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Universal Waste Rule (Hazardous Waste Management System; Modification of the Hazardous Waste Recycling Regulatory Program); Final Rule

ENVIRONMENTAL PROTECTION

40 CFR Parts 9, 260, 261, 262, 264, 265, 266, 268, 270, and 273

[FRL–5201–3]

RIN 2050–AD19

Universal Waste Rule (Hazardous Waste Management System; Modification of the Hazardous Waste Recycling Regulatory Program)

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: On February 11, 1993, the Environmental Protection Agency proposed new streamlined hazardous waste management regulations governing the collection and management of certain widely generated wastes (batteries, pesticides and thermostats) known as universal wastes (58 FR 9346). Additional information was noticed for comment on June 20, 1994 (59 FR 31568). Today's final rule promulgates streamlined universal waste management regulations which are very similar to the February 11, 1993 proposal.

The new streamlined hazardous waste management regulations promulgated today govern the collection and management of certain widely generated wastes identified as universal wastes. This final rule will greatly facilitate the environmentally-sound collection and increase the proper recycling or treatment of hazardous waste nickel cadmium and other batteries, certain hazardous waste pesticides, and mercury-containing thermostats. The current RCRA regulations have been a major impediment to national collection and recycling campaigns for these wastes. This rule will greatly ease the regulatory burden on retail stores and others that wish to collect or generate these wastes. It should greatly facilitate programs developed to reduce the quantity of these wastes going to municipal solid waste landfills or combustors. It will, also, assure that the wastes subject to this system will go to appropriate treatment or recycling facilities pursuant to the full hazardous waste regulatory controls. It also will serve as a prototype system to which EPA may add other similar wastes in the future. A petition process is also included through which additional wastes could be added to the universal waste regulations in the future. These regulations are set forth in 40 CFR part 273.

EFFECTIVE DATE: This final rule is effective on May 11, 1995.

ADDRESSES: The official record for this rulemaking is identified as Docket Numbers F–93–SCSP–FFFFF and F–94–SCSA–FFFFF and is in the EPA RCRA Docket, located in Room M2616, U.S. EPA (5305), 401 M Street SW., Washington, DC. 20460. The docket is open from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays. To review docket materials, the public must make an appointment by calling (202) 260–9327. The public may copy a maximum of 100 pages from any regulatory docket at no cost. Additional copies cost $0.15 per page.

FOR FURTHER INFORMATION CONTACT: For information concerning this final rule contact the RCRA Hotline toll free at (800) 424–9346. In the Washington, DC. metropolitan area, call (703) 412–9810. For further information regarding specific aspects of this notice, contact the Office of Solid Waste (5304), U.S. EPA, 401 M Street SW., Washington, DC. 20460. Additional copies of this rule and supporting documentation (e.g., fact sheet and summary of requirements) are available by mail by calling the RCRA Hotline. A supporting document containing the Agencies response to comments is available for review in the Docket for this rule.

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I. Background

Under Subtitle C of the Resource Conservation and Recovery Act (RCRA), the Environmental Protection Agency (EPA) has promulgated regulations setting forth the framework of the nation's hazardous waste management program. These regulations are found in parts 260 through 279 of title 40 of the Code of Federal Regulations. These regulations first identify what wastes are considered hazardous and thus are subject to the hazardous waste regulations. Requirements are then set forth for hazardous waste generators, transporters, and owners and operators

of treatment, storage, and disposal facilities (TSDs).

On February 11, 1993, the Environmental Protection Agency proposed to add to the hazardous waste regulations a set of streamlined requirements for collecting certain widely-dispersed hazardous wastes (58 FR 8102), which were called "universal wastes." These wastes share several characteristics:

—They are frequently generated in a wide variety of settings other than the industrial settings usually associated with hazardous wastes;

— They are generated by a vast community, the size of which poses implementation difficulties for both those who are regulated and the regulatory agencies charged with implementing the hazardous waste program; and

— They may be present in significant volumes in non-hazardous waste management systems.

In the preamble to the proposal, known as the "universal waste" proposal, the Agency explained a number of reasons why it believed that a streamlined regulatory system was appropriate for these wastes. See 58 FR 8102 for a detailed discussion.

230 comments were received on the proposal from environmental groups, companies involved in universal waste management, state and local environmental and agricultural agencies, and trade associations. Comments received on the proposed rule were in general very supportive of the basic concepts behind the proposed regulations and of the proposed regulatory approach. Commenters did suggest numerous specific changes to the regulatory requirements that they believed would make them easier to comply with and to implement, more protective of the environment, and more successful at achieving the goals of the universal waste program.

Additional information on costs and benefits of the proposal was made available for public comment on June 20, 1994 (59 FR 31568). Eleven comments were received on this additional information and the Agency's responses to these comments are available in the docket for this rule (See Addresses section above). The Agency's responses to each of the comments are included here.

This rule finalizes the streamlined universal waste management system proposed on February 11, 1993 (58 FR 8102). In general, the final rule is very similar to the proposal. Although some of the details of the regulatory structure have changed, the basic approach adopted in the final rule and the majority of the particulars is the same as that proposed. A summary of the final rule is included in section III of this preamble. The following sections of the preamble discuss in detail the major comments received on each of the issues raised in the proposed rule, any differences between the proposal and the final rule, and the Agency's reasons for making the changes. The final regulatory text is set forth at the end of this notice. These regulatory changes will be codified into the printed version of Title 40 of the Code of Federal Regulations in its next update, which will be revised as of July 1, 1995.

II. Relationship to Other Agency Activities

II.A. Mercury-Containing Lamps

During development of the proposed universal waste rule it was suggested that spent fluorescent light bulbs (known as fluorescent lamps) might be appropriately managed under the universal waste regulations. Mercury is used in the production of fluorescent lamps, and as a result, a relatively high percentage of these lamps are hazardous waste when spent because they exhibit the toxicity characteristic for mercury. At the time of the proposal, the Agency decided that further investigation into the issue of mercury-containing lamps was necessary before proposing changes to the regulations governing management of these lamps. Thus, in the February 11, 1993 universal waste proposal the Agency explained that it was not proposing to include fluorescent lamps in the universal waste regulations but requested comment on several issues (58 FR 8110). First, EPA requested comment on the risks posed by these lamps in landfills or municipal waste combustors. Second, EPA requested information on the risks of current or developing mercury recovery technology.

A number of comments were received addressing the mercury-containing lamps issue. Many of the commenters argued that these lamps should be included in the universal waste final rule. Several commenters also suggested other regulatory alternatives for regulating management of these lamps. A number of comments also addressed the questions that the Agency asked in the proposal about the risks of various management methods.

On July 27, 1994, the Agency published a proposed rule specifically addressing the management of spent mercury-containing lamps (59 FR 38288). Information received in comments on the universal waste proposal was used in developing the proposal on lamp management.

Two options for changing the regulations governing mercury-containing lamps were included in the July 27, 1994 proposal. The Agency requested comment on a number of issues, including which of the two options should be implemented. One option was to conditionally exempt these lamps from regulation as hazardous waste. Under this option, mercury-containing lamps would not be considered hazardous waste provided they are disposed of in municipal solid waste landfills that meet certain requirements, or are recycled at mercury reclamation facilities that meet certain requirements. In addition, generators would be required to maintain documentation identifying the disposal or recycling facility to which the lamps were sent.

The second option proposed was to add mercury-containing lamps to the universal waste regulations. Under this option, mercury-containing lamps that fail the toxicity characteristic would continue to be regulated as hazardous waste, but would be subject to the streamlined universal waste regulations promulgated today instead of the full hazardous waste regulations. The July 27, 1994, proposed regulatory text for including mercury-containing lamps in the universal waste regulations was based on the February 11, 1993, proposed universal waste regulations. In the July 27, 1994, proposal the Agency explained that it expected to promulgate final universal waste regulations prior to promulgating a final rule on mercury-containing lamps. It was noted that if the Agency selected the universal waste option for management of mercury-containing lamps, the final regulations would be consistent with the final universal waste rule (59 FR 38295).

Thus, if in the future final rule on mercury-containing lamps the Agency decides to add them to the universal waste regulations, the requirements proposed on July 27, 1994, would be revised to be consistent with the universal waste regulations promulgated today. For example, instead of using the terminology for universal waste handlers from the proposed rule (generators and consolidation points), the terminology from today's final rule would be used (small and large quantity handlers of universal waste). The concepts governing management of mercury-containing lamps from the proposed universal waste option (e.g., waste management controls, quantity limits for notification), revised as appropriate in response to comments, would be incorporated into the

universal waste regulatory structure promulgated today.

All of the comments submitted on the universal waste proposal that addressed the issue of how mercury-containing lamps should be regulated and the questions concerning the risks of managing these wastes have been included in the docket for the July 27, 1994, proposal on mercury-containing lamps (docket number F–94–FLEP-FFFFF). The Agency will respond to those comments in the final rule on mercury-containing lamps together with comments submitted in response to the July 27, 1994, proposal.

II.B. Redefinition of Solid Waste

Over the past several years EPA has been exploring ways of clarifying the "definition of solid waste" regulations, which are the regulations that govern hazardous waste recycling. The goals of this effort are to eliminate disincentives for hazardous waste recycling, ensure that hazardous waste recycling is environmentally protective, address areas of underregulation, and simplify the definition of solid waste regulations to make them easier to comply with and to implement. In mid-1992 the Agency formed a Definition of Solid Waste Task Force which met over the course of a year with representatives of industry, environmental groups, states, and EPA regional offices to discuss possible options. The Task Force has published a final report recommending various regulatory changes that could be made to accomplish the goals of the project. The report is entitled "Re-engineering RCRA for Recycling: The Definition of Solid Waste Task Force Report and Recommendations," EPA publication # EPA 530–R–94–016, and is available by calling the RCRA Hotline listed above in the For Further Information section of this notice. It is expected that the Agency will make decisions on how to act on the Task Force's recommendations within the next several months.

Today's universal waste rule arises out of some of the same past Agency efforts as does the redefinition of solid waste project, and has similar goals. The two projects are not concurrent, however, and each is now in a different stage of development. While this is the final rule setting up the structure of the universal waste regulations, the redefinition of solid waste is a longer term project that has not yet reached the point of regulatory revisions. Several issues raised by the universal waste rule and the redefinition project make it important that the reader understand the interaction between these two projects.

First, the Universal Waste Rule is designed to accomplish three general goals. These goals consist of encouraging resource conservation while ensuring adequate protection of human health and the environment, improving implementation of the current subtitle C hazardous waste regulatory program, and providing incentives for individuals and organizations to collect the unregulated portions of these universal waste streams and manage them using the same systems developed for the regulated portion, thereby removing these wastes from the municipal waste stream. As discussed earlier, the goals of the Redefinition of Solid Waste Force include eliminating disincentives for hazardous waste recycling, ensuring that hazardous waste recycling is environmentally protective, addressing areas of underregulation, and simplifying the definition of solid waste regulations to make them easier to comply with and to implement. In the universal waste proposal the Agency did not propose to make any changes to the regulations governing facilities recycling universal wastes (destination facilities), and has not done so in this final rule. Facilities recycling universal wastes are thus subject to the same regulations as any other hazardous waste recycler. A number of commenters suggested that the Agency should lessen the regulatory requirements for universal waste recyclers to encourage recycling. Although the Agency agrees that encouraging safe recycling of these wastes is an important objective, it would be premature to make any changes to the recycling regulations at this time.

As part of the redefinition of solid waste project, the Agency and other interested parties have expended a great deal of effort analyzing this issue and discussing the best ways to accomplish this goal. It would not make sense to make any changes to the recycling regulations now, since the final results of the project are not available. Any changes made now would not realize the benefit of the efforts put into the project. In addition, making changes now could be very disruptive, since it is likely that the recycling regulations will be revised again shortly after the universal waste regulations are in place (i.e., incorporated into state regulations).

The Agency's goals for universal waste recycling are the same as for all other hazardous waste recycling. Thus, when the Agency makes changes to the recycling regulations as part of the redefinition of solid waste project, these changes will also be applied to universal waste recycling.

Second, the Definition of Solid Waste Task Force recommendations discuss a category of recycling called "product stewardship." Depending on the direction taken by the Agency in this area there may be some similarities to, or overlap with, the universal waste regulations. Any regulatory changes that are made in this area as part of the redefinition of solid waste will take into account the status of the universal waste regulations (e.g., what wastes have been added, how many states have implemented the regulations, and how well the system is working). The Agency will ensure that the product stewardship portion of the redefinition effort is coordinated with the universal waste regulations as necessary and will not disrupt existing programs.

II.C. Possible Revisions to the Hazardous Waste Characteristics

EPA believes the approach in this rulemaking is a useful new approach to easing the burden while encouraging the proper management of wastes that pose a hazard if mismanaged. There may be certain hazardous wastes, however, for which relief beyond that provided by the universal waste rule may be appropriate. One approach for doing so is through reexamination of the existing toxicity characteristic. EPA is going to expeditiously investigate what sort of effort would be involved in developing modifications to the characteristics, what sort of resources would be needed to do that, and consider the benefits of such an effort against the benefits of other regulatory improvements EPA is considering. A rulemaking to modify the characteristics might potentially affect a significant quantity of currently regulated and currently unregulated waste.

III. Summary of Final Universal Waste Regulations

The part 273 regulations for managing universal wastes promulgated today are substantively very similar to those proposed on February 11, 1993. Thus, the requirements that a person managing universal wastes must follow under this final rule are very similar to those that they would have been required to follow under the regulations as proposed. However, in response to comments from the public on the proposal, the Agency has made a number of changes to the regulations that the Agency believes will improve the environmental protectiveness of the rule, make it easier for the regulated community to comply with the requirements, and make it easier for

implementing agencies to implement the universal waste program.

III.A. Structure of the Final Rule

Although the final universal waste rule requirements are substantively very similar to those proposed, the final rule may at first appear to be quite different from the proposal because two major structural changes have been made to the universal waste regulations, 40 CFR part 273. First, the terms used to refer to some of the participants in the universal waste system have been changed in the final rule. To make the final regulation easier to use and less repetitive, the basic organization of the regulation has also been changed from the proposal.

The first major revision to the structure of the regulation is that the terms used to refer to some of the participants in the universal waste system have been changed. Specifically, in the proposal there were four types of regulated persons that manage universal waste: Generators, consolidation points, transporters, and destination facilities. In the final rule there are also four types of regulated persons. The transporter and destination facility categories are retained as they were proposed. However, the persons who would have been included in the proposed generator and consolidation point categories will now fit into either the category of small quantity handlers of universal waste (SQHUWs) or the category of large quantity handlers of universal waste (LQHUWs). Under the proposal, the categories of generator and consolidation point were distinguished by the way wastes came to be at the facility. Generators generated the waste themselves on-site, and consolidation points received the waste from off-site. Under the final rule, the categories of large and small handlers of universal waste are distinguished by the amount of waste accumulated on-site at any time. LQHUWs accumulate 5,000 kilograms or more total of universal wastes. SQHUWs accumulate less than 5,000 kilograms total.

The Agency decided to make this change for several reasons. First, numerous commenters suggested that there should be a third category of universal waste handler: front-line collectors of universal waste who collect small quantities of universal waste, largely from consumers and small businesses. These commenters pointed out that such collectors would frequently be retail-type operations (e.g., a department or specialty store that has a spent battery collection box) participating in national or regional collection programs. Such front-line collectors would likely accumulate only small quantities of universal waste because only a minor portion of their business is devoted to managing waste, and because they would ship wastes frequently using package shipping services or similar systems set up by the collection programs. Under the proposal, these front-line collectors would have been subject to the more stringent consolidation point requirements because they receive wastes from off-site generators.

These commenters argued that front-line collectors should be subject to less stringent requirements than the proposed consolidation point requirements for several reasons. One reason was that the universal waste they would have on-site would pose limited risk due to the small quantities involved. Another reason was that some of the requirements would inhibit the participation of many retail-type operations (such as the large retail chains), thereby greatly limiting the success of universal waste collection programs in removing these wastes from non-hazardous waste management systems.

The Agency agrees with the concept that the activities of persons such as front-line collectors managing small quantities of universal waste pose less risk and require less stringent standards than those managing larger quantities of universal waste. Instead of adding an additional category of front-line collectors with less stringent standards, however, the Agency decided to extend this concept to all persons both generating and collecting universal waste. Thus, under the final rule, persons accumulating large quantities of universal waste (5,000 kg or more total of universal waste accumulated on-site) are called large quantity handlers of universal waste, and are subject to more stringent requirements than small quantity handlers of universal wastes, who are persons accumulating less than 5,000 kg total of universal waste. A handler's designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated.

Another reason the Agency decided to restructure the categories of persons managing universal wastes was in response to comments received on the issue of recordkeeping for universal waste shipments. The Agency had proposed that a manifest be required for shipments from final consolidation points to destination facilities, based on the concept that such shipments would be larger shipments and thus require closer tracking. In addition to other issues, a number of commenters pointed out that it is not necessarily true that shipments from consolidation points to destination facilities will be larger shipments. For example, shipments between consolidation points or between generators and destination facilities may also be large shipments.

The Agency agrees that it does not necessarily make sense from a risk perspective to require recordkeeping for certain shipments based solely on the type of universal waste management activity conducted by the shipper and receiver (i.e., whether the shipper generates or collects universal waste or whether the receiver collects or disposes of universal waste) rather than on the quantity of universal waste handled. Thus, the Agency has decided to require recordkeeping of LQHUWs but not SQHUWs, and to define the categories by the quantities of waste managed.

