Navigating the Regulatory Minefield of Hazardous Waste Handling and Transportation

*Lisa A. Harig and Lindsay W. McGuire**

Both generators and transporters of hazardous waste must comply with a maze of federal and state statutes and regulations. In the current climate of regulatory enforcement, compliance should be viewed as an investment. As government agencies seek to supplement their coffers with civil penalties and fines, however, companies will find that complying in the short term saves money in the long run. This was certainly the case for a nationwide pharmacy that recently settled a hazardous waste lawsuit for nearly *$14 million*.[1] The primary compliance challenge with hazardous waste regulations is that numerous federal and state regulatory agencies have their hands in the pot. Understanding which agency regulates the process of hazardous waste management at any given time during the transportation process is critical to avoiding civil penalties.

At the beginning of the process, the Environmental Protection Agency ("EPA") regulates the *handling* of hazardous waste through the Resource Conservation and Recovery Act ("RCRA"). In addition, many states have their own "RCRA-based" programs, meaning that the EPA has granted the state authorization to implement RCRA at the state level and perhaps even make the state-level rules more stringent. Thus, the federal program provides a baseline for understanding hazardous waste requirements, though such requirements may vary (because they are more stringent) from state to state.

Once the hazardous waste is "in motion," the Department of Transportation ("DOT") through the Pipeline and Hazardous Materials Safety Administration ("PHMSA") regulates the *transportation* of interstate hazardous waste through the Hazardous Materials Regulations ("HMR").[2] In the case of hazardous materials regulations, a state may adopt rules for the intrastate transportation of hazardous wastes, as long as the state-level rules (or regulations) do not interfere with interstate transportation.

EPA Requirements: What is Hazardous Waste?

Any company that produces a "solid waste" – essentially any trash, whether it is a solid, liquid, or gas – may be a "generator" under RCRA. A generator must determine if the waste it produces is hazardous. If it is, RCRA applies to the handling, storage, transportation, treatment, and disposal of the hazardous waste.

EPA defines a waste as hazardous if it is a solid waste that: (1) is listed as such in the regulations implementing RCRA; (2) exhibits any of the four hazardous characteristics—ignitibility, corrosivity, reactivity, and/or toxicity; or (3) is a mixture of a listed waste and a solid waste.

There are four lists that apply to hazardous wastes, which are categorized by the letters F, K, P, or U.[3] The P and U lists include pure or commercial grade formulations of specific, unused chemicals. The F list contains hazardous waste from certain common industrial or manufacturing processes that are products of non-specific sources, while the K list designates hazardous waste from specific industries and sources.

If the waste is not listed, the generator must determine if it is a "characteristic waste," meaning that it exhibits one of the following characteristics: ignitability (its flash point), corrosivity (its pH level), reactivity (whether it is stable under normal conditions), or toxicity (whether it poses harm to human health if ingested or absorbed).[4]

Before expending too much time finding a listed waste or determining its characteristics, a company should check to see whether it is covered at all. EPA actually exempts certain hazardous wastes from RCRA coverage, which eliminates the RCRA requirements.

Once a generator establishes that it is dealing with hazardous waste(s), it

*McBreen & Kopko (Arlington, Virginia, and Jericho, New York). The authors would like to thank Michael J. Cole for his research assistance.

must determine how to handle those waste(s). Handling procedures will depend upon the type of waste, as well as the classification of the generator. Generator classifications are examined below first, keeping in mind that some states have modified these thresholds.

EPA Requirements: Generator Classifications

Depending on the amount of hazardous waste produced each month, EPA classifies generators as Large Quantity Generators ("LQG"), Small Quantity Generators ("SQG"), or Conditionally Exempt Small Quantity Generators ("CESQG"). LQGs produce 1,000 kilograms (2,200 pounds) or more of hazardous waste per month; more than 1 kilogram per month of acutely hazardous waste; and no more than 100 kilograms (220 pounds) per month of acute spill residue or soil. SQGs produce more than 100 kilograms but less than 1,000 kilograms of hazardous waste per month. Finally, CESQGs produce 100 kilograms or less of hazardous waste per month (or 1 kilogram or less of acutely hazardous waste per month).[5]

The calculation of the amount of hazardous waste created by CESQGs is not as straightforward as the other categories. The generation of certain hazardous waste is excluded from the threshold calculations, including so-called "universal waste" (as explained further below).[6] Furthermore, generators do not need to calculate hazardous waste when it is removed from temporary on-site storage or "accumulation" in calculating the amount generated each month.[7]

The generator's classification determines several things, including which regulations apply to the generator and how long accumulated hazardous waste can remain on site. These limitations are particularly important, as a noncompliant generator risks being categorized as a storage facility, which triggers more stringent regulatory requirements. The time period for accumulation starts when the generator first places waste in or on an approved hazardous waste accumulation unit (*e.g.*, tank, container, drip pad, or containment building).[8]

EPA Requirements: Handling Hazardous Waste

In contrast to the above requirements, actually handling the hazardous waste is comparatively easy. SQGs and LQGs must comply with the EPA regulations covering the following areas: (1) EPA identification; (2) the manifest; (3) pre-transport requirements; and (4) recordkeeping and reporting requirements. These requirements are streamlined for universal waste, as discussed in the following section.

