

# Appendixes

# Hazardous Waste Regulation

## Introduction

The transportation of hazardous wastes is regulated by both the Hazardous Materials Transportation Act (HMTA) and the Resource Conservation and Recovery Act (RCRA) of 1976. Subtitle C of RCRA, which is administered by the U.S. Environmental Protection Agency (EPA), is the primary Federal statute governing hazardous wastes. Although the regulatory program developed by EPA is chiefly concerned with the disposal of hazardous wastes, Section 3003 of RCRA directed EPA to establish certain standards for transporters and to coordinate regulatory activities with the U.S. Department of Transportation (DOT).

It is estimated that 264 million metric tons (71 billion gallons) of hazardous wastes are generated each year in the United States.<sup>1</sup> Ninety-six percent of these wastes are disposed of at the site where they are generated.<sup>2</sup> Most of the waste that is shipped offsite for disposal or treatment is transported by truck; these waste shipments are usually less than 100 miles.<sup>3</sup> Information on highway, rail, and water shipments of hazardous wastes is limited for two reasons. First, EPA does not compile information on waste shipments on a nationwide basis. Instead, the States are responsible for tracking the movement of hazardous wastes through the use of manifests. Only a few States have computerized databases capable of extracting this kind of information. Second, general transportation databases maintained by the Interstate Commerce Commission (ICC), DOT, the Bureau of the Census, and other organizations are not capable of distinguishing hazardous waste shipments. Data on the numbers of hazardous waste spills that occur during transport and the impacts associated with such incidents are also limited (see chapter 2).

## RCRA Overview

The regulatory program established by RCRA is intended to ensure that hazardous wastes generated by industrial and commercial operations are transported and treated, stored, or disposed of in a manner that protects human health and the environment. Significantly, both interstate and intrastate activities are covered.

<sup>1</sup>V. Westat, Inc., *National Survey of Hazardous Waste Generators and Treatment, Storage, and Disposal Facilities Regulated Under RCRA in 1981* (Washington, DC: U.S. Environmental Protection Agency, Office of Solid Waste, 1984). Estimate includes only 1981 "regulated" wastes.

<sup>2</sup>Ibid.

<sup>3</sup>ICF, Inc., *Assessing the Releases and Costs Associated With Truck Transport of Hazardous Wastes* (Washington, DC: U.S. Environmental Protection Agency, Office of Solid Waste, January 1984), pp. 2 and 16.

Under RCRA, EPA is responsible for developing regulations in four major areas: identification and listing of hazardous wastes; standards for generators, transporters, and owners and operators of treatment, storage, and disposal facilities; permit requirements for all such facilities; and a manifest system, which is used to track the movement of hazardous wastes. RCRA specifies that generator standards include requirements for recordkeeping, reporting, use of appropriate containers, container labeling, providing information on the chemical composition of wastes, and complying with the manifest system. Standards for transporters must include recordkeeping and labeling requirements. Transporters also must comply with the manifest system, and restrict the transportation of hazardous wastes to permitted facilities.

States are authorized to administer and enforce a hazardous waste program in lieu of the Federal Government if their programs are at least as stringent as the Federal requirements and are consistent with the Federal program and other State programs.<sup>4</sup> EPA regulations specify two ways in which a State program would be considered inconsistent: if a program unreasonably restricts, impedes, or operates as a ban on the free movement of hazardous wastes across State borders; or if a State law or program has no basis in human health or environmental protection and acts as a prohibition on the treatment, storage, or disposal of hazardous wastes.<sup>5</sup> It should be noted that the HMTA allows DOT to preempt inconsistent State and local requirements.<sup>6</sup>

EPA estimates that in 1981 over 14,000 generators produced hazardous wastes and that there were 12,367 transporters of hazardous wastes.<sup>7</sup> The number of generators covered by RCRA has recently increased by more than 100,000 because a 1984 legislative amendment extended the scope of the law to small-quantity generators of hazardous wastes (those generating 100 kg to 1,000 kg per month). As most small-quantity generators will be shipping their wastes to offsite facilities, the number of shipments is also expected to increase.