The second major change to the structure of the rule is that it has been reorganized. Part 273 of the proposed rule included some general provisions in the first subpart, and then each subsequent subpart included the regulations applicable to persons managing each specific type of universal waste. For example, subpart B covered universal waste batteries, and included requirements for generators, transporters, consolidation points, and destination facilities. Subpart C covered universal waste pesticides, and also included requirements for generators, transporters, consolidation points, and destination facilities.

A number of commenters pointed out that this organization was unnecessarily repetitive, particularly since the majority of the requirements for each type of participant in the universal waste system was the same. In other words, the requirements for generators of batteries (or transporters, consolidation points, or destination facilities) were basically the same as the requirements for generators of pesticides (or transporters, consolidation points, or destination facilities). These commenters also noted that the rule would become even more repetitive if additional wastes were added in the future, since a new subpart would have to be added for each new universal waste. These commenters suggested that the rule would be easier to use if it were structured such that general requirements were presented together, followed by specific differences for persons managing particular universal wastes.

The Agency agrees with these commenters and has revised the final rule accordingly. Subpart A of the final rule includes general provisions such as

applicability and definitions. Subpart B includes requirements applicable to Small Quantity Handlers of Universal Waste. Subpart C includes requirements for Large Quantity Handlers of Universal Waste. Subpart D covers the requirements for transporters of universal waste. Subpart E sets forth standards for destination facilities. Subparts F and G, respectively, include standards for imports of universal waste and petitions to include other wastes under Part 273.

Subparts B through E of the final rule now include all of the requirements applicable to one type of universal waste manager, regardless of what type of universal waste is being managed. Thus, a universal waste manager who may be handling more than one type of universal waste need only read the one section applicable to his or her activities. Requirements that are different for particular waste types are noted within the regulatory text. For example, the waste management sections for small and large handlers each include a subsection setting forth the requirements applicable to management of a particular universal waste. Subsection (c) addresses batteries, subsection (d) pesticides, and (e) thermostats.

The Agency believes reorganization makes the final rule more user-friendly, and thus will encourage participation in universal waste collection programs. The Agency also believes that the regulatory sections within the subparts are laid out simply and clearly, making it easier to find any particular part of the regulation.

Although this reorganization does remove much of the redundancy of the regulation (and will avoid adding repetition in the future if new universal wastes are added to the regulations), readers may note that the small and large quantity handler subparts of the rule remain somewhat repetitive. This is because, although these two groups share many of the same requirements, in three sections, the requirements are different. These sections are notification, tracking, and employee training. One possibility would have been to have only one handler subpart, and specify the different requirements for small and large quantity handlers within each of these three sections. However, the Agency believes that the regulation will be easier for handlers to follow if they determine once whether they are small or large handlers, and then read only the regulations applicable to their category. Thus, the Agency has decided to retain two different subparts for small and large quantity handlers.

Figure 1 illustrates the structure of the final universal waste management system.

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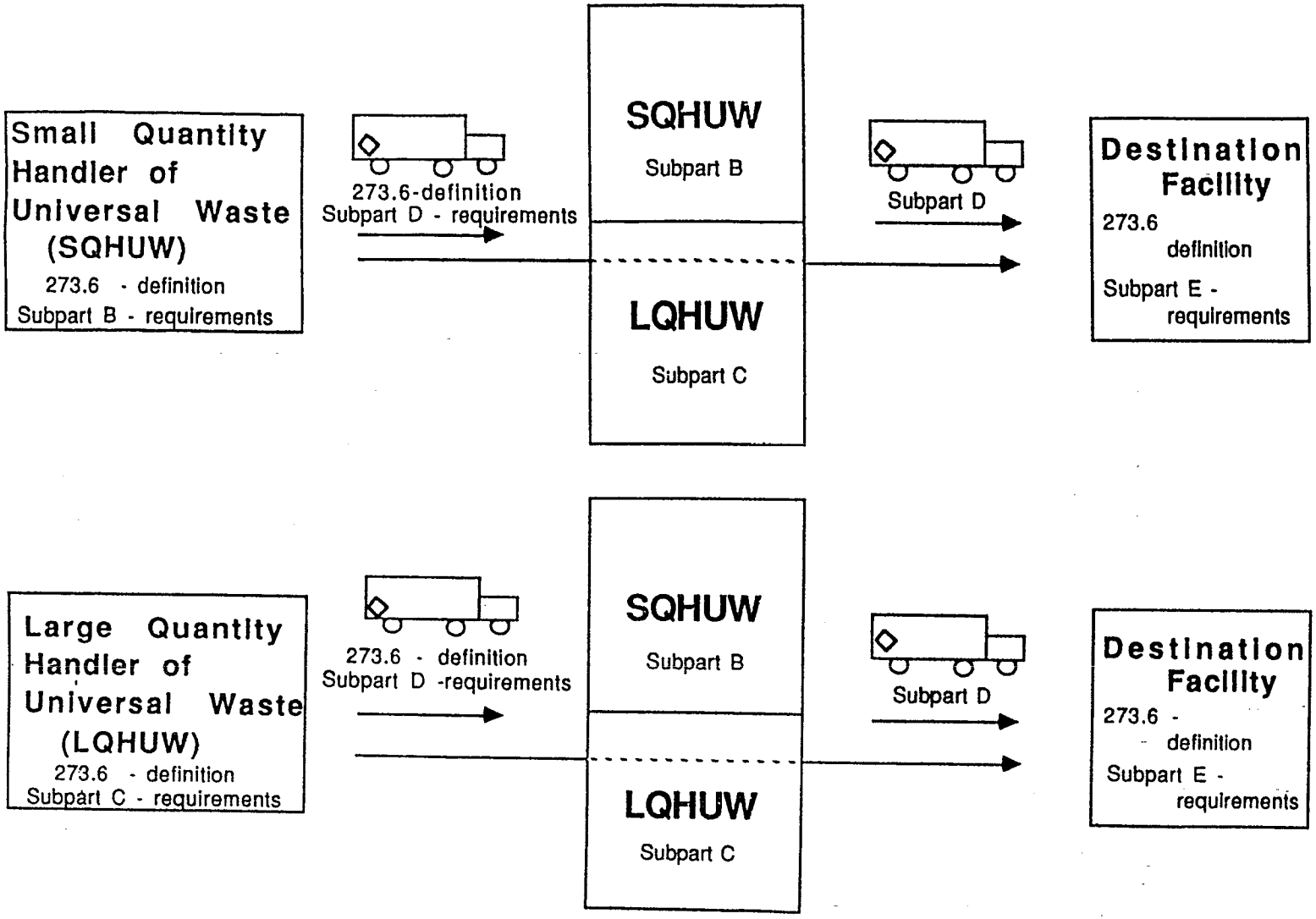
BASIC STRUCTURE OF THE UNIVERSAL WASTE SYSTEM



PLEASE NOTE: Shipments of universal waste may be rejected and returned to the originating handler of the universal waste, by the receiving facility.

Requirements related to off-site shipments of these "rejected loads" are found in Part 273.18, 273.38, 273.55, and 273.61

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III.B. Summary of Universal Waste Requirements

This section provides a summary of the final universal waste regulations, 40 CFR part 273. Table 1 presents a simplified overview of the types of participants in the universal waste system and the requirements applicable to each type of participant. Each of the universal waste requirements is discussed in more detail in the later sections of this preamble.

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TABLE 1: OVERVIEW OF UNIVERSAL WASTE REGULATIONS[1]

Participants in Universal Waste System / Universal Waste Requirements	Small Quantity Handlers of Universal Waste	Large Quantity Handlers of Universal Waste	Universal Waste Transporters	Destination Facilities
Prohibitions	§273.11	§273.31	§273.51	Comply with RCRA TSDF requirements
Notification	§273.12 NO REQUIREMENTS	§273.32	Comply with DOT requirements	Comply with RCRA TSDF requirements
Waste Management Requirements	§273.13	§273.33	§273.52 Comply with DOT requirements	Comply with RCRA TSDF requirements
Labeling/Marking	§273.14	§273.34	Comply with DOT requirements	Comply with RCRA TSDF requirements
Storage Time Limits	§273.15 ONE YEAR LIMIT	§273.35 ONE YEAR LIMIT	§273.53 TEN DAY LIMIT	Comply with RCRA TSDF requirements
Employee Training	§273.16 DISTRIBUTE INFO	§273.36 ENSURE FAMILIARITY	Comply with DOT requirements	Comply with RCRA TSDF requirements
Response to Releases	§273.17	§273.37	§273.54	Comply with RCRA TSDF requirements
Off-Site Shipments	§273.18	§273.38	§273.55 Comply with DOT requirements	§273.61
Tracking	§273.19 NO REQUIREMENTS	§273.39	Comply with DOT requirements	§273.62
Export Requirements	§273.20	§273.40	§273.56	§273.63

[1] Gray shading indicates that there is a regulatory section in Part 273, the universal waste regulations.

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III.B.1. Wastes Covered Under the Universal Waste System

Three types of wastes are covered under the universal waste regulations: hazardous waste batteries, hazardous waste pesticides that are either recalled or collected in waste pesticide collection programs, and hazardous waste thermostats. Other wastes may be added to the universal waste regulations in the future, but at this time only these three wastes are included.

III.B.2. Requirements for Participants in the Universal Waste System

As illustrated in Table 1, there are four types of participants in the universal waste system: Small Quantity Handlers of Universal Waste, Large Quantity Handlers of Universal Waste, Universal Waste Transporters, and Destination Facilities. Each of these participants is described below.

Although there are ten basic universal waste management requirements, individual participants in the universal waste system are not subject to all ten requirements. Only those requirements that have been determined to be appropriate for a given type of participant are included in the regulations for that participant. Throughout the universal waste regulations, each of these ten basic requirements is addressed in regulatory sections using the same section headings. For example, the same requirements are addressed in the off-site shipments section for SQHUWs as are addressed in the off-site shipments sections for LQHUWs, transporters, and destination facilities. In some cases not all issues within a section were determined to be necessary for each type of participant, so some sections do not address every issue addressed in other sections with the same heading.

III.B.2.a. Small and Large Quantity Handlers of Universal Waste

There are two types of handlers of universal waste. The first type of handler is a person who generates, or creates, universal waste. This is a person who uses batteries, pesticides, or thermostats and who eventually decides that they are no longer usable and thus are waste. Contractors or repair people who decide that batteries or thermostats are no longer usable and remove them from service also generate universal waste, and thus are handlers of universal waste. The second type of handler is a person who receives universal waste from generators or other handlers, consolidates the waste, and then sends it on to other handlers, recyclers, or treatment/disposal facilities. Universal waste handlers accumulate universal waste, but do not treat, recycle, or dispose of the waste. Each separate location (e.g., generating location or collecting location) is considered a separate universal waste handler. Thus, if one company has several locations at which universal waste is generated or collected, each location is a separate handler.

There are two sets of regulations for handlers of universal waste. Subpart B of part 273 sets forth the requirements that small quantity handlers of universal waste must follow. SQHUWs do not accumulate 5,000 kilograms or more total (all universal waste categories combined) of universal waste at their location at any time. Subpart C of part 273 sets forth the requirements that large quantity handlers of universal waste must follow. LQHUWs accumulate 5,000 kilograms or more total (all universal waste categories combined) of universal waste at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated, at any one time. The Agency realizes that some handlers of universal waste who would generally qualify as a small quantity handler may have a one-time, or infrequent, occasion to accumulate 5,000 kg of universal waste, at any one time, on-site, thus requiring them to comply with the large quantity handler regulations in today's rule. The Agency did not intend to require these handlers to comply with the more stringent large quantity handler requirements during subsequent years in which they do not accumulate 5,000 kilograms or greater. The Agency clarifies in the definition of large quantity handler of universal waste, that this designation is retained by the handler for the remainder of the calendar year in which 5,000 kilograms or more of universal waste was accumulated. A handler may reevaluate his status as a large quantity handler of universal waste in the following calendar year.

Subparts B and C each include eleven sections (see Table 1; Note: the "Applicability" section is not included in this table). Because most of the requirements are the same for SQHUWs and LQHUWs, they are described together. The first sections (40 CFR 273.10 and 273.30) are called "applicability," and explain who the subpart B and C requirements apply to. The second sections, "prohibitions" (40 CFR 273.11 and 273.31), prohibit handlers from disposing of, diluting, or treating universal waste except in certain circumstances. The third sections, "notification," are different for SQHUWs and LQHUWs. 40 CFR 273.12 notes that SQHUWs are not required to notify EPA of their universal waste activities and are not required to obtain an EPA identification number. 40 CFR 273.32 requires LQHUWs to notify EPA and to obtain an EPA identification number.

The fourth sections, "waste management" (40 CFR 273.13 and 273.33), explain the requirements SQHUWs and LQHUWs must follow when handling universal waste. They require that universal waste be managed in a way that prevents releases to the environment, specify packaging requirements for universal wastes, and set forth procedures that must be followed when handling batteries (e.g. sorting battery types, mixing battery types, disassembling battery packs, removing electrolyte, etc.), and when removing mercury-containing ampules from thermostats. The next sections, "labeling/marking" (40 CFR 273.14 and 273.34), require handlers to label or mark universal wastes or containers of universal waste to identify the type of universal waste (e.g., used batteries, pesticides). The "accumulation time limit" sections (40 CFR 273.15 and 273.35) limit the time that handlers may accumulate universal waste to one year (with one exception), and require handlers to be able to demonstrate that wastes are not accumulated for more than one year. The seventh sections, "employee training" (40 CFR 273.16 and 273.36), are somewhat different for SQHUWs and LQHUWs. SQHUWs must distribute basic handling and emergency information to employees handling universal waste. LQHUWs must ensure that employees are familiar with waste handling and emergency procedures as appropriate based on their responsibilities.

The eighth sections are entitled "response to releases" (40 CFR 273.17 and 273.37) and require handlers to immediately contain any releases of universal waste and to handle residues appropriately. The "off-site shipments" sections (40 CFR 273.18 and 273.38) require handlers to send universal waste only to persons within the universal waste system and specify procedures to be followed when a shipment is rejected by the receiving facility. The ninth sections, "tracking universal waste shipments" (40 CFR 273.19 and 273.39), are different for SQHUWs and LQHUWs. SQHUWs do not have any requirements. LQHUWs must maintain basic records documenting shipments received at the facility and shipments sent from the facility. The last sections, "exports" (40 CFR 273.20 and 273.40),

specify notification procedures that must be followed when handlers ship universal wastes to foreign destinations.

III.B.2.b. Transporters of Universal Waste

The requirements for transporters of universal waste are found in subpart D of part 273. See Table 1. Transporters are persons who transport universal waste from handlers of universal waste to other handlers, destination facilities, or foreign destinations. A transporter may be an independent shipper contracted to transport the waste, or may be a handler who self-transports the waste. A universal waste handler who self-transports his waste becomes a transporter for those self-transportation activities and is subject to the requirements of subpart D of this rule.

The universal waste rule does include some specific requirements for transporters. However, the basic approach to transportation under the universal waste system is that no hazardous waste manifests are required, and transporters must comply with the Department of Transportation (DOT) requirements that would be applicable to the waste if it were being transported as a product. For example, if transporting universal waste batteries, the transporter must comply with the appropriate DOT requirements, which are based on whether the particular battery type is a DOT hazardous material, and if so, which DOT hazardous material requirements apply to the specific battery type.

The universal waste transporter requirements consist of seven sections. The first, "applicability" (40 CFR 273.50), explains to whom the transporter requirements apply. "Prohibitions" (40 CFR 273.51), prohibits transporters from disposing of, diluting, or treating universal waste. The third section, "waste management" (40 CFR 273.52), explains that transporters must comply with applicable DOT requirements if the waste they are transporting is a hazardous material under DOT regulations. The fourth section, entitled "accumulation time limits" (40 CFR 273.53), notes that transporters may store waste for up to ten days at a transfer facility during the course of transportation. Transfer facilities are transportation related facilities such as loading docks, parking areas, and storage areas. If a transporter stores waste for more than ten days at one location, the transporter must comply with the appropriate universal waste handler rules while storing the waste.

The fifth transporter section, "response to releases" (40 CFR 273.54), requires transporters to immediately contain any releases of universal waste and to handle residues appropriately. "Off-site shipments" (40 CFR 273.55) prohibits transporters from transporting universal waste to any place other than a universal waste handler, destination facility, or foreign destination. Finally, "exports" (40 CFR 273.56), requires transporters to follow certain requirements for exports of hazardous waste.

III.B.2.c. Destination Facilities

The requirements for destination facilities are found in subpart E of part 273. See Table 1. Destination facility means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in paragraphs (a) and (c) of §§ 273.13 and 273.33. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

The universal waste rules include only two specific universal waste requirements for destination facilities. In general, however, these facilities are subject to the same requirements that are applicable to treatment, storage, and disposal facilities under the full hazardous waste regulations. This includes permitting as well as general facility standards and unit specific requirements. In addition to the full hazardous waste requirements, there are three sections specifying universal waste requirements for destination facilities. For the most part these requirements simply mirror universal waste handler requirements for receipt of universal waste, since destination facilities also receive universal waste.

First, "standards for destination facilities" (40 CFR 273.60) indicates which of the full hazardous waste regulations destination facilities must follow. These are the same full hazardous waste regulations these facilities would be subject to if they were handling non-universal hazardous wastes. Specifically, facilities that treat, dispose of, and recycle universal wastes, except for those activities described in paragraphs (a) and (c) of §§ 273.13 and 273.33, are subject to the permitting or interim status requirements of 40 CFR parts 264 or 265. Facilities that recycle universal waste without accumulating the waste before it is recycled are subject to the recycling requirements of 40 CFR 261.6(c)(2).