First, before doing anything with a hazardous waste, a generator must obtain an EPA identification number.[9] In addition, a generator must ensure that each transporter and facility used by the generator also has an EPA identification number.[10]

Next, the generator must prepare a manifest before transporting or offering a hazardous waste for transportation.[11] A manifest is essentially a bill of lading with additional details about the dangers posed by the particular hazardous waste. The manifest must designate one facility to handle the waste and may include one alternative facility in the event of an emergency. The generator must certify that it has attempted to minimize the production of hazardous wastes.[12] The generator must also sign the manifest certification by hand; have the initial transporter sign the manifest by hand along with the date of acceptance; retain one copy of the manifest; and give the remaining copies to the initial transporter.[13]

Third, the generator must prepare the hazardous waste for transportation. Complications can arise because this is where PHMSA regulations enter into the process, as discussed below.

Finally, the generator faces certain recordkeeping and reporting requirements. Although the recordkeeping requirements are straightforward, these requirements are one of the most frequently fined areas. Recordkeeping and reporting requirements are most stringent for LQGs.

A generator must keep: (1) a copy of each manifest for at least three years from the date the initial transporter accepted the waste; and (2) records of any test results, waste analyses, or other determinations in accordance with 40 C.F.R. § 260.11 for a period of three years from the date it last sent the waste for treatment, storage, or disposal.[14] In addition, LQGs must keep a copy of each biennial report and exception report for a period of at least three years from the due date.

LQGs must submit a biennial report that includes certain identifying and administrative information.[15] It must also provide the name and identification number of each transporter used during the reporting year; a description of the type and amount of any hazardous waste shipped off-site; a description of efforts taken to reduce the volume and toxicity of waste generated; and a description of success in the reporting year. The generator must sign a certification as well. Similar requirements apply to LQGs that treat, store, or dispose of hazardous wastes on-site.

In addition, LQGs must ensure that they receive a copy of the manifest with a handwritten signature from the owner or operator of the designated facility within 35 days of the date the initial transporter accepted the hazardous waste.[16] If the LQG does not receive the manifest, it must submit an exception report to its EPA Regional Administrator within 45 days of the date when the initial transporter accepted the waste.

Similarly, if an SQG does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility

within 60 days of the date the initial transporter accepted the waste, it must submit a legible copy of the manifest, with some indication that it did not receive confirmation of delivery, to its EPA Regional Administrator.[17] From time to time, the Federal Aviation Administration may demand additional reports from both SQGs and LQGs.[18]

It is also important to note that both SQGs and LQGs must always have at least one employee available in the event of an emergency to serve as the coordinator for emergency response measures. Finally, LQGs must have detailed, written contingency plans for handling emergencies and must submit a biennial hazardous waste report.

EPA Requirements: Universal Management

In an effort to ease the regulatory burden, the EPA enacted reduced handling requirements for certain streamlined management processes for the following universal wastes: batteries, pesticides, mercury-containing equipment, and bulbs (lamps).[19] The requirements differ for small quantity handlers ("SQH") and large quantity handlers ("LQH"). SQHs accumulate less than 5,000 kilograms (11,000 pounds) of universal waste at any time.[20] LQHs accumulate 5,000 kilograms or more of universal waste at any time.[21] The specific management procedures vary depending on the type of waste.

PHMSA Requirements: Know Before You Ship

The HMR includes regulations on: (1) shipping papers (in the case of hazardous waste(s)—the manifest); (2) packaging; (3) marking; (4) labeling; (5) placarding; (6) emergency response information; (7) training; and (8) safety and security plans. In addition, any company that offers a shipment for transportation under the HMR must register with PHMSA prior to such shipment.[22]

Packaging requirements refer to the type of container in which the hazardous waste may be shipped.[23] This will vary depending on whether the waste is a liquid or a gas.

Marking, labeling, and placarding regulations were promulgated to ensure easy identification of the type of hazardous substance in a shipment. A marking provides one or more of the following types of information: (1) package handling requirements, such as indicating whether it must be kept upright or away from heat; (2) the category of hazardous substance enclosed; (3) health risks presented (e.g., inhalation hazard); and (4) a descriptive name or UN identification number.[24] A label is basically a tag on the package that identifies the class of hazardous substance inside.[25] The HMR designates both solid and liquid hazardous waste as a "Class 9" material.[26] The label may also include additional instructions, such as whether the shipment can be transported by air. Finally, a placard is similar to a label, except that it is affixed to the vehicle transporting the packaging, a bulk packaging, a freight container, or a unit load device.[27]

If a company ships a package containing hazardous waste even once, PHMSA generally requires the company to provide initial and recurrent hazardous waste training to its employees including: (1) general awareness and familiarization; (2) function-specific responsibilities; (3) safety; (4) security awareness; (5) in-depth security training; and (6) Occupational Safety and Health Administration (OSHA), EPA, and other training.