<sup>4</sup>40 CFR 271 contains the requirements for authorization of a State Resource Conservation and Recovery Act program.

<sup>5</sup>40 CFR 271.4.

<sup>6</sup>The U.S. Department of Transportation (DOT) has included a special provision in its hazardous wastes regulations noting that any State or local requirement is inconsistent if it applies only to waste materials and applies differently from or in addition to the DOT requirements. See 49 CFR 171.3(c). As described later in this appendix, DOT exercised its preemption authority when it required the use of a uniform manifest. Ch. 4 contains additional information on preemption under the Hazardous Materials Transportation Act.

<sup>7</sup>This is the most recent data available. See Westat, Inc., op. cit.

<sup>8</sup>The U.S. Environmental Protection Agency recently published final rules for small-quantity generators. Transporter requirements are explicitly addressed. See 51 F.R. 10146, Mar. 4, 1986. The regulations become effective in September 1986.

## DOT and EPA Coordination

RCRA explicitly states that regulations promulgated by EPA for transporters be consistent with DOT regulations established under the HMTA, and authorizes EPA to make recommendations to DOT regarding the regulation of hazardous wastes and the addition of materials covered by the HMTA. In February 1980, EPA promulgated final regulations for transporters of hazardous wastes and adopted DOT regulations for labeling, marking, placarding, using proper containers, and reporting discharges. DOT amended its hazardous materials regulations in May 1980, to make them applicable to hazardous wastes and to incorporate additional requirements for the transportation of hazardous wastes. In 1984, a uniform hazardous wastes manifest, jointly developed by DOT and EPA, was published. To coordinate the activities of DOT and EPA, a Memorandum of Understanding (MOU) was signed in 1980. The MOU delineates the responsibilities of each agency with respect to investigations, enforcement, and information exchange. EPA enforcement activities and training under RCRA are discussed in chapter 5.

## Shippers and Carriers Subject to RCRA Regulation

DOT considers a shipper to be any entity that performs any of the functions in 49 CFR 172 and 173, such as labeling or packaging. EPA calls a person or firm fitting DOT's description of a shipper a waste "generator." A generator is defined as, "an<sub>1</sub> person, b<sub>1</sub> site, whose act or process produces hazardous waste . . . or whose act first causes a hazardous waste to become subject to regulation."<sup>9</sup>

EPA's definition of a generator includes any person who removes hazardous waste sludges and any residues in transport vehicles or vessels that have carried products or raw materials."<sup>10</sup> If a person other than the owner of the transport vehicle or vessel is hired to remove and dispose of sludges and residues, or a vehicle or vessel is taken to a central facility for cleaning, EPA believes that all parties are generators and can be held jointly and severally liable if the regulations are violated."

Carriers are defined by DOT as persons engaged in the transportation of passengers or property by land or

water, as a common, contract, or private carrier, or civil aircraft, "z EPA refers to carriers as "transporters" and defines transporters as persons, "engaged in the offsite transportation of hazardous waste by air, rail, highway, or water.""] EPA regulations do not apply to onsite shipments of hazardous wastes by generators or owners/operators of permitted facilities.

Under special circumstances, transporters can become generators of hazardous wastes: by importing hazardous wastes into the United States,<sup>14</sup> by mixing hazardous wastes of different DOT shipping descriptions by placing them into a single container,<sup>15</sup> or by being responsible for cleanup of a discharge of hazardous wastes or commercial chemical product that occurred during transport. In the latter case, the transporter may become a generator of the discharged material and any resulting debris, such as contaminated soil or water.<sup>16</sup>

If a generator or transporter accumulates hazardous wastes for more than 90 days, a RCRA storage facility permit must be obtained."<sup>17</sup> However, if a transport vehicle, vessel, tank, or container is used only for neutralizing wastes because they are corrosives, a facility permit is not required.<sup>18</sup> In addition, transfer facilities that store manifested shipments of hazardous wastes for 10 days or less are not required to obtain a facility permit."