Second, "off-site shipments" (40 CFR 273.61) sets forth procedures for rejecting a shipment of universal waste. Finally, "tracking universal waste shipments" (40 CFR 273.62) requires destination facilities to retain the same records for receipt of universal waste shipments that LQHUWs are required to retain. By documenting receipt of universal waste shipments, these records complete documentation of shipments sent from handlers.

III.B.3. Import Requirements

Subpart F of the universal waste regulations clarifies the requirements for universal wastes that are imported. In general, once universal waste enters the United States it is subject to the same universal waste requirements it would be if it had been generated in the United States.

III.B.4. Petitions to Include Other Wastes Under Part 273

Subpart G of part 273 includes two sections setting forth the procedures to be used to petition the Agency to add additional wastes to the universal waste regulations. Further requirements are specified in 40 CFR 260.20 and 260.23.

IV. Detailed Discussion of Final Rule

IV.A. Goals of Final Rule

In the proposed part 273 regulations, EPA proposed a set of special requirements for universal hazardous wastes which were designed to accomplish three general goals. One goal was to encourage resource conservation, while ensuring adequate protection of human health and the environment. Another broad goal defined in the proposal was to improve implementation of the current subtitle C hazardous waste regulatory program. And, the final goal, by simplifying the requirements and encouraging collection of these hazardous wastes, EPA hoped to provide incentives for individuals and organizations to collect the unregulated portions of these universal waste streams (e.g., from households or CESQGs) and manage them using the same systems developed for the regulated portion, thereby removing these wastes from the municipal waste stream and minimizing their input of hazardous constituents to municipal landfills, combustors, and composting projects. Each of these goals is discussed below.

The first goal for the universal waste rule stated in the proposal was to encourage resource conservation. EPA believes that today's final rule serves to stimulate achievement of this goal. While today's final rule applies to both universal wastes destined for recycling and those destined for disposal, as proposed, several features of the rule remove major obstacles faced by persons

desiring to recycle these wastes. Today's final rule reduces the management requirements for generators, consolidation points (in the final rule referred to as small and large quantity handlers of universal waste), and transporters. Destination facilities must continue to meet all requirements, except manifesting requirements, of the subtitle C regulations. By relaxing the standards for these handlers, collection of universal waste is simplified, thereby, encouraging participation in collection programs. The Agency believes that the ability to access large quantities of universal waste from central collection centers may encourage the development and use of safe and effective ways to recycle these wastestreams. Conversely, limiting the rule to universal waste destined for recycling only, may discourage the use and development of recycling technologies as universal waste handlers may be hesitant to participate in a program that requires knowledge that their universal waste is recycled.

The second goal of today's final rule is to improve implementation of the hazardous waste program. EPA believes that today's rule, as modified in response to comments, will have significant impacts on waste management practices nationwide. Implementation of the hazardous waste program will be improved by the simplified set of requirements set forth in the rule. The provisions are now written such that they are more easily understood by handlers of universal wastes. The Agency believes that today's final rule is protective of human health and the environment, will be clear and easily understood by the diverse community which is targeted in this rule, and will not require expending unreasonable amounts of time and effort to understand the applicable requirements. The final rule also allows the part 273 regulations to be applied to all universal wastes, regardless of whether they are destined for recycling or disposal. Thus, compliance and enforcement procedures are easier to implement. Finally, because the final rule does not require that universal waste handlers count those universal wastes managed under part 273 toward their monthly quantity determination, today's rule will greatly simplify the procedures used to determine monthly hazardous waste generation rates for universal waste handlers, thus facilitating the implementation of the regulations.

The third goal of today's final rule is to separate universal waste from the municipal waste stream. Under the full subtitle C regulations, the management of waste differs based on the waste's generation source. That is, waste generated by consumers in their homes is not regulated under RCRA Subtitle C when discarded, because it is excluded from the definition of hazardous waste under 40 CFR 261.4(b)(1). Conversely, the same waste would be subject to RCRA Subtitle C regulation if generated by commercial establishments, industries and other non-exempt generators. Wastes covered under the universal waste regulations (batteries, pesticides, and mercury thermostats) are examples of wastes that are generated by both groups. Because the waste itself is the same, and therefore looks the same to waste handlers, universal waste that belongs in a hazardous waste system may be entering municipal solid waste landfills or combustors instead. The Agency believes that today's rule is practical enough that, as an infrastructure develops for collecting universal waste, all categories of handlers will manage their universal waste under the part 273 requirements. Therefore, in the final rule, management of universal waste is material-specific rather than source-specific, therefore, universal waste, regardless of the source of generation, should be easily managed under today's final rule.

IV.B. Scope of Final Rule

This section discusses the scope of the final universal waste rule. The first section discusses the question raised in the proposal of whether the universal waste system should be limited to wastes that are recycled, or should include both wastes that are recycled and wastes that are treated and disposed. The second section discusses each of the wastes that have been included in the final rule, and several wastes that have not been included. The third section addresses another question raised in the proposal, whether Conditionally Exempt Small Quantity Generators (CESQGs) should be required to manage their universal wastes under the universal waste system or have the option of managing the waste under the existing CESQG exemption.

IV.B.1. Recycling Versus Recycling or Disposal

The Agency requested comment in the proposed universal waste rule on whether the streamlined universal waste regulations should cover wastes that are to be either recycled or disposed of, or whether they should be limited only to wastes that are to be recycled. The Agency discussed three options: (1) Limiting the regulations to recycled wastes only; (2) allowing management of wastes that are to be either recycled or disposed of; or (3) a hybrid of options 1 and 2 under which generators and transporters could manage waste that was to be either recycled or disposed of under the streamlined universal waste regulations, but the streamlined regulations would be available only to consolidation points that send wastes on for recycling.

The proposed regulatory text was crafted following option 2: the streamlined regulations would be applicable to both recycled and disposed of wastes. Although limiting the regulations to recycled wastes might encourage recycling, which the Agency supports, the Agency explained that at the time it believed that not limiting the regulations was the best option for a number of reasons. The vast majority of commenters who addressed this issue agreed that the universal waste regulations should be available for both wastes that are recycled and wastes that are disposed of. Commenters generally agreed with the Agency's basis for not limiting the regulations and also discussed additional supporting factors. Based on these comments, the Agency has decided to include both recycled and disposed of universal wastes under the final universal waste regulations of part 273. The main reasons that commenters supported this approach and that the Agency has chosen this approach for the final rule are discussed below.

Not limiting the universal waste system to recycled waste makes the regulations much less complex and more user friendly, thus encouraging participation in universal waste collection programs. Persons are more likely to be willing to participate in collection programs if they are not required to determine whether recycling is available and cost effective, particularly in situations where recycling markets and capacity are volatile. In these cases it may not actually be possible to make such a determination early in the collection system, and the determination may vary over time, making compliance and enforcement difficult. The Agency believes, and commenters agreed, that less complex regulations will increase collection of universal wastes. Increased collection under the universal waste regulations will result in increased environmentally protective management of universal wastes at Subtitle C hazardous waste facilities. The Agency believes that the environmental benefits to be obtained from improved management of these wastes, whether it is recycling or treatment and disposal, outweigh the possible increases in

recycling that might occur if the regulations were limited.

Not limiting the regulations also avoids one problem that the Agency and the regulated community have had difficulties with in the past. Regulations that are based on the intent of a person to do something in the future are very difficult to enforce, and sometimes even make it difficult for regulated persons to know what regulations they should be following. The Agency believes, and commenters agreed, that the compliance and implementation difficulties that are inherent in requirements that vary depending on a future action (e.g., recycling or disposal) make distinguishing between wastes to be recycled and wastes to be disposed of infeasible under the universal waste regulations.

Several commenters argued that limiting the regulations to recycled waste might, in fact, discourage collection and recycling. Commenters believed that persons are not likely to be willing to collect wastes for potential recycling under the universal waste regulations if they are vulnerable to liability for full Subtitle C violations, if, at a later time, they determine that recycling is not available. Given the volatility of recycling markets and capacities, particularly for recycling technologies that are under development and not fully established, this is a real concern. One commenter also pointed out that some universal wastes are likely to be collected in mixtures of recyclable wastes and non-recyclable wastes (e.g., mixed batteries). Such wastes would have to be managed under the full hazardous waste regulations, thus nullifying the benefits of the universal waste regulations, inhibiting collection of even the recyclable wastes, and ultimately limiting recycling. The Agency agrees with these commenters that the difficulties inherent in having two systems based on the ultimate disposition of the waste is not practical and may, in some cases, actually inhibit recycling.

Several commenters argued that providing streamlined regulations only for recycled wastes would provide an even greater incentive than already exists for persons managing wastes to claim that they are recycling, when their operations may be sham rather than legitimate recycling. This would make it even more difficult for both persons shipping wastes to recyclers and regulating agencies to determine whether persons claiming to be recycling (or sending wastes to recycling), are legitimately recycling. The Agency's experience has been that it is not an easy task to determine whether an operation is a legitimate or sham recycler. The added incentive for sham recycling, and the increased importance of distinguishing legitimate from sham recycling would further complicate a system limited to recycled wastes, making it less effective in accomplishing the goals of removing waste from non-hazardous waste management systems and improving implementation of the hazardous waste regulations.

Numerous commenters pointed out that there may be a number of wastes for which the universal waste system would be successful in greatly improving waste management practices, but for which recycling is not available because it is not either technologically or economically feasible. Waste pesticides are a good example. Recycling is rarely, if ever, an option and incineration is frequently the only management option available. If the universal waste regulations were limited to wastes that are recycled, waste pesticides could not be included. This would greatly limit the environmental benefits to be obtained from collection and proper management of pesticides, and other similar wastes, under the universal waste regulations. These commenters, and the Agency, agree that the benefits of encouraging proper management for such wastes far outweigh the possible increases in recycling that might occur if the regulations were limited.

Finally, the Agency notes that the treatment standards of the land disposal restrictions program specifically require recycling for many wastes included in the final universal waste rule, including lead-containing batteries, cadmium-containing batteries, and high concentration mercury wastes such as high-mercury batteries and thermostats. Land disposal, and treatment followed by land disposal, is not allowed for these wastes. Under the final rule, all universal wastes must go to a destination facility for any treatment, recycling, or disposal. The land disposal restrictions, including the treatment standards, are fully applicable to destination facilities. Thus, for these universal wastes recycling is actually mandatory. The Agency notes that in cases such as these the land disposal restrictions program has been used to require recycling for particular hazardous wastes where it has been determined to be the best demonstrated available technology (BDAT). These requirements continue to apply under the universal waste regulations.

IV.B.2. Wastes Included in Final Rule

In the universal waste proposal, hazardous waste batteries and suspended and/or cancelled pesticides that are recalled were included as universal wastes in the proposed regulatory text. In the preamble, the Agency suggested several additional waste types for which it believed regulation under the universal waste system might be appropriate. The waste types discussed included spent antifreeze, paint residues, used thermometers, and used thermostats. The Agency requested comment on whether these wastes should be included in the universal waste system, and on what requirements would be appropriate to include in the regulations to ensure that management under the universal waste regulations was protective of human health and the environment. Specific waste management requirements for thermostats were discussed in some detail. The Agency has decided to include three waste categories in the final universal waste rule: hazardous waste batteries, certain hazardous waste pesticides, and hazardous waste thermostats. These wastes are exempt from 40 CFR parts 262—270, except as specified in 40 CFR part 273. These wastes are now subject to the new part 273 regulations and, therefore, are not fully regulated under the current hazardous waste regulations. The universe of wastes included in each of these categories is discussed in detail in the subsections below. Comments received on each of the waste categories and the Agency's responses to these comments are also discussed. Also discussed are several waste types for which a number of comments were received, but that were not included in the final universal waste rule.

IV.B.2.a. Hazardous Waste Batteries

The Agency proposed to include all batteries that are hazardous waste in the universal waste regulations, to encourage collection and proper management of these wastes. The main reason for including all batteries was to simplify the regulations and make them easy to comply with. The Agency requested comment on several issues, including the proposed definition of battery, whether the regulation should distinguish between "wet" and "dry" batteries, whether the regulation should distinguish between various sizes of batteries, and how lead-acid batteries should be addressed. This latter issue is discussed in detail in the following section of this preamble.

The Agency has decided to generally retain the proposed approach to including batteries in the final rule. Thus, all batteries that are hazardous waste may be managed under the final universal waste regulations. However, based on comments received, the final definition of battery has been revised from the proposal. A number of commenters raised questions concerning the proposed definition and suggested various revisions. Several commenters also recommended using a standard definition that is already in use and accepted by major industry groups. One commenter identified the American National Standards Institute (ANSI) standard definitions for battery and cell, and recommended using a combination of the two.

The Agency agrees that a recognized, standard definition for battery is most likely to properly identify the universe of articles that should be covered by the universal waste regulations. The Agency's intent is to include those items commonly understood to be batteries, without inadvertently including other items or excluding some particular type of battery. A standard definition is most likely to accomplish this. Thus, the Agency has chosen to use a combination of the American National Standards Institute (ANSI) standard definitions for battery and electrochemical cell to define the term battery in the final rule. (See "The New IEEE Standard Dictionary of Electrical and Electronics Terms," Fifth Edition, published by the Institute of Electrical and Electronics Engineers, Inc., IEEE Standard 1000–1992.) The definition of battery in the final rule is "a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed."

As suggested by commenters, the final definition has been revised to specify that a battery must store electrical energy in addition to receiving and delivering electrical energy. This distinction is to ensure that gas-powered or electric generators are not included. The definition has also been expanded to clarify that the definition of battery does include batteries from which the electrolyte has been removed. This was clearly the intent of the proposal, which specifically allowed removing electrolyte from batteries. Commenters did not object to electrolyte removal, but were concerned that it be clear that batteries may not be crushed or broken to remove electrolyte. Note also that the waste management requirements for batteries prohibit breaking batteries during electrolyte removal.

With respect to the question of whether the universal waste regulations should distinguish between "wet" and "dry" batteries (batteries with a liquid vs. non-liquid electrolyte), those commenters who addressed this issue agreed that no distinction should be made. The Agency has decided to include both types of batteries in the regulation based on these comments and the argument that including all hazardous waste batteries greatly simplifies the regulations, making them easier to comply with and thus encouraging collection and improved management. Similarly, the Agency has decided to include all sizes of batteries in the final rule. Few commenters addressed this question, and again the Agency believes that not limiting the universal waste system will result in improved management of all batteries, regardless of size.

Finally, a number of commenters raised questions about which types of batteries exhibit characteristics of hazardous waste and therefore would be covered under the universal waste system. Several commenters requested that the Agency specify which battery types are hazardous. A few commenters provided some data on various types of batteries, but the Agency did not find the data to be comprehensive enough to make broad generalizations about whether various battery types are always or never hazardous. In addition, the Agency found it was not possible to commit the resources that would be required to conduct sufficient testing of numerous brands, sizes, and ages of batteries to make any broad generalizations. Furthermore, even if resources were available, it would likely not be possible to make definitive determinations in any case.

As a result, the Agency has decided to retain the proposed approach of using the term "hazardous waste batteries" to identify the universe of batteries that may be managed under the universal waste regulations. As is true under all of the hazardous waste regulations, it remains up to the generator (handler) of batteries to determine whether they must be managed under the hazardous waste regulations at all. If so, then the universal waste regulations apply. However, the Agency continues to believe that the universal waste regulations are simple and basic enough that it will be easier and more efficient to manage all kinds of batteries, and particularly mixed batteries, under the universal waste system rather than making individual determinations about batteries or battery types.

Of course, where sufficient information is available for a generator (or other handler) to determine that a particular battery is not hazardous, then that battery need not be managed under the universal waste regulations. However, one of the Agency's goals for the universal waste system has been to reduce the complexity and burden of complying with the hazardous waste regulations for these wastes. One of the major difficulties with the hazardous waste regulations has been hazardous waste determinations in cases where wastes are generated in small quantities by large numbers of people who are not familiar with the specific composition of the waste. Batteries are a classic example of this problem. Thus, the Agency hopes that the universal waste regulations are sufficiently improved to allow persons to manage batteries within the universal waste system without placing too much emphasis on whether they are hazardous or not. Obviously, in cases where it is known that batteries are not hazardous this is not necessary. But where it is not known, it is hoped that resources will be spent on improved management rather than on extensive, initial analytical work.

The Agency would like to note that the Universal Waste Rule applies only to hazardous waste batteries as defined in 40 CFR 260.10 and 273.6, and not to the unit or device in which the battery is contained. There may be a situation in which a regulated business is sending a device containing a battery to a facility to be repaired. At this point, the device would not be considered a universal waste as: (1) The device is still a product, and therefore not yet a solid waste; and (2) the device does not fall into any of the current categories of universal waste (hazardous waste batteries, thermostats, and certain pesticides). If, however, the person (either the original generator or the repair facility) decides to dispose of the device, he must determine if the entire device is or is not a hazardous waste.