Generally, shippers must provide emergency response information that is available for immediate use at all times while the hazardous material is present, including the emergency response telephone number, so that any Federal, State, or local agency representative investigating an incident can reach the appropriate party at the company.[28]

State Laws

In addition to complying with the federal regulations discussed above, all states and the District of Columbia have their own regulations with respect to the handling and transport of hazardous waste. In some cases, state statutes and regulations can be more stringent than RCRA and/or the HMR. For example, several states have additional training requirements for generators of hazardous waste and for transporters of hazardous materials (including hazardous waste).[29] Other states have different quantity limitations for purposes of categorizing generator size.[30] Further, many require additional licenses or permits to transport hazardous materials (including hazardous waste).[31] State reporting and recordkeeping requirements can vary greatly from the federal regulations and should be reviewed carefully. As discussed above, reporting and recordkeeping violations result in many civil penalties and fines and are, for the most part, avoidable. In all cases, the state can, and usually will, assess a fine regardless of whether the alleged violator already paid a fine at the federal level.

Compliance Programs

Given the complexity of the federal and state laws and regulations governing the handling and transport of hazardous waste, it can seem like a Herculean effort to craft a compliance plan for companies that transport hazardous waste across one or more state lines. However, certain considerations can make this task manageable.

1. Have a National Plan Based on the Federal Regulations

Federal statutes and regulations (including RCRA and the HMR) should serve as the basis for a national, company-wide compliance plan. Proposed changes to and clarifications of these regulations are published periodically in the Federal Register and should be monitored so that compliance plans can be updated and revised

in a timely fashion. In comparison to other federal agencies, EPA and PHMSA have a fairly frequent level of rulemaking activity.

2. Have State-Specific Plans Where Necessary

For companies that operate in several different states (whether generating and handling hazardous waste or transporting hazardous materials across state lines), it is important to have individualized compliance plans for each state when state laws impose increased or different (additional) requirements than federal laws and regulations. These state plans should act as addenda to the national, company-wide compliance plan. Employees who work in several different states should be familiar with the applicable state compliance plans, and should be trained accordingly.

3. Keep Detailed, Accessible Compliance Records

No compliance plan is useful unless the company can prove that it followed its plan. Companies that handle and transport hazardous waste should keep detailed records of conformity with their compliance programs, including initial and recurrent employee training. These records should be centralized and accessible to company personnel who may need to respond to investigations by state and federal regulators.

* * * * *

In closing, it is important for each company to define the manner in which it must comply with hazardous waste rules and regulations at the federal and state level, as well as the specific regulations that apply before the company can develop an effective compliance strategy and successfully navigate the hazardous waste maze.

Endnotes

1. http://www.mercurynews.com/san-mateo-county-times/ci_20426777/cvs-settles-california-hazardous-waste-pay-13-7.
2. 49 C.F.R. Parts 100-185.
3. *See* 40 C.F.R. §§ 261.31 – 261.33.
4. *See* 40 C.F.R. §§ 261.21 – 261.24.
5. 40 C.F.R. § 261.5(a).
6. *See* 40 C.F.R. § 261.5(c) for a complete list.
7. *See* 40 C.F.R. § 261.5(d) for a complete list.
8. 40 C.F.R. § 262.34.
9. 40 C.F.R. § 262.12.
10. *Id.*
11. *See* EPA Form 8700-22A. *See also,* 40 C.F.R. § 262.20.
12. 40 C.F.R. § 262.27.
13. 40 C.F.R. § 262.21. (Note that a generator may have additional responsibilities with regards to providing the manifest to transporters to whom it has sent the hazardous waste for transportation by ocean or rail.)
14. 40 C.F.R. §§ 262.40 and 262.44.
15. 40 C.F.R. § 262.41.
16. 40 C.F.R. § 262.42(a).
17. 40 C.F.R. § 262.42(b).
18. 40 C.F.R. § 262.43.
19. 40 C.F.R. §§ 273.1 – 273.5.
20. 40 C.F.R. § 273.9.
21. *Id.*
22. 49 C.F.R. Part 107, Subpart G.
23. 49 C.F.R. Part 173.
24. 49 C.F.R. Part 172, Subpart D.
25. 49 C.F.R. Part 172, Subpart E.
26. *See, e.g.,* 49 C.F.R. § 173.13.
27. 49 C.F.R. Part 172, Subpart F.
28. 49 CFR Part 172, Subpart G. Note that safety and security plan requirements do not apply to Class 9 substances.
29. *See, e.g.,* Cal. Code Regs. Tit. 13, § 1161.7; 6 Colo. Code Regs. § 1007-3-262.34(d)(5)(iii).
30. California, the District of Columbia, Kansas, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, Rhode Island, and Washington all have state-specific hazardous waste generation quantity limits.
31. *See. e.g.,* Cal. Code Regs. Tit. 13, § 1160.4(g); Colo. Rev. Stat. § 42-20-202; Ga. Comp. R. & Regs. 672-10-.02; W. Va. Code R. § 150-23.