## Generator Requirements

Generators of hazardous wastes are responsible for complying with the regulations established by DOT for all hazardous materials as well as additional regulations promulgated by both EPA and DOT. The regulations can be divided into four major categories: identification and notification; preparation of wastes for transport; compliance with manifest requirements; and recordkeeping and reporting. Table A-1 summarizes these requirements, indicates the responsible agency, and provides a reference to the Federal Code of Regulations.

## EPA Identification and Notification

Generators begin the regulatory process by determining whether their wastes are hazardous according to **EPA's criteria**. A waste is considered to be hazardous if it satisfies the following conditions:

- i<sub>1</sub> is a solid waste as defined by EPA;

<sup>9</sup>See 40 CFR 260.10.

<sup>10</sup>A transport vehicle is defined as a motor vehicle or railcar used for the transportation of cargo by any mode. Each cargo-carrying body is a separate transport vehicle (e.g., each freight car). A vessel includes every description of watercraft, used or capable of being used as a means of transportation on the water. 40 CFR 260.10.

<sup>11</sup>40 CFR 261.4(c) and 45 F.R. 72024, Oct. 30, 1980. Guidance provided by the U.S. Environmental Protection Agency indicates that in cases involving more than one party, the Agency will initially look to the operator of the central facility to perform the generator duties.

<sup>12</sup>49 CFR 171.8.

<sup>13</sup>40 CFR 260.10.

<sup>14</sup>40 CFR 263.10(c)(1).

<sup>15</sup>40 CFR 263.10(c)(2).

<sup>16</sup>45 F.R. 12739, Feb. 26, 1980; and 40 CFR 263.31

<sup>17</sup>40 CFR 262.34.

<sup>18</sup>40 CFR 260.10 and 264.1(g)(6).

<sup>19</sup>40 CFR 263.12.

**Table A-1.—U.S. Environmental Protection Agency (EPA) and U.S. Department of Transportation (DOT) Hazardous Waste Transportation Regulations**

| Requirements  | Agency     | Code of Federal Regulations   |
|---|------------|---|
| <b>Generator/shipper:</b>   |            |   |
| 1. Determine if waste is hazardous according to EPA listing criteria  | EPA        | 40 CFR 261 and 262.11   |
| 2. Notify EPA and obtain I.D. number; determine that transporter and designated treatment, storage or disposal facility have I.D. numbers                                   | EPA        | 40 CFR 262.12   |
| 3. Identify and classify waste according to DOT Hazardous Materials Table and determine if waste is prohibited from certain modes of transport                              | DOT        | 49 CFR 172.101 (see also 49 CFR 173-177)  |
| 4. Comply with all packaging, marking, and labeling requirements  | EPA<br>DOT | 40 CFR 262.32(b),<br>49 CFR 173,<br>49 CFR 172, subpart D, and<br>49 CFR 172, subpart E |
| 5. Determine whether additional shipping requirements must be met for the mode of transport used  | DOT        | 49 CFR 174-177  |
| 6. Complete a hazardous waste manifest  | EPA        | 40 CFR 262, subpart B   |
| 7. Provide appropriate placards to transporter  | DOT        | 49 CFR 172, subpart F   |
| 8. Comply with recordkeeping and reporting requirements   | EPA        | 40 CFR 262, subpart D   |
| <b>Transporter/carder:</b>  |            |   |
| 1. Notify EPA and obtain I.D. number  | EPA        | 40 CFR 263.11   |
| 2. Verify that shipment is properly identified, packaged, marked, and labeled and is not leaking or damaged   | DOT        | 49 CFR 174-177  |
| 3. Apply appropriate placards   | DOT        | 49 CFR 172.506  |
| 4. Comply with all manifest requirements (e.g., sign the manifest, carry the manifest, and obtain signature from next transporter or owner/operator of designated facility) | EPA<br>DOT | 40 CFR 263.20<br>49 CFR 174-177   |
| 5. Comply with recordkeeping and reporting requirements   | EPA        | 40 CFR 263.22   |
| 6. Take appropriate action (including cleanup) in the event of a discharge and comply with DOT incident reporting requirements  | EPA<br>DOT | 40 CFR 263.30-31<br>49 CFR 171.15-17  |