IV.B.2.b. Lead-Acid Batteries

In the proposed rule, EPA proposed to maintain the current exemption for lead-acid batteries under subpart G, part 266. Under these regulations, persons who generate, transport, or collect spent lead-acid batteries, or who store them but do not reclaim them (other than spent batteries that are to be regenerated) are not subject to the

hazardous waste regulations. Persons who accumulate spent lead-acid batteries before reclaiming them (e.g. cracking, and/or smelting the batteries) must notify EPA and obtain a RCRA permit for that storage. Under the universal waste proposal, persons had the option of continuing to manage lead-acid batteries under the part 266, subpart G exemption or under the part 273 requirements. The existing recycling program for automotive lead-acid batteries currently in place, which operates under this exemption, has been extremely successful, with recycling rates in excess of 90% nationwide. By retaining the part 266, subpart G exemption, the Agency believes that this program can continue to operate without unnecessary modifications nor an adverse effect on the environment. Therefore, in today's final rule, the subpart G, part 266 exemption has been retained. Therefore, handlers of spent lead-acid batteries are who are managing them under the requirements of § 266.80 are not subject to the requirements under 40 CFR part 273. However, handlers of spent lead-acid batteries who are not managing them under the § 266.80 requirements are subject to the requirements under 40 CFR part 273.

In addition, 40 CFR 266.80 (a) and (b) have been revised to clarify that lead-acid batteries that are regenerated remain exempt from the hazardous waste regulations throughout the management cycle. Since the final rule retains the lead-acid battery provisions of 40 CFR 266.80, it is most appropriate to also include regenerated lead-acid batteries so that all lead-acid batteries may be managed similarly. However, since the activities of a regeneration facility are more similar to a facility that accumulates waste than a facility that processes a waste to recover a usable product, batteries that are regenerated have also been exempted from the requirements for lead-acid battery reclamation facilities (for further discussion of regenerated batteries, see section IV.J. of today's preamble).

Most commenters agreed that the current exemption for lead-acid batteries under subpart G of 40 CFR part 266 should be retained. Commenters agreed that by maintaining this exemption, the current recycling program for automotive lead-acid batteries can continue to operate successfully.

A few commenters, however, argued that EPA should consolidate all requirements applicable to batteries into one set of regulations to reduce confusion on the part of handlers as to which requirements must be complied with for proper management. Some commenters stated that extending the part 266 exemption to all batteries would be the most appropriate, while others express a desire for all batteries to be incorporated into part 273. Others recommended a combination of the two by incorporating the part 266 exemption into the part 273 regulations.

The Agency believes that retaining the exemption under part 266, subpart G will not make the management of hazardous waste batteries overly confusing or complex. The part 266, subpart G exemption is primarily used for the reclamation of automotive lead-acid batteries, which are easily identifiable. As such, the Agency believes separate management of this waste stream is simple to accomplish and therefore does not place a burden on handlers managing these batteries.

It was noted by one commenter that automotive batteries of various formulations are currently under development for use in electric vehicles, and thus, in the future, the chemistry of automotive batteries (eg., lead-acid versus other formulations) may not be as easily identifiable as it is at this time. The Agency would like to clarify that under the hazardous waste regulations as revised by today's addition of part 273, if the handler believes a battery is a hazardous waste but is not clear whether the battery is lead-acid or another chemical formulation, the battery should be managed under part 273 regulations. The Agency believes, however, that the final part 273 requirements are simple and straightforward enough that management of any mixed battery types, including electric vehicle batteries, will not be overly burdensome.

Another commenter expressed concern regarding the management of small (non-automotive) lead-acid batteries. The Agency expects that small, sealed dry cell lead-acid batteries will likely be handled under the part 273 regulations along with other hazardous waste batteries, therefore eliminating the need for the handler to separate these batteries from other hazardous waste batteries. Managing small sealed lead-acid batteries together with other hazardous waste batteries under part 273 is acceptable under the final rule.

IV.B.2.c. Hazardous Waste Pesticides

Among the wastes proposed to be included in the universal waste regulations was a narrowly limited set of hazardous waste pesticides. Specifically, the proposed rule established streamlined requirements for the collection of unused pesticides that are suspended or canceled under section 6 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and recalled, and that are collected for discard. FIFRA regulates pesticides from initial distribution by producers to ultimate disposal. As proposed, to meet the applicability criteria of part 273, the pesticides were required to be: (a) Part of a voluntary or mandatory recall under FIFRA section 19(b); or (b) owned by a registrant responsible for conducting a recall under FIFRA section 19(b); or (c) part of a registrant-conducted recall of a canceled or suspended pesticide under FIFRA section 6. A number of changes have been made to the universe of pesticides covered in the universal waste rule and in the corresponding regulatory text, which was proposed to delineate which pesticides were or were not subject to the requirements of part 273.

First, in the final rule, the Agency has expanded and organized the applicability section for pesticides into four subsections, as follows: (1) Pesticides covered under part 273; (2) pesticides not covered under part 273; (3) generation of hazardous waste pesticides; and (4) pesticides that are not wastes. The Agency decided to restructure the pesticides applicability section in this way because several commenters stated that it was difficult to determine which pesticides were covered or which pesticides were not covered under the proposed rule. For example, the proposal § 273.20(a) included §§ 273.20(a) (2) and (3) which both described hazardous waste pesticides *not* covered under part 273. Similarly, § 273.21(a) included § 273.21(a)(2) which described recalled pesticides that never become hazardous wastes and thus are never generated. The Agency agrees that these and other sections could confuse readers attempting to determine whether their pesticides were covered under part 273. The Agency believes that the restructured applicability section for pesticides, 40 CFR 273.3, will be much more clear and less cumbersome in that all of the provisions addressing which pesticides are covered are now located in one section and the section is clearly organized to assist readers in making this determination.

Second, the universe of pesticides included under the final universal waste regulations has been expanded. This expansion is codified in § 273.3(a), which describes the types of hazardous waste pesticides that are considered universal wastes and may be managed under part 273. The first paragraph of this § 273.3(a)(1) rewords, but essentially retains, the proposed

regulatory text from § 273.20(a)(1) that described the recalled pesticides that are subject to FIFRA recall procedures and were proposed to be managed as universal wastes. The second paragraph of this § 273.3(a)(2), has been added to the final rule and describes the universe of pesticides that has been added to the universal waste regulations in addition to the recalled pesticides described above. Specifically, the Agency has broadened this section to include unused pesticide products that are collected and managed as part of a waste pesticide collection program. These unused pesticide products are generally materials that are no longer useful for their intended purpose. Frequently, they are agricultural pesticides that have been banned for use on crops or are obsolete and have been replaced by newer products. They may also be pesticides that have become damaged (e.g., exposed to temperature extremes) or that are no longer needed due to factors such as changes in cropping patterns.

Ultimately, farmers nationwide have accumulated these materials in their sheds or barns for many years. To encourage the removal of unused pesticide products from long term accumulation on the farm, a number of state agricultural departments have implemented programs to collect and properly dispose of these materials. By including unused pesticide products under part 273, farmers will be able to ship their universal waste pesticides to the collection programs without needing to meet the full requirements under 40 CFR parts 260 through 272.

Several factors prompted the Agency to include unused pesticide products that are collected and managed as part of waste pesticide collection programs into the part 273 universal waste management standards. One factor for including unused pesticide products was that unused pesticide products are generated by a wide variety of generators and are present in large amounts in the agricultural community. Another factor was that potential risks posed by the presence of unused pesticide products during accumulation and transport are similar to the risks posed by recalled pesticides during accumulation and transport. Finally, the inclusion of unused pesticides under part 273 will greatly facilitate participation and implementation of state programs that are currently collecting the unused pesticide products found on farms.

Most of the commenters addressing pesticide related portions of the proposed rule supported including such unused pesticide products in the final rule. These commenters specifically argued that unused pesticides posed risks similar to risks posed by pesticides already included under the proposed regulations. Some commenters, argued that if the proposed pesticide regulations for recalled pesticides could be expanded to include stocks of unused pesticide products, state approved programs currently collecting unused pesticide products could greatly improve participation by farmers. These commenters indicated that certain current requirements under 40 CFR parts 260 through 272 had deterred many farmers from participating in, and benefitting from, waste pesticide collection programs, and that streamlined requirements under part 273 would remove many such barriers to participation.

Third, the Agency has developed a subsection under the final rule which describes the types of pesticides that are not covered under part 273. Paragraph 273.3(b)(1) reiterates that qualifying hazardous waste pesticides can be regulated in compliance either with 40 CFR parts 260 through 272 or with part 273. For example, farmers managing hazardous waste pesticides in compliance with 40 CFR 262.70 are not subject to the regulations of part 273. Under § 273.3(b)(2) of the final rule, hazardous waste pesticides that do not meet the conditions described in § 273.3(a) are required to comply with the full hazardous waste regulations in 40 CFR part 260 through 272. This provision has been retained from § 273.20(a)(2) of the proposed rule. Similarly, §§ 273.3(b) (3) and (4), which describe recalled pesticides that are not yet solid wastes and therefore are not subject to the hazardous waste regulations including part 273, have also been retained from the proposed regulatory text from § 273.21(a)(2). Again, the Agency recodified these paragraphs in one subsection of the final rule to make it clearer to the reader which types of hazardous wastes are not covered under part 273 standards of the final rule.

The text in the applicability section for universal waste pesticides was complex in the proposed rule. Part 273.21(a) ("Generation of Hazardous Waste Pesticides), the Agency proposed criteria to establish the date at which waste pesticides are generated, but also included criteria to distinguish when pesticides are or are not solid wastes and, therefore, not subject to the hazardous waste regulations. To clarify the applicability section of the final rule, the final rule text separates these criteria into two separate paragraphs (§§ 273.3 (c) and (d)), as described below.

Section 273.3(c) will help readers determine the date at which a recalled or unused pesticide becomes a waste. Understanding this factor is important since a pesticide that has not become a waste also has not become a hazardous waste and is not covered under part 273 (see also preamble discussion on §§ 273.3 (b) and (d)). The text in § 273.3(c)(1) simplifies but retains the meaning of text in § 273.21(a)(1) of the proposed rule. Section 273.3(c)(1) states that a recalled pesticide becomes a waste on the first date on which two conditions occur. These conditions are: (1) The generator of the recalled pesticide agrees to participate in the recall; and, (2) the person conducting the recall decides to discard the pesticide or burn the pesticide for energy recovery. For example, if a farmer decides to participate in a recall and sends the recalled pesticide back to the registrant for reclamation and reformulation, the pesticide would be considered an unused commercial chemical product being reclaimed and therefore would not be a solid waste (or hazardous waste) under RCRA section 261.1. A recalled pesticide sent by a recall participant to the recall facility does not become a waste until the registrant makes a decision to discard the pesticide (e.g., burn for energy recovery). Once a decision to discard the pesticide or burn the pesticide for energy recovery is made, both conditions of § 273.3(c)(1) have been met and the registrant becomes the generator of the universal waste. Section 273.3(c)(2), describing when an unused pesticide products becomes a waste, has been added to the final rule to accommodate the changes mentioned above to the proposed regulatory text from § 273.20(a).

Section 273.3(d)(1) of the final rule further explains the decision-making role played by the person conducting the recall of a pesticide in determining whether the pesticide becomes a waste. The regulatory language established in the final rule is retained from § 273.21(a)(2) in the proposed rule. The final rule also adds § 273.3(d)(2) describing the generator's role in determining whether a pesticide is a waste. This addition accommodates the expansion of the applicability section at § 273.3(a)(2), mentioned earlier. This decision-making process remains as proposed and is specific to pesticides involved in a recall. Recalled pesticides are covered by procedures under FIFRA section 19(b) and 6(g). Other situations are covered generally under § 261.2.

IV.B.2.d. Hazardous Waste Thermostats

In the proposed rule, the Agency requested comment on whether used mercury-containing thermostats should be added to the universal waste regulations. The Agency specifically requested comment on whether used mercury-containing thermostats fit the factors proposed to be used to evaluate whether new candidate wastes are suitable for inclusion under part 273. In addition, the Agency asked for comment on whether the universal waste requirements proposed for universal waste batteries would be appropriate for managing used mercury-containing thermostats.

Commenters overwhelmingly supported adding mercury-containing thermostats to the universal waste regulations. Commenters agreed that mercury-containing thermostats are an appropriate waste type to manage under the universal waste system and that they meet the criteria proposed for adding wastes to the part 273 regulations. Commenters argued that thermostats are generated in a wide variety of settings by a large number of generators, since they can be generated at almost any building, including commercial, industrial, agricultural, community, and household buildings. Commenters asserted that thermostats are likely to be managed in the municipal waste stream because they are small, generated infrequently, and usually generated by persons not familiar with the hazardous waste regulations or hazardous waste management systems.

Several commenters described a "reverse distribution" or "take back" system that is under development by one thermostat manufacturer. A trade association representing manufacturers of thermostats indicated that all of the members intend to participate in this collection system, thus making the system industry-wide and allowing collection of virtually all brands of thermostats used in the United States. The "take back" system will be used to collect used mercury-containing thermostats to recover the mercury and reuse it in the production of new thermostats. The manufacturer implementing the "take back" system has developed packaging, marking, and labeling procedures that will be required for participation in the program that will ensure that the waste mercury thermostats are appropriately handled. The information provided indicated that the nation-wide waste mercury thermostat collection and recycling program would greatly reduce the amount of mercury that is now being managed in the municipal waste stream across the United States.

Commenters further argued that mercury-containing thermostats present relatively low risk during accumulation and transport because they are designed to protect the ampules that contain mercury from breakage. One commenter explained that ampules are attached to a bi-metal strip designed to absorb shocks. The commenter further explained that ampules are also enclosed within plastic or metal outer casings that protect them further from breakage. This commenter described experience with warrantee take back programs and indicated that less than .01% of new mercury thermostats returned to them are returned due to breakage of the ampules. Commenters also stated that during accumulation, waste mercury thermostats are not subject to deterioration, therefore, the risk of mercury release will not increase as accumulation time increases. The packaging, marking, and labeling procedures that will be part of the industry "take back" program provide further evidence that the risks during accumulation and transport will be low.

The Agency agrees with commenters that used mercury-containing thermostats meet the proposed (and final) factors for adding new wastes to the universal waste regulations and that these wastes are appropriate to be managed under the universal waste system. The Agency recognizes that due to the administrative burden, costs, and stigma associated with managing these wastes under the full hazardous waste regulations, it is not likely that a "take back" system such as that described by commenters will be implemented if compliance with the full hazardous waste regulations is required of participants. Thus, the Agency has included mercury-containing thermostats in the final universal waste regulations promulgated today. It should be noted that universal wastes, including mercury-containing thermostats, are exempt from regulation under both the 40 CFR 262–270 and 40 CFR part 273 if they are household waste (see 40 CFR 261.4(b)(1)), therefore the possible burden of compliance with the current Subtitle C regulations lies with generators, transporters and storage facilities currently regulated under 40 CFR parts 262–270.

One commenter suggested a regulatory definition to identify what wastes are covered under the universal waste regulations. The Agency agrees that a definition is necessary, and has included the following definition in 40 CFR 273.6 of the final rule: "thermostat means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of 40 CFR 273.13(c)(2) or 273.33(c)(2)." This definition differs slightly from the definition that was recommended by the commenter. The commenter suggested limiting the definition to wall-mounted thermostats, rather than extending the definition to all temperature control devices that contain metallic mercury in ampules. The commenter expressed concern that difficulties may arise when managing small wall-mounted thermostats together with other mercury thermostats. The Agency recognizes the commenter's concerns, but points out that universal waste handlers are not required to accept any type of universal waste that they are not prepared to manage. Thus, if a collection program is designed only to handle a certain type of thermostat, only that type of thermostat should be accepted by the operators of the program. The Agency does not want to limit the possibility that other collection programs may be developed for other types of thermostats, or that different types of thermostats could be managed separately (i.e., transport and accumulate wall-mounted and other thermostats separately). Thus, the definition has not been limited to wall-mounted thermostats.

In addition, the definition suggested by the commenter has been expanded in the final rule to include mercury-containing ampules that have been removed from thermostats. As is discussed in section IV.E.3.c of this preamble, requirements for managing thermostats under the universal waste rule have been drafted to allow removal of ampules as long as certain conditions are met. In order to allow management of the ampules under the universal waste system once they have been removed from the thermostat casing, it was necessary to include them in the definition of thermostat. The definition specifies that the ampules must be removed following the universal waste handler waste management conditions set forth in § 273.13(c)(2) or §273.33(c)(2).

Finally, with the exception of the issue of ampule removal, commenters overwhelmingly supported applying the requirements proposed for universal waste batteries to used mercury-containing thermostats. Thus, in the final rule, persons managing universal waste thermostats are subject to the same basic requirements as persons managing other universal wastes:

requirements for small and large quantity handlers, transporters, and destination facilities. Specific waste management requirements have been added to the small and large quantity handler sections to address the commenter's concerns about ampule removal. These requirements are discussed in detail in section IV.E.3.c of this preamble, entitled waste management.

IV.B.2.e. Other Wastes Suggested by Commenters

A number of commenters suggested additional wastes that they believed should be added to the universal waste regulations. For example, wastes suggested included electronic components, photographic wastes, aerosol cans, solvent contaminated rags and wipers, treated wood, auto shredder fluff, and a number of others. Several wastes were suggested by numerous commenters and merit further discussion. These are spent lamps (lighting waste), used mercury containing equipment, and antifreeze. Spent lamps are discussed in section II.A, of this preamble, entitled mercury-containing lamps. Used mercury-containing equipment and spent antifreeze are discussed in the following sections of this preamble.

