gal. Guidance Document: *Satellite Accumulation of Hazardous Waste by Generators*; and *Guidance on “Open Containers.”*

These guidance documents are available at [www.state.in.us/idem/olq/docs.P&SF](http://www.state.in.us/idem/olq/docs.P&SF)