SOURCE: U.S. Environmental Protection Agency, *Hazardous Waste Transportation /rrterface-Guidance Manual*, prepared for the U.S. Department of Transportation, PB82-18281 (Springfield, VA: National Technical Information Service, November 1981).

- it is listed as a hazardous waste by EPA\* or it is a mixture that contains a listed waste or exhibits one of four characteristics identified by EPA—ignitability, reactivity, corrosivity, or EP\*\* toxicity; and
- it is not explicitly excluded from regulation by statute or rulemaking.<sup>20</sup>

Once it is ascertained that a waste is hazardous, generators are required to notify EPA and obtain an EPA identification (I. D.) number. This is done by submitting EPA Form 8700-12 to the Agency.” Generators should also determine that any transporters or owners/operators of treatment, storage, or disposal facilities who will eventually handle the waste have EPA I.D. numbers.

### Pretransport Preparations

Most of the requirements in this category are DOT regulations that apply to all hazardous materials. They

include: identifying and classifying wastes according to the DOT Hazardous Materials Table and determining if the wastes are prohibited from certain modes of transport; complying with all packaging, marking, and labeling requirements; determining whether additional shipping requirements must be met for the mode of transport used; and providing appropriate placards to the transporter. In addition, hazardous waste transporters are also required to comply with DOT modal requirements. The following discussion focuses on particular aspects of the DOT regulations as they relate to hazardous wastes.

**DOT Identification and Classification.—Identification of hazardous wastes under EPA’s regulations is a separate procedure from classifying wastes under DOT’s regulations. DOT considers hazardous wastes to be a subset of the hazardous materials regulated by the HMTA. Determining the proper hazard classification of hazardous wastes under DOT’s system is important, because DOT hazard communication and packaging requirements correspond to these hazard classes,**

**First, it must be determined whether a hazardous waste is listed in the DOT Hazardous Materials Table contained in 49 CFR 172. If it is not, the characteristics of the waste must be identified, based on the DOT hazard class definitions. However, the four characteristics used by EPA to identify a waste are different from DOT’s hazard classes. For example, a “reactive” waste according**

\*The U.S. Environmental Protection Agency (EPA) lists Include wastes from: specific sources; nonspecific sources; and discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

\*\*EP = Extraction Procedure.

<sup>20</sup>40 CFR 262.11 and 40 CFR 261. The 1984 amendments to the Resource Conservation and Recovery Act contain provisions regarding the listing and delisting of hazardous wastes; these provisions have not yet been fully implemented by the U.S. Environmental Protection Agency. See Sec. 222 of the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, Nov. 8, 1984 and Conference Report 98-1133, Oct. 3, 1984.

<sup>21</sup>W CFR 262.12.

to EPA might be an “irritating material” or “explosive” according to DOT. A waste that EPA calls “ignitable” could be either a “flammable” or “combustible” material by DOT definitions. A proper DOT shipping name for a hazardous waste that is listed in the DOT Table or falls into a DOT hazard class would consist of the name of the hazardous material or hazard class as it is listed in the DOT Table preceded by the word “waste.” In those instances where a waste is not listed by DOT and does not fall into one of DOT’s hazard classes, it is considered to be a Hazardous Waste “not otherwise specified” (n.o.s.) and is classified as an ORM-E<sup>22</sup> by DOT.