Although many of the wastes suggested may be appropriate candidates for the universal waste system in the future, the Agency has decided to include only three wastes in this final rule: hazardous waste batteries, thermostats, and certain unused pesticides. This decision was made because, first, with a few exceptions discussed below, commenters provided only very limited information about the suggested waste(s), current management of the waste(s), and appropriate waste management controls that could be used to develop universal waste regulations for the waste(s). Most commenters did not evaluate how the suggested waste(s) compared against the factors proposed to add new wastes to the universal waste regulations. For most suggested wastes, the Agency did not feel that it had sufficient information to consider adding the waste to the universal waste regulations at this time. Unlike unused pesticide products and mercury-containing thermostats on which we have a body of information, adding other suggested waste types would require additional research to determine appropriate waste management practices and other issues related to these wastes. Second, in this final rule the factors used to evaluate candidate wastes to determine whether they are appropriate to be added to the universal waste regulations have been revised from those proposed.

Finally, the universal waste system is a new program. The Agency believes it is important to begin implementation with a limited number of waste types, and conduct at least an initial assessment of how the program is working before adding a great deal of new wastes. Thus, due to resource constraints, the Agency has decided to add only the above-named wastes and focus it's efforts on promulgating the basic structure of the regulations, while initially including only a few wastes in the program. If determined necessary, revisions to the regulatory structure could be made at the same time that new wastes are added.

The fact that the Agency has decided not to add a commenter's suggested waste to the universal waste regulations at this time does not mean that the Agency will not consider adding the waste at some time in the future. In fact, commenters are encouraged to assess whether their suggested wastes fit the final evaluation factors, and if so, to submit a petition making that demonstration and including suggested waste management controls that could be used to develop universal waste regulations for the waste. Petitions should follow the procedures set forth in 40 CFR 260.20, 260.23, 273.80, and 273.81 as revised by this final rule.

IV.B.2.f. Used Mercury-Containing Equipment

In addition to supporting the addition of mercury-containing thermostats to the universal waste regulations, a number of commenters suggested expanding the scope of this waste type to be a category of wastes including other mercury-containing equipment. Commenters pointed out that thermostats are a form of mercury switch, and that there are many other types of mercury switches that may present issues similar to those for thermostats. Other items commenters identified as mercury-containing equipment that should be included were gauges, manometers, relays, and circuit boards. Commenters also noted that some of these items may contribute substantial amounts of mercury to non-hazardous waste management systems.

Although the Agency believes that adding a broader category of mercury-containing equipment to the universal waste rule may ultimately be the best way to approach this issue, at this time only mercury-containing thermostats have been included in the final rule. In addition to the reasons discussed above for limiting this final rule to batteries, pesticides, and thermostats, the Agency does not believe that it has sufficient information at this time to add the broader category to the universal waste regulations. Specifically, the universe of wastes that would fit into such a category is not clearly identified. The Agency does not know exactly what types of wastes would be included if it were to add such a category. For example, it is not known how much mercury might be in such equipment. It is possible that there are some pieces of equipment that have very large amounts of mercury that may be of more concern for management under the universal waste regulations than equipment with small amounts of mercury. It is also not known how various types of mercury-containing equipment are constructed, and thus it is not known whether the mercury is sufficiently contained to provide some assurance that the mercury would not be released during management under the universal waste system. Similarly, it is not known what type of waste management controls would be appropriate to include in the universal waste regulations for the broader category.

The Agency would welcome a petition to add some form of broad category of mercury-containing equipment to the universal waste rule. In developing such a broad category, the Agency would be particularly interested in several issues. First, suggestions on how to define the category to limit it to wastes appropriate for the universal waste system would be useful. Second, the Agency would need a listing of the types of equipment that would be included in the category, and general information about the amounts of mercury contained in each and how the equipment is constructed to protect the mercury from release. Third, it would be helpful to know whether there is some mercury quantity limit that might be used to ensure that the risks of managing the wastes under the universal waste rule are low (relative to other hazardous wastes), while at the same time including as many of these wastes as is appropriate. Fourth, the Agency would appreciate suggested waste management requirements that, taking into account the construction of the mercury-containing equipment, would minimize the risks of managing these wastes under the universal waste regulations. Finally, any available information about systems that are used or could be used to collect these wastes would be useful (e.g., reverse distribution systems).

IV.B.2.g. Spent Antifreeze

In the preamble to the universal waste rule the Agency suggested that used antifreeze might be a good candidate for addition to the universal waste regulations. Comment was requested on whether spent antifreeze fit the factors for addition to the universal waste rule, and on what specific management requirements would be appropriate if spent antifreeze were added. Numerous comments were received addressing this issue, but commenters disagreed on both whether used antifreeze should be added to the universal waste system at this time and on what requirements would be appropriate.

A number of commenters argued that spent antifreeze did fit the proposed factors and should be added to the rule. Several commenters addressed each of the proposed factors in turn and maintained that antifreeze fit them all. A number of other commenters, however, questioned how frequently spent antifreeze actually fails the toxicity test and is thus hazardous waste. They noted that one of the factors proposed to be used to evaluate new wastes for addition to the universal waste system was whether or how frequently the waste was hazardous. They argued that regulation under the universal waste rule would imply a presumption that used antifreeze is hazardous, making management of that portion of spent antifreeze that is not hazardous more difficult. Several of these commenters also predicted that the lead levels in used vehicle antifreeze will diminish over time as more and more vehicles are produced with cooling systems that have little or no exposed lead solder. They thus believe that less and less antifreeze will fail the toxicity characteristic over time.

Commenters also recommended a wide range of management requirements for spent antifreeze if it were to be added to the universal waste system. Some commenters believed that the requirements proposed for batteries and pesticides were generally appropriate. A number of commenters also maintained that the antifreeze recycling pattern is very different from the limited recycling or treatment and disposal options available for wastes such as batteries and pesticides. They described antifreeze recycling as requiring less sophisticated technology and being practiced at many dispersed locations rather than a few centralized facilities. They did not believe that the universal waste regulatory structure was appropriate to accommodate this type of waste management pattern.

Several commenters argued that because antifreeze is a high volume liquid, the management requirements should be somewhat different than those included in the proposal. Some commenters argued that requirements for used antifreeze should be based on the small quantity generator regulations. Many others suggested requirements similar to the used oil management standards of 40 CFR part 279. Some commenters suggested specific sets of requirements that they believed were appropriate for used antifreeze management.

Spent antifreeze is not included in the final universal waste rule. The Agency made this decision for several reasons. First, because the Agency did not request specific comments on issues related to spent antifreeze, the comments received were not focussed on any particular issues and provide little clear direction for the Agency to move forward with this issue at this time. As suggested by several commenters, the Agency does not believe it would be wise to add spent antifreeze to the universal waste regulations without first proposing and accepting comment on specific management standards.

Second, commenters opinions on whether spent antifreeze should be added to the universal waste regulations ranged so widely that it is clear that more investigation into this issue is necessary before promulgating final regulations. Specifically, some additional information on the frequency with which used antifreeze exhibits the toxicity characteristic may be available and should be reviewed prior to making a decision on how to address antifreeze. In addition, the Agency should also investigate further suggestions that improved handling by generators (e.g., managing antifreeze only in dedicated containers) could reduce the rate at which antifreeze exhibits the toxicity characteristic. Similarly, opinions on appropriate management standards also varied so greatly that the Agency recognizes it would not be possible, based on the information available at this time, to develop management requirements that adequately address the issues raised by commenters.

Third, many commenters argued that the question of how antifreeze recycling is regulated is central to the development of appropriate management standards. As explained in section II.B of this preamble, entitled Redefinition of Solid Waste, the general question of how recycling should be regulated is being addressed in a larger forum and is outside the scope of today's final rule. The Agency believes that it may be necessary to proceed somewhat further with this effort before it will be possible to determine how best to address the issue of antifreeze management.

Finally, for this initial final rule, the Agency decided to focus its efforts and available resources on wastes for which commenters demonstrated more agreement about the major issues of whether to include the waste and appropriate management requirements. Once the basic structure of the universal waste system is in place, it may be more clear whether and how more controversial wastes such as antifreeze may fit into the system. Thus, spent antifreeze has not been included in this final rule, but the Agency has not ruled out adding it in the future if it seems appropriate and if it appears possible to develop requirements that would improve management of used antifreeze.

IV.B.3. Conditionally Exempt Small Quantity Generator Waste

In the proposed part 273 regulations, the Agency proposed to retain the 261.5 CESQG conditional exemption from the hazardous waste regulations for universal wastes. Under this approach, CESQGs would have the option of managing universal wastes under either part 273 or § 261.5. Thus, CESQGs would not be required to manage their universal waste under part 273. However, the Agency requested comment on whether this approach should be retained, or whether CESQGs should be required to manage their universal wastes under part 273. In the final rule, the Agency has decided to retain the approach proposed and is allowing CESQGs the option of handling their universal wastes under part 273 or under the CESQG exemption in § 261.5.

Most commenters responding to this request for comment argued that CESQGs should be allowed flexibility in managing their universal wastes. Commenters stated that CESQGs should have the option of managing these wastes as universal wastes under part 273 if they so choose, or to continue to handle these wastes in compliance with the requirements of the CESQG exemption under § 261.5. Commenters argued that this option would allow each CESQG the flexibility to select the disposal method that is least costly and best meets the needs of its business. They also argued that CESQGs often do not have ready access to new information and markets for their wastes and therefore should not be required to manage their universal wastes under part 273 to the exclusion of other existing waste management options. Many commenters pointed out that as

an infrastructure develops for the universal waste collection systems, CESQGs are likely to voluntarily participate in such programs. Other commenters stated that management under part 273 should be mandatory in order to reduce confusion related to how these waste types should be handled and to ensure protection of the environment.

The Agency believes that allowing individual CESQGs to choose the regulatory option that best meets their circumstances will aid in assuring effective collection, management and disposal of universal wastes. Requiring compliance with part 273 would be an added administrative and cost burden for CESQGs, many of whom may be small businesses and small organizations. In addition, compliance with some aspects of the program may be difficult for these generators. The Agency believes that as an infrastructure develops for protectively handling these wastes, CESQG waste is most likely to be incorporated into the universal waste system through voluntary efforts, state or local programs, and the availability of convenient collection systems rather than through additional regulatory requirements. Therefore, in the final rule, the Agency has retained the opportunity for CESQGS to manage their wastes under either the CESQG exemption or under part 273. The option for CESQGs to send their universal wastes to a universal waste handler or destination facility has been added to 40 CFR 261.5(f)(3)(vi) and 261.5(g)(3)(vi) as was proposed. As was proposed at 40 CFR 273.10(b)(1)(ii) and 40 CFR 273.20(b)(1)(ii), 40 CFR 273.5(a)(2) has been added to the final rule to clarify that CESQGs may, at their option, manage their universal wastes under part 273.

Further, the Agency is retaining the intent of the proposed requirement that if universal wastes from CESQGs are commingled with universal wastes from larger, regulated hazardous waste generators, and the commingled waste is a hazardous waste under 40 CFR 261.3 (i.e., is listed or exhibits a characteristic), the commingled waste must be managed under the part 273 requirements. As explained in the proposal, this provision is included to clarify this point for persons managing universal waste, but is actually merely a restatement of existing hazardous waste requirements.

In the proposed universal waste rule, the Agency also proposed not to require hazardous waste generators to count those universal wastes managed under the part 273 requirements toward the monthly quantity calculation used to determine generator regulatory status (i.e., CESQG, SQG, LQG). Today's final rule retains the approach as proposed. Section 261.5 has been redrafted to clarify this point.

One commenter was concerned that this exclusion would cause more hazardous waste to be sent to non-subtitle C facilities because more generators would be CESQGs if universal wastes are not counted. The remainder of the commenters agreed with excluding universal wastes managed under part 273 from the generator's calculation of monthly generation rates to determine generator status.

The Agency does not believe that excluding universal wastes from the generator's calculation of monthly generation rates will have a significant impact on the amount of hazardous waste sent to non-subtitle C facilities. The volume of universal wastes typically generated by any one generator is not large. Thus, the Agency believes that the number of generators that will move from the regulated SQG category to the conditionally exempt SQG category will be small.

More importantly, the Agency believes that on balance, encouraging generators to manage their wastes under part 273 by allowing generators not to count those universal wastes managed under part 273 will likely increase the overall quantity of hazardous waste recycled or disposed of at Subtitle C facilities. Excluding universal hazardous wastes that are managed under part 273 from the generator's monthly quantity determination will encourage generators to manage wastes under the universal waste rule, and therefore maximize the benefits to the environment by redirecting these hazardous wastes from non-hazardous waste management to more protective management. The Agency strongly believes that the benefits of capturing these universal wastes for safe handling outweighs the potential risks of small quantities. Therefore today's final rule retains this exclusion.

In addition, as other waste types are considered for inclusion in part 273, they will be evaluated according to the criteria in § 273.81. Part 273.81(d) states that "systems to be used for collecting the waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste." EPA believes that this criterion, the other criteria included under § 273.81(a)–(h), and the petition and rulemaking procedures for adding new wastes to the universal waste system will ensure that any wastes added in the future will be managed in an environmentally protective manner.

One commenter stated that it is not clear that SQGs and LQGs should use the same procedures for determining generator status as that used by CESQGs since the regulatory language explaining the calculation is located in § 261.5, which applies to CESQGs. Although the language in § 261.5(c) makes it clear that the counting procedures apply to all generators ("the quantity determination of this part and parts 262 through 266, 268, and 270"), the Agency agrees that it might be easier for SQGs and LQGs to find the counting procedures if they were referenced in part 262. Thus, this rule revises § 262.10 by adding a new paragraph (b) to read "40 CFR 261.5 (c) and (d) must be used to determine the applicability of provisions of this part that are dependent on calculations of the quantity of hazardous waste generated per month."

Finally, as proposed, the final rule adds part 273 to the list of parts in § 262.11(d) where exclusions or restrictions for hazardous waste management are found. In addition, to clarify that § 261.5 provides additional exclusions as discussed above, the final rule also adds part 261 to this list. Thus, § 262.11(d) now reads "If the waste is determined to be hazardous, the generator must refer to parts 261, 264, 265, 266, 269, and 273 of this chapter for possible exclusions or restrictions pertaining to management of the specific waste."

IV.C. Adding Additional Wastes in the Future

The proposed universal waste rule included a process for adding additional waste types to the universal waste system in the future. The process consisted of procedures for persons to petition the Agency requesting the addition of new waste types, procedures for the Agency to use in responding to petitions, and factors to be used to evaluate whether a new waste type is appropriate to be added to the system. The final rule includes a similar process, but based on the comments addressing this issue some changes have been made to both the procedures and the factors. In addition, the Agency has decided to allow states the flexibility to add additional wastes to their state list of universal wastes without requiring the waste to be added at the federal level. The following two sections discuss changes made to the petition procedures and the factors.

IV.C.1. Procedures for Adding New Wastes

In the proposed universal waste rule, EPA proposed that any person may petition to have additional hazardous wastes added to the part 273 universal waste regulations. Proposed regulations governing the petition process were found in §§ 260.20, 260.34, and 273.2. Detailed procedures for submitting and reviewing petitions, however, are set forth in existing 40 CFR 260.20 and were only referenced in the proposed regulatory text. These procedures are the same procedures that are used for submitting and reviewing all petitions for regulatory amendments to the hazardous waste regulations.

The proposed rule indicated that in order for a petitioner to be successful, it must be demonstrated that regulation under the universal waste system is appropriate and that the part 273 requirements will improve waste management practices for the waste. This demonstration was to be made by submitting information to support the factors listed in § 273.2 (a) and (b).

In today's final rule, the procedures for submitting petitions remain substantially unchanged, although several minor revisions have been made. First, the requirements for petitions for inclusion of other wastes under part 273 have been moved from § 273.2 in the proposal to subpart G of part 273 in today's final rule. The Agency believes that putting the petition requirements in a separate subpart makes them easier to locate, and thus makes the entire regulation easier to follow. In addition, the proposed § 260.34, entitled "Petitions to amend part 273 to include additional hazardous wastes" has been renumbered to be § 260.23 in the final rule. This change has been made to keep the sections of part 260 that discuss regulatory amendments together.

Second, the petition procedures have been revised to allow petitions to add categories of waste as well as individual wastes to the universal waste system. This revision was made in response to comments. It was suggested that the term "waste" may be more limiting than the Agency intended. Use of the term "waste category" will allow petitioners to submit a group of wastes such as "hazardous waste batteries" instead of petitioning for each type of hazardous waste battery individually (hazardous waste nickel-cadmium batteries, hazardous waste lithium batteries, etc.). One commenter also suggested that a category of wastes such as unused products in original packaging might be appropriately managed under the universal waste system. The Agency agrees with these comments and has incorporated this suggestion into the final rule.

Third, to clarify the Agency's goals for the universal waste program (which the petition factors are designed to address) and to clarify the standard that will be used to make decisions on petitions, the final rule has been revised to read: "the decision will be based on the weight of evidence showing that regulation under part 273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program." This language merely reflects more closely the goals discussed in the proposal for the universal waste system than did the language in the proposed rule.

Fourth, many commenters expressed concern that petitions seeking a regulatory amendment to add new hazardous wastes to part 273 must contain quantitative information on each of the factors outlined in the proposed rule under § 273.2 (found in § 273.81 in the final rule). Commenters believed that the proposed rule was not clear on whether or not information must be submitted to address every one of the factors or only some of the factors. The Agency agrees that the proposal was confusing on this point. As suggested by several commenters, the Agency also agrees that it may not be possible or appropriate to address each of the factors for any particular waste or waste category. Thus, the petition process regulations (found in both §§ 273.80 and 260.23 of the final rule) have been revised to clarify that: (1) A petition should address as many of the factors as are appropriate for the waste or waste category addressed in the petition; and (2) the decision to grant or deny a petition will be based on the weight of evidence showing that regulation under part 273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

Thus, the Agency clarifies in the final rule that an individual waste would not be disqualified from inclusion under part 273 merely because every factor was not addressed. Rather, the Agency will consider the overall weight of the evidence demonstrating that the goals of the universal waste system would be met by adding the particular waste or waste category to the universal waste system. Thus, a waste that several of the factors demonstrate very strongly would accomplish the Agency's goals may be more likely to be added to the universal waste system than a waste that all of the factors weakly support.

In addition to concern about the number of factors that must be addressed, commenters also expressed concern that the proposal was vague with regard to the quality and quantity of data that must be submitted regarding each of the factors. In response, the Agency reiterates that decisions will be made based on the weight of the evidence demonstrating, using the listed factors, that the Agency's goals for the universal waste system will be met. Thus, the quantity of data submitted is not as critical as how strongly the data supports these goals. Of course, the more complete the data are, the more likely it is that they will demonstrate that the Agency's goals would be met. The Agency also notes that although quantitative data are desirable, due to the nature of the wastes likely to be appropriate for the universal waste system the Agency recognizes that direct quantitative data about these wastes and their management *may not* be available. Thus, quantitative data are not necessarily required for a successful petition. Any information that can be extrapolated from available related quantitative data is recommended, as would be any estimates that can be developed based on available qualitative information. In addition, as discussed in the proposal, the Agency will take into consideration the quality and completeness of the data submitted by the petitioner as a way to set priorities among the many various waste streams that may be suggested for this program. If a petitioner's request is complete and supporting data are adequate, EPA is likely to evaluate the request and determine whether to propose a regulatory amendment sooner than if a request has only minimal information.

Fifth, commenters expressed confusion concerning the process for submitting a petition. In § 273.80 of today's final rule, the Agency more fully details the process for submitting a petition. The substance of the requirements have not changed. Section 273.80(b) reiterates that the petitioner must follow the requirements in § 260.20(b) (Subpart C—Rulemaking Petitions), which sets forth general requirements which apply to all such rulemaking petitions. As proposed, the regulatory language in § 260.20(a) also has been amended to add reference to the part 273 requirements. As discussed above, § 273.80(b) also specifies that the petition should address as many of the factors listed in § 273.81 as are appropriate for the waste or waste category addressed in the petition. It should also be noted that the procedures

for submitting petitions and for the Agency's review of and response to petitions for regulatory amendments are described in detail in § 260.20.

In response to some confusion expressed by commenters, § 273.80(c) clarifies that the Administrator will evaluate petitions using the factors listed in 40 CFR 273.81 and that the Administrator will grant or deny a petition using these same factors. This clarification reiterates the procedures proposed in § 260.34 of the proposal and included in § 260.23 of the final rule. As discussed above, § 273.80(c) also explains that the Administrator's decision will be based on the weight of evidence showing that regulation under part 273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

Sixth, petitioners expressed concern about the length of time it may take for the Agency to evaluate petitions. Many commenters suggested that a time limit be set for such evaluations and that, in addition, petitions be released for public comment. While the Agency agrees that it is important for petitions to be considered in a timely manner, the Agency has decided to continue to follow the general procedures for responding to petitions for regulatory amendments set forth in § 260.20 of the hazardous waste regulations. As with all petitions submitted under § 260.20, a specific time limit is not defined for the review process. Although the Agency expects to review and respond to petitions within a reasonable timeframe, due to competing priorities and other statutory and court ordered mandates the Agency is not able to commit to a definitive review schedule. Committing to such a schedule would also not be possible because the Agency has no previous experience with this program and is not able to predict the number and depth of petitions that may be submitted, and thus the workload that will be required to respond to them.

With respect to public comment on the Agency's response to petitions and on proposals to add new wastes to the universal wastes system, § 260.20 specifies that the Agency will make a tentative decision to grant or deny a petition and publish that determination in the **Federal Register** for written public comment. Any persons who have additional information relevant to a particular petition would be able to submit the information for the Agency's review. The Agency may also hold an informal public hearing to consider oral comments on the tentative decision.

For any waste or waste category that the Agency tentatively decides to add to the universal waste system, the Agency will propose regulatory requirements that would apply to management of the waste under the universal waste system. Comments would be solicited on the tentative decision to add the waste or waste category, and on the appropriateness and practicality of the requirements. After reviewing and responding to any comments submitted, the Agency would publish a final rule amending the universal waste regulations to include the new waste unless the tentative decision was reversed (in which case a denial would be published). For any waste or waste category the Agency tentatively decides not to add to the universal waste system, the Agency would publish a tentative decision to deny the petition and request comment. A public hearing may be held. After reviewing and responding to comments, the Agency would publish a final denial, unless the tentative decision was reversed (in which case a subsequent proposal to add the new waste would be required).

Finally, as is discussed in detail in Section V of this preamble, entitled "State Authority," it should be noted that States may apply for and be granted authorization to implement any part of today's amendments to the hazardous waste regulations. This includes the petition process for inclusion of additional wastes in the universal waste program. Thus, in States authorized for the universal waste regulations and the petition process, petitions may be submitted to the State agency to regulate management of a waste or waste category under the universal waste regulations within that State. The State agency would then grant or deny petitions, using the criteria established for evaluating wastestreams for inclusion in the program. If a petition is granted, the waste would be managed under the streamlined universal waste requirements within that state. However, the full hazardous waste regulations would apply once the waste is transported out of the state in which it is considered universal waste into other states that have not included the waste in their universal waste programs (or states that are not authorized for or do not have universal waste programs). Thus, manifests and hazardous waste transporters would be required for the shipment out of the state, and all subsequent management must be at RCRA treatment, storage, and disposal facilities.

IV.C.2. Factors for Evaluating New Wastes

The proposed universal waste rule included two sets of factors to be used to evaluate whether candidate wastes are appropriate to be added to the part 273 universal waste regulatory system. The first set of factors was designed to determine whether the waste presents a problem to human health and the environment due to its presence in the municipal waste stream or due to other, widespread management practices. The second set of factors was designed to determine whether the universal waste system would satisfactorily address the problem presented by the hazardous waste.

In response to a number of issues raised by commenters concerning the proposed factors, the Agency has substantially revised the factors for the final rule. Major issues raised by commenters and the changes made to the factors are discussed below.

First, in the final rule, the two sets of proposed factors have been consolidated into one set of factors. This change was made in response to several comments pointing out that having two separate sets of factors was potentially confusing, particularly because the content of the two sets seemed to overlap. The Agency agrees with these commenters, and believes that having only one set of factors will eliminate possible confusion, making it easier for the regulated community and regulating agencies to implement the evaluation factors. In addition, as discussed further below, the Agency has revised the factors to focus more on a positive showing that regulation under the universal waste system would improve waste management practices rather than a negative showing that a waste is being managed improperly. Combining the two sets of factors assists with this change of focus.

Second, the Agency has added text to the general introduction to the final petition factors (40 CFR 273.80) and revised 40 CFR 260.34(b) to clarify that not all of the factors must be either addressed or demonstrated in a petition in order for an individual waste to be added to part 273. The text clarifies that the Agency will consider the overall weight of evidence presented in determining whether regulation under the universal waste system is appropriate for the waste, and whether the part 273 regulations will further the Agency's goals of improving management practices for the waste and improving implementation of the hazardous waste program.

This change was made in response to several commenters who indicated that there was some confusion regarding whether all factors must be addressed for inclusion under part 273. In addition, the text of proposed 40 CFR 260.34, which indicated that all factors must be addressed, contradicted the preamble which suggested that not all factors must be addressed. The Agency chose this approach because it does not believe that each and every factor must be met in order for a waste to be appropriate for the universal waste system, and for regulation of the waste under part 273 to improve waste management and implementation. Thus, the Agency will make decisions based on the weight of evidence showing that regulation of a particular waste under part 273 will further the Agency's goals for the program. It seems likely, however, that the more factors a petition addresses the more likely it is that there will be a substantial amount of supporting evidence.

The Agency notes, however, that resources for making changes to the hazardous waste regulations are limited, and that these resources must be focused on areas where the most improvement can be made. In fact, the Agency does not expect to have the resources to add great numbers of wastes to the universal waste system. Therefore, the Agency will prioritize addition of new wastes to the universal waste system based on the strength of the case made that addition of a particular waste will further the goals discussed above. For example, as suggested by one commenter, the Agency would give priority to a waste that is generated in higher volumes nationally, that a greater percentage of the waste is hazardous, or that are generated by a larger number of generators. Priority would be given because addition of such a waste to the universal waste system is likely to improve overall waste management and implementation more than addition of a waste that does not meet these factors. In addition to adding to the strength of such a case, the completeness and quality of supporting data submitted by a petitioner may also affect the Agency's prioritization in that the Agency may not itself be able to expend a great deal of resources gathering additional data.

Third, the Agency notes that the final rule has been revised to allow petitions to add, and the addition of, categories of waste to the universal waste system as well as individual waste types (see 40 CFR 273.80, 273.81, 260.20, and 260.23). This change was made at the suggestion of one commenter who pointed out that there may be broad categories of waste that could fit well into the universal waste system but that are identified by characteristics other than a single waste classification. For example, wastes that remain in their original product packaging (e.g., unused products) are easily identifiable, and presumably the packaging provides protection since it was designed to protect the product during storage and transportation. The Agency agrees with the commenter that some categories of waste may be appropriate for addition to the universal waste system and thus has made this change. It should be noted that a petition to add any category of waste would have to make the same demonstration for the category that a petition would have to make for an individual waste type.

The following sections discuss each of the factors included in the final rule and any changes made from the proposal. The final section discusses proposed factors that are not included in the final rule.

IV.C.2.a. Final Factor 40 CFR 273.81(a)

The Agency has revised proposed § 273.2(a)(1), which addressed the idea that a waste should either be a listed hazardous waste, or that a proportion of the waste should exhibit one or more characteristics of hazardous waste in order to be considered for addition to the universal waste system. In the final rule, this factor, which is now § 273.81(a), has been revised by adding a parenthetical statement discussing wastes that are hazardous due only to exhibiting characteristics. Numerous commenters expressed concern that the Agency would be adding wastes to the universal waste system that are not already hazardous. The Agency is clarifying, and would like to emphasize, that *only wastes that are hazardous (i.e., are listed or exhibit one or more characteristics of hazardous waste) are subject to the universal waste regulations.* This is because the universal waste regulations are part of the RCRA hazardous waste regulations, under which only wastes that are hazardous are regulated. This has been further clarified by adding a definition of the term "universal waste" (see 40 CFR 273.6 and 260.10), specifically identifying only *hazardous* wastes as universal wastes (e.g., *hazardous waste* batteries).

The Agency understands that this may be confusing in cases where a waste added to the universal waste system is identified using a generic name (e.g., battery, thermostat), but only a portion of the waste stream actually exhibits a characteristic and is thus hazardous. For example, some battery types exhibit one or more characteristics and are hazardous, while others may not. The Agency has used the generic term hazardous waste battery in the universal waste regulation for several reasons. One reason is that, when appropriate, the Agency wishes to encourage persons to manage both regulated waste and unregulated waste in the same collection systems, to eliminate duplication of collection systems, and to eliminate excess effort identifying, documenting, and keeping separate regulated waste and unregulated waste. As long as all commingled waste is managed in a system that meets the requirements of the universal waste regulations, such efforts are not necessary.

Another reason for using a generic term is to make the system flexible, so that the regulation does not have to be revised every time a waste (such as a particular battery type) either becomes hazardous or is no longer hazardous due to changes in manufacturing practices or technology. A final reason is that the Agency will likely not be able to make across the board hazardous waste determinations for entire categories of waste and must leave that responsibility to individual waste generators. For example, as the chemistry in a type of battery changes over time and varies from manufacturer to manufacturer, some older batteries may exhibit characteristics while some newer batteries do not. Given such a situation, it would not be possible for the Agency to identify individually which batteries are hazardous and which are not. Thus, the Agency stresses that although generic terms may be used in some cases, the term will be modified with the phrase "hazardous waste" and only those wastes that are hazardous (are listed or exhibit characteristics) are subject to hazardous waste regulation, including the universal waste rule.

IV.C.2.b. Final Factor 40 CFR 273.81(b)

To retain and expand on the concept included in proposed § 273.2(a)(2) and discussed in the proposal preamble that universal wastes are typically generated by a wide variety of types of generators, the Agency has added another factor to the final rule. Final § 273.81(b) indicates that wastes that are good candidates for the universal waste system would not be exclusive to a specific industry or group of industries, and would commonly be generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, service businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as

large industrial facilities). This factor is also similar to one proposed by a commenter who suggested that positive demonstrations, such as this one, should be utilized in place of negative showings that wastes are a "problem" or pose risks because such negative factors will inhibit persons from petitioning to add their wastes or products. This factor will assist petitioners and the Agency in determining whether a waste is appropriate to be added to the universal waste system.

This new factor also addresses an issue raised by several commenters; whether industrial wastes could be added to the universal waste system. As was discussed in the preamble to the proposal, the Agency does not believe that wastes that are generated *primarily* in an industrial setting are appropriate for the universal waste system. In this context, the term industrial setting, however, is used to describe locations where large production-type operations are conducted and where large quantities of waste are generated. The Agency believes that wastes that are primarily generated in such settings can be managed under the current hazardous waste regulations because such facilities are usually set up to comply with the applicable requirements. The new factor makes it clear that wastes appropriate for addition to the universal waste system should be generated by a wide variety of types of establishments, which could include, but should not be exclusively, large industrial operations. One of the problems the universal waste rule is designed to address is that a relatively large portion of some waste types are exempt from the hazardous waste regulations (i.e., are generated by households and CESQGs) and are indistinguishable from the regulated portion of the waste. This "look alike" problem makes implementation of the program for these wastes extremely difficult. For example, batteries are probably the classic example of a waste type that is generated by all types of establishments, including large industrial operations. The Agency points out that some wastes commenters described as "industrial" might be appropriate for the universal waste system as indicated by the new factor. For example, a large percentage of antifreeze is generated by do-it-yourselfer households, while other portions are generated by CESQGs, small businesses, service businesses, government organizations, as well as large industrial facilities. The Agency envisions that most wastes that meet the new factor would be post-user wastes rather than residues from production or other industrial operations.

IV.C.2.c. Final Factor 40 CFR 273.81(c)

The Agency has essentially retained the proposed factor, § 273.2(a)(3), which addressed the number of generators of a candidate waste, as final factor 273.81(c). This factor will assist in identifying wastes that are appropriate for addition to the universal waste system. The text of the factor has been revised to indicate that universal wastes should be generated by a large number of generators, but that the number 1,000 is an example rather than a hard and fast number. In fact, the Agency believes that in general universal wastes should be generated by many more than 1,000 generators. The goal of the universal waste program is to capture wastes that due to their widespread nature are difficult to manage under the current hazardous waste regulations. The Agency believes that a waste must be generated by a large number of generators in order for regulation under the universal waste system to contribute largely to improving management practices and to improving implementation of the hazardous waste program. Because of this, the Agency does not anticipate adding wastes to the universal waste system that are generated by a small number of generators (e.g., less than 1,000) in large volumes, as was suggested by one commenter.

In fact, to further assist in identifying wastes that are appropriate for the universal waste system, the Agency has added a qualifier to the final factor clarifying that wastes that are appropriate to be added to the universal waste system are frequently generated in relatively small quantities by each generator. This concept comes from proposed § 273.2(a)(4)(iv), which was generally interpreted by commenters to mean that only wastes generated by small quantity hazardous waste generators would be considered for addition to the universal waste system. The revised § 273.81(c) should clarify that the Agency would consider wastes that are generated in relatively small quantities by each generator, regardless of the total quantity of all hazardous wastes generated by the generator. For example, even a very large industrial generator of large volumes of hazardous waste may generate relatively small quantities of batteries. It should be clarified that this factor is intended only as a gross indicator of quantities generated. Specifically, the term "relatively" is used to contrast small quantities of universal wastes with the quantities in which large volume industrial hazardous wastes can sometimes be generated, e.g., tens of thousands of pounds or gallons per month.

The Agency also confirms, as was suggested by one commenter, that the factor concerning number of generators could be applied prospectively in cases where newly developed products are likely to be appropriate for the universal waste system. Thus, if a newly developed product (or redesigned product) can be shown to be likely to be produced and disposed of in such a way as to be appropriate for the universal waste system, a petition could be submitted even before there are actually a large number of generators of the waste.

IV.C.2.d. Final Factor 40 CFR 273.81(d)

The final rule retains as § 273.81(d) the factor proposed as § 273.2(b)(2) which indicates that collection systems that ensure close stewardship would make a waste a more likely candidate for addition to the universal waste system. All of the comments addressing this factor were positive. The Agency emphasizes, however, that this factor is not intended to be biased toward collection systems run by product manufacturers. Although manufacturers may have easy access to information about products that may assist them in developing collection programs, the goal of this factor is to facilitate addition of wastes to the universal waste system that are most likely to be collected, and to be collected in a manner that ensures good management of the waste. Thus, any collection system that would ensure good stewardship would be a favorable factor, regardless of what organizations run the program. The Agency also notes that the economics of collecting and recycling or disposing of a waste can provide some insight into the stewardship that may be provided a waste. For example, if a waste can be recycled at profit, it may be more likely that collectors will maintain close stewardship of the waste.