All small-quantity generators of hazardous wastes—those who produce 100 kg to 1,000 kg of waste per month—must comply with the DOT regulations. Moreover, generators of hazardous wastes that are exempt from EPA regulation under RCRA because they produce less than 100 kg of waste per month may still have to comply with DOT transportation requirements; this is true only if the waste is listed in the DOT Hazardous Materials Table or fits into one of the DOT Hazard Classes other than ORM-E.

**Marking, Labeling, and Placarding.**—All shipments of hazardous wastes must comply with appropriate DOT marking, labeling, and placarding regulations. However, ORM-E materials are subject only to DOT marking and general packaging requirements.<sup>23</sup> Thus, labels and placards are not required for hazardous waste shipments classified as ORM-E.

As described in chapter 4, DOT requires shippers (generators) to mark all packages with a capacity of 110 gallons or less with a proper shipping name, including a United Nations/North American (UN/NA) identification number. There is a single UN/NA number for all hazardous wastes in the “Hazardous Waste n.o.s.” category; it is NA 9189.<sup>24</sup> In addition, EPA requires generators to mark each hazardous waste container of 110 gallons or less with a statement identifying the generator and indicating that Federal law prohibits improper disposal of hazardous wastes.<sup>25</sup>

<sup>22</sup>ORM-E means Other Regulated Material not included in any other Department of Transportation (DOT) hazard classes. Materials in this class include hazardous substances and hazardous wastes. 49 CFR 173.500 and 173.1300. See ch. 4 for additional information on DOT hazard classes.

<sup>23</sup>49 CFR 173.1300; and 49 CFR 173.510.

<sup>24</sup>In 1978, when the U.S. Environmental Protection Agency (EPA) initially published regulations for hazardous wastes transportation, the U.S. Department of Transportation (DOT) had not yet adopted the United Nations/North America numbering system. At the time, EPA was concerned that there were no placarding requirements for hazardous materials presenting chronic (e.g., carcinogenic) hazards and indicated that recommendations to DOT regarding the development of additional placards were being considered. Following DOT’s decision to adopt the U.N. numbering system, EPA stated that it was satisfied that DOT’s requirements were fully protective of human health and the environment. See 45 F.R. 12741, Feb. 26, 1980.

<sup>25</sup>40 CFR 262.32.

**Packaging.**—OTA’s data analysis (see chapter 2) indicates that corrosive materials have the highest accident and spill rate. Since many hazardous wastes are corrosives, selecting a compatible container for transport is important. While DOT packaging regulations specify acceptable containers, the potential for misusing containers exists unless generators and transporters understand and comply with these requirements. With more than 100,000 small businesses becoming subject to EPA and DOT regulations, the potential for confusion and inappropriate use of containers is immense. Significantly, information sent to small generators by EPA in 1985 merely referenced DOT regulations; detailed guidance on the transportation of hazardous wastes has not been provided to small generators.<sup>26</sup>

In addition to the regulations for all hazardous materials, DOT has promulgated two special packaging rules that apply to hazardous wastes. The first rule allows the use of an open head drum instead of a closed head drum for wastes containing solids or semisolids.<sup>27</sup> The second rule allows the shipment of hazardous wastes in used packaging that has not been reconditioned or tested under specified circumstances.<sup>28</sup>

## Manifest Requirements

The purpose of the manifest system, established by Section 3002(5) of RCRA, is to assure that hazardous wastes designated for delivery to offsite treatment, storage, or disposal facilities actually reach their destination. A “manifest” is a specific form (U.S. EPA Form 8700-22 or 8700-22A) that contains information about a hazardous waste shipment and accompanies a shipment from its point of generation to its ultimate destination. A sample manifest form is shown in figure A-1. Manifests, like DOT shipping papers, provide information about the nature of the shipment to emergency responders when accidents or incidents occur. The only significant difference between a manifest and a DOT shipping paper is that a manifest lists the EPA identification numbers of the generator, transporter, and designated facility. DOT regulations specify that an EPA manifest may be used in place of a DOT shipping paper.<sup>29</sup>

Generators are responsible for originating and signing the form. They must also obtain the signature of the transporter, retain one copy of the form for their records,

<sup>26</sup>The U.S. Environmental Protection Agency and the U.S. Department of Transportation published a guidance manual in 1981 about the interface between their regulations; however, an updated version has not been published to reflect changes in the regulations. See U.S. Environmental Protection Agency, *Hazardous Waste Transportation Interface-Guidance Manual*, PB82-182361, prepared for the U.S. Department of Transportation (Springfield, VA: National Technical Information Service, November 1981).

<sup>27</sup>49 CFR 171.3(e).

<sup>28</sup>49 CFR 173.28(P).

<sup>29</sup>49 CFR 172.205.

Figure A-1.—Hazardous Waste Manifest

Please print or type (Form designed for use on elite(12-pitch)typewriter)

Form Approved OMB No 2000-0404 Expires 7-31-86

| <b>UNIFORM HAZARDOUS WASTE MANIFEST</b>   |  | 1 Generator's US EPA ID No | Manifest Document No | 2 Page 1 of                              | Information in the shaded areas is not required by Federal law |
|---|--|----------------------------|----------------------|--|--|
| 3 Generator's Name and Mailing Address  |  |                            |                      | A. State Manifest Document Number        |  |
| 4 Generator's Phone ( )   |  |                            |                      | B. State Generator's ID                  |  |
| 5 Transporter 1 Company Name  |  | 6 US EPA ID Number         |                      | C State Transporter's ID                 |  |
| 7 Transporter 2 Company Name  |  | 8 US EPA ID Number         |                      | D. Transporter's Phone                   |  |
| 9 Designated Facility Name and Site Address   |  | 10 US EPA ID Number        |                      | E State Transporter's ID                 |  |
|   |  |                            |                      | F Transporter's Phone                    |  |
|   |  |                            |                      | G. State Facility's ID                   |  |
|   |  |                            |                      | H. Facility's Phone                      |  |
| 11 US DOT Description (Including Proper Shipping Name Hazard Class, and ID Number)  |  |                            |                      | 12 Containers No                         | 13 Total Quantity  |
|   |  |                            |                      | Type                                     | 14 Unit Wt Vol   |
|   |  |                            |                      |  | Waste No   |
| Additional Descriptions for Materials Listed Above  |  |                            |                      | K Handling Codes for Wastes Listed Above |  |
| 15 Special Handling Instructions and Additional Information   |  |                            |                      |  |  |
| <p>16 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations</p> <p>Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment</p> |  |                            |                      |  |  |
| Printed/Typed Name  |  |                            | Signature            |  |  |
|   |  |                            | Month Day Year       |  |  |
| 17 Transporter 1 Acknowledgement of Receipt of Materials  |  |                            |                      |  |  |
| Printed/Typed Name  |  |                            | Signature            |  |  |
|   |  |                            | Month Day Year       |  |  |
| 18 Transporter 2 Acknowledgement of Receipt of Materials  |  |                            |                      |  |  |
| Printed/Typed Name  |  |                            | Signature            |  |  |
|   |  |                            | Month Day Year       |  |  |
| 19 Discrepancy Indication Space   |  |                            |                      |  |  |
| 20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19   |  |                            |                      |  |  |
| Printed/Typed Name  |  |                            | Signature            |  |  |
|   |  |                            | Month Day Year       |  |  |

and give the remaining copies to the transporter. Transporter requirements under the manifest system are described below.<sup>30</sup>