IV.C.2.e. Final Factor 40 CFR 273.81(e)

Proposed factor 273.2(b)(1), which addressed the risk posed by the waste during accumulation and transport, has been retained largely as it was proposed. The final factor, § 273.81(e), has been revised to clarify that good candidate wastes for the universal waste system would pose relatively low risks *compared to other hazardous wastes* during accumulation and transport. This revision should clarify that, although it is possible that a candidate universal waste may pose more risk than other non-hazardous wastes during

accumulation and transport (since they are identified as hazardous), wastes appropriate for the universal waste system should pose relatively less risk than other hazardous wastes since the universal waste accumulation and transport requirements are relatively less stringent than the existing hazardous waste regulations. Examples of reasons a waste might pose relatively low risk during accumulation and transport include the construction or physical form of the product or waste, packaging of the waste, chemical characteristics of the waste, ease of containment, and standard handling procedures for the waste.

The final factor (§ 273.81(e)) also addresses, as did the proposed version, the concept that waste management requirements appropriate for the universal waste regulations can be used to mitigate risks posed by accumulation and transport of the waste. This part of the factor has been clarified to indicate that petitioners should suggest or reference waste management requirements specific for the candidate waste that could be added to the universal waste regulations (or that are independently applicable, e.g., DOT requirements) that would protect human health and the environment from risks posed by the waste during accumulation and transport. Such waste management requirements may include volume reduction incident to collection activities. The activities should be designed to ensure that these management practices do not dilute the hazardous constituents or release them to the environment. For example, if mercury-containing lamps were considered for addition to the universal waste system, crushing might be allowed as appropriate management if the crushing process was performed in a controlled unit which did not allow any releases of mercury or other hazardous constituents to the environment.

IV.C.2.f. Final Factor 40 CFR 273.81(f)

The Agency has revised and combined proposed § 273.2(b)(3) and part of proposed § 273.2(a)(2), which addressed, respectively, whether addition to the universal waste system would facilitate removal of the waste from the municipal waste stream and the presence of the waste in the municipal waste stream. The revised factor, § 273.80(f), addresses whether "regulation of the waste under part 273 will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous commercial or industrial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with Subtitle C of RCRA."

The Agency combined the two proposed factors to reduce the duplication that several commenters pointed out existed in the two sets of factors. The revised factor encompasses the concepts included in both the proposed factors, in that it would be necessary to show that some portion of a waste is being managed in non-hazardous waste management systems in order to argue that regulation under part 273 would increase the likelihood of diversion from these systems.

The revised final factor also addresses diversion of waste from non-hazardous waste management systems generally, rather than specifically from the municipal waste stream. This revision was made in response to a number of commenters who pointed out that the goal of the universal waste system should be to improve management of wastes that are managed in any type of non-hazardous waste system, such as, for example, disposal through municipal sewer systems. These commenters suggested that the term implied that the only waste management system the agency was interested in removing hazardous wastes from was the municipal solid waste stream. The Agency agrees that the term "municipal waste stream" was too specific and could have been interpreted to prevent addition of wastes to the universal waste system that may be primarily managed in non-hazardous waste systems other than the municipal solid waste system. This was not the Agency's intent. Thus, the revised factor uses the term "non-hazardous waste management systems" and provides some examples to clarify this point.

In addition, the revised factor focuses more on a positive showing that regulation under the universal waste system will improve waste management, rather than a negative showing that the waste is being managed improperly. Several commenters argued that requiring such a negative showing would discourage potential petitioners from seeking the benefits of the universal waste system. For example, commenters argued that manufacturers and generators would not want to develop and submit data that demonstrate that their used products or wastes are "problem" wastes that are managed illegally and pose significant risks to human health or the environment. Requiring submission of such data would force petitioners to stigmatize their wastes, and could potentially subject them to significant liabilities in the future.

It should also be noted that diversion of unregulated portions of a waste, such as household waste and CESQG waste, from non-hazardous waste management systems could be a reason to add a waste to the universal waste system. For example, in some cases it may be likely that facilitating the collection of commingled regulated and unregulated waste would encourage development of collection systems that could divert significant quantities of the waste, including unregulated waste, from non-hazardous waste management systems. Such a showing would not require petitioners to focus on management of regulated waste in non-hazardous waste management systems.

IV.C.2.g. Final Factor 40 CFR 273.81(g)

Proposed factor 273.2(b)(5) addressing improved implementation of the hazardous waste program has been essentially retained in the final rule as § 273.81(g). Commenters supported the factor as proposed. The final factor has been revised only to clarify that improving compliance with the hazardous waste program is an important facet of improving implementation of the program. Thus, the final factor specifies that if regulation of a waste under the universal waste system is likely to improve both implementation and compliance, a waste would be a stronger candidate for addition to the system.

IV.C.2.h. Final Factor 40 CFR 273.81(h)

Finally, one commenter requested additional guidance on what other factors might be addressed under the proposed factors that discussed "other appropriate information" and "such other factors as may be appropriate" (proposed §§ 273.2(a)(6) and 273.2(b)(6)). These factors have been combined in the final rule as § 273.81(h), which addresses "such other factors as may be appropriate." In response, there is no list of specific subjects that the Agency expects might be addressed under this factor. The Agency retained this factor because it believes that it is likely that for any particular waste or waste category there may be unique factors which would demonstrate that regulation under the universal waste system is: Appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. These unique factors might result from physical or chemical characteristics of the waste, characteristics of waste generators (e.g.,

organization or distribution of generators), characteristics of collection programs, or other aspects of the waste or its management. The Agency does not mean to imply that petitioners must address other factors, but believes that it is important to be able to take unique factors into account if such factors exist.

IV.C.2.i. Proposed Factors Not Included in the Final Rule

First, the proposed factor 273.2(a)(4), which addressed typical generation sites, is not included in the final rule. Commenters overwhelmingly argued that the proposed factor would unintentionally limit universal wastes because there are few wastes generated at such locations, and would limit universal wastes to wastes generated by small businesses, many of which would be CESQGs anyway. The Agency had intended that this factor would assist in identifying wastes that are generated in situations that make them more difficult to manage and thus the universal waste system could improve management. However, the Agency agrees that the proposed factor was overly restrictive, and that many wastes appropriate for the universal waste system may not be generated primarily at the types of locations described. The Agency recognizes that although universal wastes may frequently be generated by large organizations, due to the small quantity and type of waste generated at any one location, regulation under the universal waste system may be appropriate if the goals of the system would be advanced. Thus, the Agency decided to delete this factor. However, as discussed above, one concept from the proposed factor has been clarified and added to another final factor. Specifically, the idea that universal wastes are frequently generated in relatively small quantities by any one generator has been added to final § 273.81(c).

Second, the proposed factor 273.2(a)(5), which addressed the risk posed by management of the waste in the municipal waste stream (e.g., municipal waste combustors or landfills), is also not included in the final rule. The Agency agrees with numerous commenters who pointed out that any waste that has been identified as hazardous waste (i.e., is either listed or exhibits one or more characteristics), by definition could pose a risk to human health or the environment under non-hazardous waste management scenarios. The purpose of identifying wastes as hazardous waste is to identify those that pose such risks. Since only hazardous wastes are eligible for the universal waste system, the Agency decided it is not necessary to require any additional demonstration of risk for typical management scenarios. The Agency also agrees with commenters who argued that requiring such a demonstration of risk would inhibit petitioners because they would be unwilling to stigmatize their products or wastes or increase future liabilities by highlighting the risks posed by the products or wastes in non-hazardous management systems.

Third, the proposed factor 273.2(b)(4), which addressed the availability of recycling technologies, is also not included in the final rule. Commenters were divided on this issue, but the Agency agrees with several points made by commenters opposing the use of this factor. Several commenters argued that recycling technology is quickly developing and that the availability of volumes of input material is a major factor in driving this development. Thus, using the prior existence of recycling technology as a factor for adding wastes to the universal waste system may inhibit collection of volumes of potentially recyclable wastes and thus may actually inhibit development of technologies for recycling. The Agency thus believes it is appropriate to evaluate wastes for addition to the universal waste system based on other factors, such as whether waste management practices for a waste will be improved, regardless of whether the waste is recycled or treated and disposed of under existing Subtitle C requirements.

Other commenters argued that the environmental benefits of removing hazardous wastes from non-hazardous waste management systems should not be lost only because a recycling technology has not yet been developed for a particular waste type. Although the Agency encourages environmentally protective recycling of hazardous wastes, this argument is convincing. The Agency would prefer to get hazardous wastes out of non-hazardous waste management systems as soon as possible, rather than waiting for a recycling technology to develop, which in some cases may be technologically or economically unlikely.

IV.D. Participants in the Universal Waste System

The following three sections describe the four regulatory categories of participants in the final universal waste management system: Small quantity handlers of universal waste, large quantity handlers of universal waste, transporters, and destination facilities. The differences between these categories and the proposed categories of generators, consolidation points, transporters, and destination facilities are also described.

IV.D.1. Small and Large Quantity Handlers of Universal Waste

In the proposed rule, regulated persons managing universal waste were categorized into four categories: Generators, consolidation points, transporters, and destination facilities. In the final rule there are also four types of regulated persons. The transporter and destination facility categories are retained essentially as they were proposed. The persons who would have been included in the proposed generator and consolidation point categories will now fit into either the category of small quantity handlers of universal waste (SQHUWs) or the category of large quantity handlers of universal waste (LQHUWs).

Under 40 CFR 273.6 of the final rule, a Universal Waste Handler is defined to mean a generator of universal waste or the owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or a foreign destination. The Agency further clarifies the definition of Universal Waste Handler by stating that a Universal Waste Handler does not mean: (1) A person who treats (except under the provisions of § 273.13 (a) or (c), or 273.33 (a) or (c)), disposes of, or recycles universal waste; or (2) a person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility (see preamble discussion under sections IV.E.8 of today's rule).

In the final rule, the term Universal Waste Handler is subdivided into two categories: Small Quantity Handler of Universal Waste (SQHUW) and Large Quantity Handler of Universal Waste (LQHUW). Part 273.6 defines a Small Quantity Handler of Universal Waste to mean a universal waste handler, as defined above, who does not accumulate 5,000 kilograms or more total of universal waste (batteries, pesticides, or thermostats, calculated collectively) at any time. A Large Quantity Handler of Universal Waste is defined in § 273.6 to mean a universal waste handler (as defined above) who accumulates 5,000 kilograms or more total of waste (batteries, pesticides, or thermostats, calculated collectively) at any time. The 5,000 kg accumulation cut-off level does not refer to *any one category* of universal waste, calculated separately but refers to the *total* quantity

of universal waste accumulated on-site. Thus, a universal waste handler who accumulates one or more categories of universal waste (batteries, pesticides, or thermostats) must determine their status as a small or large quantity handler of universal waste by calculating the *total* quantity of *all* universal waste categories accumulated on-site.

The Agency decided to make this change for several reasons. First, numerous commenters suggested that there should be a third category of universal waste handler: front-line collectors of universal waste who collect small quantities of universal waste, largely from consumers and small businesses. These commenters pointed out that such collectors would frequently be retail-type operations (e.g., a department or specialty store that has a spent battery collection box) participating in national or regional collection programs. Such front-line collectors would likely accumulate only small quantities of universal waste because they are not principally in the business of managing waste and because they would ship wastes frequently using package shipping services or similar systems set up by the collection programs.

These commenters argued that front-line collectors should be subject to less stringent requirements than the proposed consolidation point requirements for several reasons. One reason was that the universal waste they would have on-site would pose limited risk due to the small quantities involved. Another reason was that some of the requirements would inhibit the participation of many retail-type operations (such as the large retail chains) which would greatly limit the success of universal waste collection programs in removing these wastes from the solid waste stream.

The Agency agrees with the concept that the activities of persons such as front-line collectors managing small quantities of universal waste pose less risk and require less stringent standards than those managing larger quantities of universal waste. Therefore, instead of adding an additional category of front-line collectors with less stringent standards, the Agency decided to extend this concept to all persons both generating and collecting universal waste. Thus, under the final rule, persons accumulating large quantities of universal waste (5,000 kilograms or more accumulated on-site) are subject to more stringent requirements than persons accumulating small quantities.

The second reason the Agency decided to restructure the categories of persons managing universal wastes was in response to comments received on the issue of recordkeeping for universal waste shipments. The Agency had proposed that a manifest be required for shipments from final consolidation points to destination facilities, based on the concept that such shipments would be larger shipments and thus require closer tracking. In addition to other issues, a number of commenters pointed out that it is not necessarily true that shipments from consolidation points to destination facilities will be larger shipments. For example, shipments between consolidation points or between generators and destination facilities may also be large shipments.

The Agency agrees that it does not necessarily make sense from a risk perspective to require recordkeeping for certain shipments based solely on the type of universal waste management activity conducted by the shipper and receiver (i.e., whether the shipper generates or collects universal waste or whether the receiver collects or disposes of universal waste). The Agency believes that the appropriate variable for applying more stringent requirements is the quantity of waste managed, not whether waste is generated or received from off-site. Therefore, under the final rule the level of requirements applied to any handler (i.e., small or large quantity handler requirements) is based purely on how much universal waste is managed at the location. Requirements for SQHUWs and LQHUWs, including notification requirements are found in subparts B and C, respectively, of today's final rule. These requirements are discussed in detail in this preamble under section IV.E., Universal Waste Handler Requirements.

IV.D.2. Transporters

In the final rule, transporter is defined as "a person engaged in the off-site transportation of universal waste by air, rail, highway, or water." This definition remains substantially unchanged from the proposed definition, except that the term "universal waste" has replaced the term "hazardous waste." Persons meeting the definition of transporter are subject to the universal waste transporter requirements of subpart D of part 273. Using the term "universal waste" merely clarifies that the part 273 transporter requirements apply only to shipments of universal waste.

The universe of persons covered by the transporter definition is the same as that covered by the proposed definition, and includes those persons who transport wastes from one universal waste handler to another, to a destination facility, or to a foreign destination. In response to several commenters' questions about self-transportation of universal waste by generators, the final rule also clarifies in 40 CFR 273.18(b) and 273.38(b) that any handler who self-transports universal waste from his facility to another handler, a destination facility, or a foreign destination, becomes a universal waste transporter for those self-transportation activities and is subject to the requirements of subpart D of this rule. The purpose of this language is simply to clarify, for any handlers who might be unsure, that a handler transporting his or her own universal waste off-site is regulated the same as anyone else would be transporting that universal waste off-site.

IV.D.3. Destination Facilities

In the proposed part 273 regulations, a destination facility was defined as "a hazardous waste treatment, storage, recycling, or disposal facility which: (1) Has received a permit (or interim status) in accordance with the requirements of parts 270 and 124 of this chapter, (2) has received a permit (or interim status) from a state authorized in accordance with part 271 of this chapter, or (3) is a recycler regulated under 40 CFR 261.6 (c)(2). If a waste is destined for a facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste."

Many commenters argued that this definition should be revised to include only facilities that are actually recycling or disposing of universal wastes. For example, they argue that a facility that only receives shipments of used hazardous waste batteries, consolidates them, and then ships them to a recycling facility should not be defined to be a "destination facility" just because it is already a RCRA permitted or interim status facility due to other activities conducted at the facility. Commenters pointed out that non-permitted facilities conducting the exact same universal waste management activities would, under the proposed rule, be defined as consolidation points and would be subject to the less stringent consolidation point requirements. Commenters argued that it does not make sense to regulate facilities differently that are conducting the same universal waste management activities.

Commenters further noted that defining a destination facility in terms of whether or not it has a RCRA permit would require any facility operating under a RCRA Part B permit to manage this waste under the full Subtitle C

regulations instead of the less stringent requirements contained in the proposed part 273 regulations, whether or not they are actually treating or recycling the universal waste. Commenters also pointed out that this definition would provide an incentive for managing universal waste at unpermitted facilities with less experience in hazardous waste management and would inhibit management at permitted facilities that have hazardous waste management experience as well as oversight from regulating agencies. Commenters stated that although the proposed rule provided flexibility for most managers of universal waste, the proposed definition of destination facility would restrict the ability of permitted facilities to manage universal wastes.

The Agency agrees with these commenters and did not intend for the destination facility requirements under part 273 to apply to permitted hazardous waste facilities serving solely as consolidation areas for a particular category of universal waste. The Agency agrees that the more stringent destination facility requirements should apply only to those facilities that actually treat, recycle and/or dispose of a particular category of universal waste. Permitted facilities that only consolidate a particular category of universal waste, but do not treat, recycle, and/or dispose of this particular category of waste, should be subject to the small or large quantity handler of universal waste requirements under part 273, as appropriate. Thus these facilities would be subject to the same requirements as any other facility that conducts the same universal waste management activities.

Thus, in today's Final Rule, the definition of destination facility has been revised to clarify this point. In § 273.6 of the final rule, destination facility is defined as "* * *a facility that treats, disposes of, or recycles a particular category of universal waste except those management activities described in paragraphs (a) and (c) of §§ 273.13 and 273.33. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste." By defining a destination facility based on the universal waste management activity conducted at the facility rather than by whether the facility has a RCRA permit for other waste management activities, the final rule indicates that only facilities that actually treat, dispose of, or recycle a particular category of universal waste must comply with the destination facility requirements at § 273.60. The universal waste handler definition (§ 273.6) has also been structured to conform to this change and includes all facilities that accumulate a particular category of universal waste but do not treat, dispose of, or recycle them. Thus, such facilities must comply with only the appropriate universal waste handler requirements for managing that particular category of universal waste regardless of whether they have a permit for management of other hazardous wastes or other categories of universal waste which they *do* treat, recycle, and/or dispose. Therefore, a facility which only accumulates a particular category of universal waste is a universal waste handler for that particular category of universal waste. However, if this facility also treats, recycles, and/or disposes of another category of universal waste, that facility is a destination facility for that particular category of universal waste and must comply with the destination facility requirements for that category of waste.