When the initial RCRA regulations were issued in 1980, EPA required only that certain types of information accompany a waste shipment. This flexible approach was taken so that information required by EPA would also fulfill DOT's shipping paper requirements. Subsequently, more than 20 States developed their own manifest forms requiring generators and transporters to provide a variety of information. Recognizing the burden created by multiple State manifests, EPA and DOT jointly developed the uniform manifest form, that became effective on September 20, 1984. The form includes space for optional information that may be requested by a State agency. (See items A through H in figure A-1.) However, this additional information may be requested only from generators and owners or operators of treatment, storage, or disposal facilities. States may also require generators or facilities to submit this additional data under separate cover. EPA and DOT determined that it was not appropriate or necessary for transporters to submit information beyond the Federal requirements.<sup>31</sup>

## Recordkeeping and Reporting

Generators are required by EPA to keep a copy of each signed manifest for 3 years whether or not a signed copy is returned to the generator by the designated treatment, storage, or disposal facility. Records of all test results, waste analyses, or other determinations and copies of all reports submitted to EPA (described below) must also be kept for at least 3 years. One of the reasons EPA chose a 3-year time period is that it is the same record retention time ICC requires of truckers.<sup>32</sup>

Biennial reports must be submitted to EPA by all generators who ship their wastes offsite.<sup>33</sup> The report describes all shipments initiated by the generator during a given time period. In addition, if a generator does not receive a signed copy of a manifest from the designated treatment, storage, or disposal facility within 45 days of the date the waste was accepted by the initial transporter, an Exception Report must be filed with EPA. \* Exception Reports assist EPA in determining whether the waste was improperly disposed.

<sup>30</sup>40 CFR 262, Subpart B.

<sup>31</sup>See 49 F.R. 10490 and 49 F.R. 10507, Mar. 20, 1984, for a discussion regarding the development of the uniform manifest.

<sup>32</sup>45 F.R. 12742, Feb. 26, 1980, and 40 CFR 262.40. Retention times for records can be extended by the U.S. Environmental Protection Agency for enforcement or other purposes.

<sup>33</sup>40 CFR 262.41. Use of the U.S. Environmental protection Agency Form 8700-13A is required.

\*Within 35 days, a generator must contact the designated facility to determine the status of the wastes.

## Transporter Requirements

Transporters of hazardous wastes are also regulated by both EPA and DOT. There are four categories of requirements: notification and pretransport, manifest requirements, recordkeeping, and discharge cleanup. Table A-1 also summarizes the regulations applicable to transporters. Some States have also developed permit and registration programs for hazardous waste transporters. (See chapter 4, especially table 4-7.)

### Notification and Pretransport

All transporters of hazardous wastes are required to notify EPA and obtain an I.D. number from EPA by submitting EPA Form 8700-12. Transporters must also be sure that DOT hazard communication and packaging requirements have been met. DOT regulations prohibit transporters in all modes from accepting hazardous materials that have not been properly identified, packaged, marked, or labeled.<sup>34</sup> Special requirements for leaking packages or containers have been established by DOT for each transport mode.<sup>35</sup>

Transporters are responsible for applying appropriate placards on motor vehicles, except for highway cargo tanks and intermodal tanks. Placards must be provided to transporters by generators of hazardous wastes, unless the vehicle is already appropriately placarded.<sup>36</sup> In the case of railcars, highway cargo tanks, intermodal tanks, and certain freight containers, the generator is responsible for affixing the necessary placards.<sup>37</sup>

### Manifest Requirements

EPA regulations prohibit transporters from accepting hazardous waste shipments from shippers without a manifest. Transporters who do accept manifested hazardous wastes are required to sign and date the manifest and return a signed copy of the manifest to the generator and ensure that the manifest accompanies the wastes to the designated facility. When the shipment is delivered to the designated facility or subsequent transporter, the transporter must: obtain a signature from the owner or operator of the facility or the accepting carrier upon delivery, retain one copy of the manifest, and give the remaining copies to the owner or operator of the facility or the accepting transporter.<sup>38</sup> A transporter is responsible for a hazardous waste shipment until the manifest is signed by the receiving facility. If a hazardous waste shipment cannot be delivered to the facility designated

<sup>34</sup>49 CFR 174.3, 175.3, 176.3, and 177.801.

<sup>35</sup>49 CFR 174, 175, 176, and 177.

<sup>36</sup>49 CFR 172.506.

<sup>37</sup>49 CFR 172.508, 172.512, and 172.514.

<sup>38</sup>40 CFR 263.20.

on the manifest, the transporter must contact the generator for further instructions.<sup>39</sup> Special manifest requirements for bulk shipments by water and rail have been established.<sup>40</sup>

## Recordkeeping Requirements

Transporters must also keep a copy of each signed manifest for 3 years; this includes shipping papers that may be used in place of manifests for bulk shipments.<sup>41</sup> For shipments of hazardous wastes outside of the United States, transporters are also required to retain copies of the manifests for a 3-year period.<sup>42</sup>

## Discharges and Cleanup

In the event of a discharge of hazardous waste during transport, special requirements established by EPA and DOT must be followed. A discharge of hazardous waste is defined as: "the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water."<sup>43</sup>

EPA regulations require all transporters to take appropriate immediate action in the event of a discharge. Such action could include notifying local authorities or diking an area to contain the wastes.<sup>44</sup> In addition, DOT immediate notification requirements for hazardous materials incidents are applicable to discharges of hazardous wastes; notice is given by calling (toll-free) the National Response Center, operated by the U.S. Coast Guard.<sup>45</sup> Additional information about DOT reporting requirements is presented in chapter 2.

Both EPA and DOT have included provisions in their regulations authorizing Federal, State, or local government officials to permit the immediate removal of hazardous wastes by transporters who do not have EPA I.D. numbers and without a manifest.<sup>46</sup> EPA has also exempted all persons involved with treatment or containment activities taken during an immediate response to the discharge of hazardous wastes or materials from facility permitting requirements.<sup>47</sup>

All regulations for the final disposition of wastes must be followed after the emergency is over. EPA has established a procedure for rapidly issuing I.D. numbers to emergency response personnel, shippers, or carriers who need to transport hazardous wastes following an unanticipated release. A provisional I.D. number may be obtained by telephoning the appropriate EPA Regional Office.<sup>48</sup>

EPA regulations also require transporters to clean up any discharges that occur during transport or take actions required or approved by appropriate government officials to mitigate human health or environmental hazards. DOT regulations do not contain a comparable provision for other hazardous materials.

Finally, DOT hazardous materials requirements for written incident or accident reports must be met (see chapter 2). For discharges of hazardous wastes, transporters are required to attach a copy of the manifest to the DOT reporting form and provide the following information: an estimate of the quantity of wastes removed from the scene, the name and address of the facility to which it was taken, and the manner of disposition of any unremoved wastes.<sup>49</sup>

<sup>39</sup>40 CFR 263.21.

<sup>40</sup>40 CFR 263.20 (e) and (f).

<sup>41</sup>40 CFR 263.22 (a)-(C).

<sup>42</sup>40 CFR 263.22 (d).

<sup>43</sup>40 CFR 260.10. This definition is consistent with the one used under Sec. 311 of the Clean Water Act.

<sup>44</sup>40 CFR 263.30(a).

<sup>45</sup>40 CFR 263.30(c)(1); and 49 CFR 171.15.

<sup>46</sup>40 CFR 263.30(b); and 49 CFR 171.3(d).

<sup>47</sup>40 CFR 264.1(g)(8), 265.1(c)(1), and 270.1(c)(3).

<sup>48</sup>45 F.R. 85022, Dec. 24, 1980. Subsequent to Issuing a number over the telephone, the standard U.S. Environmental Protection Agency (EPA) application form is mailed to the generator or transporter and must be returned to EPA within 10 days.

<sup>49</sup>49 CFR 171.16(a).