IV.E. Universal Waste Handler Requirements

As described in Section III, Summary of Final Universal Regulations, subparts B and C of part 273 set forth the final requirements for small and large quantity handlers of universal waste. Each of these subparts consists of ten sections. All but three of the sections include requirements that are the same for both small and large quantity handlers of universal waste. However, the notification and tracking sections for LQHUWs include regulatory requirements, while these same sections for SQHUWs merely explain that small quantity handlers are not subject to notification and tracking requirements. Also, the employee training section for large quantity handlers of universal waste includes more extensive requirements than does the employee training section for small quantity handlers of universal waste.

The requirements included in the final rule for each of the ten universal waste handler sections are discussed in detail in the following subsections of this preamble. Any changes made from the proposed rule, comments received on the proposed requirements, and the Agency's responses to these comments are also discussed.

IV.E.1. Prohibitions

In the proposed rule, the Agency proposed three prohibitions that were applicable to generators, transporters, and consolidation points managing universal waste. First, these handlers were prohibited from diluting or disposing of universal waste, except that the existing § 262.70 provision allowing farmers to dispose of waste pesticides from their own use on their own farms was retained. Second, handlers were prohibited from treating waste, except by removing electrolytes from batteries or responding to releases. Third, handlers were prohibited from sending or taking universal waste to a place other than a consolidation point, destination facility, or foreign destination. In the final rule, the three prohibitions have been revised in response to comment as discussed below, and are applied to small quantity handlers of universal waste, large quantity handlers of universal waste, and transporters of universal waste. The final prohibitions for small and large quantity handlers of universal waste are found, respectively, in §§ 273.11 and 273.31 of this final rule. The handlers to which the prohibitions apply under the final rule are the same as under the proposal since the universe of small and large quantity handlers of universal waste under the final rule is the same as the universe of generators and consolidation points under the proposal. (See section IV.D.1 of today's preamble for a full discussion of universal waste handlers).

IV.E.1.a. Prohibition on Disposal

The first proposed prohibition is related to dilution and disposal of universal waste and has essentially been retained in the final rule, although dilution has been moved and included in the second prohibition concerning treatment. Thus, the first prohibition now simply prohibits handlers from disposing of universal waste. In the proposal, farmers disposing of waste pesticides from their own use on their own farms, in compliance with 40 CFR 262.70 were exempted from the part 273 management standards. In the final rule, management under 40 CFR 262.70 is still permissible, however it is not written as an exemption. Part 273.3(b)(1) states that farmers using this exemption are not covered under part 273. As proposed, the 40 CFR 262.70 provision allowing farmers to dispose of waste pesticides from their own use on their own farms has been retained. Commenters generally did not disagree with the prohibition on disposal. A number of commenters added that the proposed prohibition on disposal is reasonable. Thus the Agency has retained the prohibition essentially as proposed at §§ 273.11 and 273.31 of today's final rule.

IV.E.1.b. Prohibition on Treatment

The second proposed prohibition on treatment of universal waste has been retained in the final rule, but several

revisions have been made. As mentioned above, the dilution prohibition was moved from the first prohibition and combined with the second treatment prohibition. This change clearly separates disposal activities from treatment activities, since dilution is a form of treatment. Further, by combining the treatment and dilution prohibitions into the same provision it is further clarified that exceptions identified to the treatment prohibition also apply to the dilution prohibition. Also, the proposed treatment prohibition included one exception allowing the removal of electrolyte from batteries as long as certain requirements were met. (See proposed §§ 273.11(d)(2) and 273.11(e)(1)). Commenters generally supported the exception on electrolyte removal. Thus, the substance of this exception has been retained. In the final rule, however, the electrolyte removal exception has been made part of a more general exception for routine battery management activities, which has been added for small and large quantity handlers of universal waste under sections 273.13(a)(2)(vii) and 273.33(a)(2)(vii). This more general exception allows handlers of universal waste batteries to conduct routine battery management activities as long as the casing of each individual battery is not breached and remains closed and intact.

Routine battery management activities include sorting batteries by type, mixing battery types in one container, discharging batteries, regenerating used batteries, disassembling battery packs, removing batteries from discarded consumer products, or removing electrolyte from batteries. The types of battery management activities that are allowed under the exception and the requirements that must be met are referenced in the prohibitions section and detailed in the waste management section. (See, for example, 40 CFR 273.11(b), 273.13(a)(2) and (3), and 273.33(a)(2) and (3) of the final rule.) The requirements for battery management are discussed further in section IV.E.3.a of the preamble, waste management.

Numerous commenters argued that the treatment prohibition could be construed to preclude persons collecting batteries from performing activities that are necessary and essential to battery collection and management. Second, commenters believed that such management activities do not pose an appreciable risk to the environment because the battery casings remain intact and thus there is no increase risk of exposure or release of battery contents to the environment. Finally, commenters argued that these activities are necessary to facilitate proper recycling. Therefore, the Agency has added text to the prohibitions section under § 273.11(b) which prohibits treatment of universal waste batteries except in response to releases or management of batteries as provided in §§ 273.13(a)(2) and 273.33(a)(2). These sections allow certain battery management activities provided that the casing of each individual battery is not breached and the battery remains closed and intact.

In response to comment, another exception to the treatment prohibition has been added to the final rule that allows certain thermostat management activities. This exception allows handlers to remove mercury-containing ampules from thermostats. As with the battery management exception, these activities must meet certain requirements referenced in the prohibitions section and detailed in the waste management section. (See, for example, 40 CFR 273.11(b), 273.13(c)(2) and (3), and 273.33(c)(2) and (3). The requirements for ampule removal are discussed further in section, IV.E.3.c, waste management, of today's preamble.

This exception for ampule removal has been added to the final rule in response to a comment. The commenter argued that all the mercury is located within the ampule not the entire thermostat and, therefore, only the mercury ampule, not the entire used mercury containing thermostat, should be regulated. The commenter also argued that removal of used mercury ampules from the thermostats will be done by trained personnel in a setting where appropriate health and safety measures have been instituted. The Agency agrees with the commenter and has included a thermostat management exception for small and large quantity handlers of universal waste, 40 CFR 273.13(c) and 40 CFR 273.33(c), who conduct mercury ampule removal activities, provided that they meet the regulatory provisions of part 273 for mercury ampule removal. For further discussion regarding mercury ampule removal, please refer to section IV.E.3.c, waste management.

Finally, some commenters were concerned that the proposed treatment prohibition, for all universal waste types, unfairly limited universal waste management activities of generators. These commenters stated that under full Subtitle C regulation, generators are allowed to treat hazardous waste in accumulation containers (§ 262.34(a) and (d)), therefore, compliance with full Subtitle C requirements is less restrictive for generators than the streamlined part 273 standards. The Agency disagrees with the commenters and revises the prohibition provisions of today's final rule with the modifications mentioned above. The Agency points out that the existing accumulation provisions are available only to regulated generators who have EPA identification numbers and are complying with the full part 262 requirements including 90- or 180-day accumulation time limits (and permitting for exceeding these limits), 40 CFR 262.34 accumulation unit standards, biennial reports, and manifests. The Agency does not believe it is appropriate to allow a similar provision for generators who are not required to comply with the part 262 controls, but are instead following the streamlined requirements of the universal waste regulations.

IV.E.1.c. Prohibition on Shipments of Universal Wastes

The third proposed prohibition on sending or taking universal waste to a place other than specifically identified locations (e.g., generators could take their universal waste only to a consolidation point, destination facility, or foreign destination) has been substantially retained in the final rule, with minor modifications. In the final rule, this prohibition has been moved to new sections entitled off-site shipments. (See 40 CFR 273.18(a) and 273.38(a).) In the final rule, this provision has been revised to fit the categories of universal waste handlers used in the final rule. (See section IV.D.1 of today's preamble for a full discussion on universal waste handlers). The prohibition has been substantially retained in the final rule, but has been modified to allow shipment to any universal waste handler. The off-site shipment prohibition is discussed in detail in section IV.E.8 of this preamble entitled off-site shipments.

IV.E.2. Notification

In the proposed rule, the Agency required generators and consolidation points accumulating more than 20,000 kg of hazardous waste batteries at any time to notify EPA of their waste management activities. EPA requested comment on the proposed approach not to require generators of universal waste pesticides to notify, and the proposed notification quantity limits.

The notification requirement in the proposed rule consisted of a letter to the EPA Regional Administrator identifying the generator's facility. Specifically, generators and consolidation points accumulating more than 20,000 kg of hazardous waste batteries at any one

time were required to send a one-time written notification to the EPA Regional Administrator describing their hazardous waste battery accumulation activities. EPA would then assign an EPA identification number. Information required in the written notification included: (1) The generator's or consolidation point's name and mailing address; (2) the name and business telephone number of the person at the generator's or consolidation point's site who should be contacted regarding the battery accumulation activity; (3) the address or physical location of the battery accumulation activity; and (4) a statement indicating that the generator or consolidation point accumulates more than 20,000 kilograms of hazardous waste batteries. Alternately, a generator or consolidation point could apply to the EPA Regional Administrator using EPA Form 8700–12, "Notification of Regulated Waste Activity," and checking the appropriate box indicating that they are a hazardous waste generator or consolidation point.

The Agency did not propose notification requirements for generators and consolidation points handling *only* hazardous waste pesticides that are suspended and/or canceled and recalled. As discussed in the preamble to the proposed rule (58 FR 8121), the Agency considered the requirements for identifying recall participants and recordkeeping, authorized by FIFRA section 19(b), to provide sufficient information concerning the identity and location of persons managing these pesticides. In addition, FIFRA section 6(g) requires notice to EPA and appropriate state and local officials of the location, quantities, and possession of pesticides that are suspended or canceled under FIFRA section 6.

Based on commenters' support for the Agency's decision not to require the part 273 notification requirements for generators or consolidation points accumulating recalled pesticides, the Agency has decided to retain this exemption. Thus, under the final rule a person who handles only (e.g., does not manage other universal waste) recalled universal waste pesticides as described in 40 CFR 273.3(a)(1) and who has sent notification to EPA as required under FIFRA section 19(b) and 6(g) is not required to notify under § 273.32 of today's rule.

In the final rule, the Agency has also decided to retain the notification provisions for hazardous waste batteries found in the proposed rule, with some minor revisions. In the final rule, the notification requirements have been modified by: (1) Expanding the notification requirements to accommodate additions to the applicability section of the rule; (2) incorporating the revisions made in the final rule regarding the categorization of generators and consolidation points; (3) reducing the 20,000 kilogram cut-off level for notification; and (4) clarifying that cut-off for the notification requirements apply on a "site-by-site" basis. These modifications are discussed below.

First, the Agency has broadened the applicability of the final rule to include, along with hazardous waste batteries, unused pesticide products and used mercury-containing thermostats. Thus, in the final rule, notification requirements previously required only for hazardous waste batteries also apply to unused pesticide products and used mercury-containing thermostats under §§ 273.3 and 273.4 respectively. A full discussion regarding the expansion of the universal waste rule to unused pesticides products and used mercury-containing thermostats can be found in sections IV.E.3.b and IV.E.3.c, respectively, of today's preamble.

Second, the final rule has been revised from the proposed rule such that generators and consolidation points are now designated as universal waste handlers. The persons who would have been included in the proposed generator and consolidation point categories will now fit into either the category of small quantity handlers of universal waste (defined in § 273.6 as a universal waste handler who accumulates less than 5,000 kilograms total of universal waste (batteries, pesticides, or thermostats, calculated collectively) at any time) or the category of large quantity handlers of universal waste (defined as in § 273.6 as a universal waste handler who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, or thermostats, calculated collectively) at any time). Thus, under the final rule, universal waste handlers accumulating large quantities of universal waste are subject to more stringent requirements than persons accumulating small quantities.

The Agency believes that the appropriate variable for applying more stringent requirements is the quantity of waste managed, not whether the waste is generated or collected. The Agency selected 5,000 kilograms of accumulated waste as the cutoff for this notification requirement (i.e., as the cut-off between small and large quantity handlers of universal waste) because the universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste), and thus it is appropriate to have a higher cut off limit for this notification requirement than applies under the full hazardous waste regulations (i.e., the conditionally exempt small quantity generator limit of 1,000 kg). Further information regarding small and large quantity handlers of universal waste, can be found in section IV.D.1 of the preamble.

A third modification made to the notification requirements reduces the notification cut-off level from 20,000 kilograms to 5,000 kilograms total of universal waste. In the proposal, as stated above, generators or consolidation points accumulating more than 20,000 kilograms of universal waste batteries would have been required to notify EPA. Under today's final rule, the applicability of part 273 has been expanded to also include unused pesticide products and thermostats. Thus, under the final rule, universal waste handlers accumulating 5,000 kilograms or more total of universal waste (batteries, pesticides, or thermostats) at any one time are required to notify EPA of this activity. Therefore, a universal waste handler who accumulates 5,000 kilograms or more total of universal waste at any one time is designated a large quantity handler of universal waste and is subject to the notification requirements of 40 CFR 273.32. However, a universal waste handler who does not accumulate 5,000 kilograms total of universal waste (e.g., batteries, pesticides, or thermostats, calculated collectively, at any one time) is designated a small quantity handler of universal waste and is not subject to any notification requirements under part 273. The Agency points out that since the universe for generators and consolidation points and universal waste handlers are the same, the only difference between the proposed notification requirements and the notification requirements of this final rule is the cut-off level. Thus, the notification provisions in today's rule have not changed substantially. In addition, as explained previously, handlers of recalled pesticides only need notify if they have not already notified under FIFRA.

The Agency's decision to reduce the cut-off level was based on recommendations by a number of commenters. Although some commenters generally supported the 20,000 kilogram cut-off level, several commenters recommended that EPA reduce the level because the 20,000 kilogram cut-off was excessive and that most generators or consolidation points would not accumulate such large amounts of universal waste. These commenters suggested reducing the

notification quantity limit to 1,000 kilograms. Another commenter recommended reducing the 20,000 kilogram notification limit to 5,000 kilograms total because the reduction eliminates the small one-time collections and average size generators while ensuring that regulatory agencies are aware of the larger generators and more permanent consolidation points. The Agency agrees with the commenter and believes that such a quantity level is appropriate. EPA believes that the amount of universal waste that a facility is accumulating is a good indicator of the quantities of waste that the facility is handling, is easily verified by regulating agencies through an inspection of the facility, and is a good indicator of the risk posed by management of universal waste at the facility.

The Agency also believes that the 5,000 kilogram quantity limit will not obstruct people managing universal waste from participating in the universal waste collection program because the recordkeeping requirements for large quantity handlers of universal waste is basic enough to be fulfilled by standard business records. Thus, handlers will arrange universal waste management activities to achieve efficiency rather than to avoid regulatory requirements. To achieve efficiency, those facilities handling large quantities in short periods of time will naturally accumulate these large quantities in order to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments. The Agency, however, would like to emphasize that all handlers who anticipate accumulating 5,000 kilograms or more total of universal hazardous waste at any one time must send written notification to the Regional Administrator, and receive an EPA Identification Number before exceeding the 5,000 kg quantity limit.

Finally, the Agency has clarified in the final rule that the notification requirement is a one-time notification for facilities accumulating 5,000 kilograms or more total of universal waste, calculated collectively on-site. The Agency believes clarification is necessary because a number of commenters raised the question of whether or not notification is necessary only when a particular site exceeds the cut-off limit or if notification is required if an entire company accumulates greater than the cut-off limit at all of its sites combined. Commenters specifically recommended that the cut-off figure apply on a location, or "site-by-site" basis and not on a company-wide basis. The Agency agrees with commenters' recommendation to require notification on a "site-by-site" basis only. The Agency believes the notification requirement in the proposed rule, and in today's final rule, already addresses this concern. In addition, the Agency clarifies that renotification is not required for large quantity handlers who have previously notified. This means that if a large quantity handler of universal waste has already notified EPA of his hazardous waste management activities and has received an EPA identification number, he is not required to re-notify under 40 CFR 273.32.

The final rule maintains the notification requirements of the proposal, but has reduced the 20,000 kilogram cut-off level to 5,000 kilograms as discussed previously. The notification requirements of § 273.32 recognize that a person may own several non-contiguous properties which accumulate universal waste independently of each other. The notification requirement under § 273.32 does not require a company owning non-contiguous properties to add together the total quantity of universal waste accumulated at each non-contiguous property and subsequently notify EPA if the total quantity of universal waste for all non-contiguous properties equals or exceeds 5,000 kilograms.

As written, the 5,000 kilogram cut-off level applies only to the total amount of all categories of universal waste accumulated at one site. Non-contiguous property is viewed as a separate site. Thus, a person who owns or operates two or more universal waste management facilities located on pieces of property which are non-contiguous should not add together the quantities of all universal waste accumulated at all of his facilities to determine if he exceeds the 5000 kilogram cut-off level. Owners or operators should consider each facility separately and is responsible for calculating the quantity of universal waste at each facility separately. If the 5,000 kg cut-off level is exceeded for the universal waste accumulated at one facility, he would be required to notify EPA of his universal waste activities. If the quantity of universal waste at this facility is less than the 5,000 kg cut-off, notification would not be necessary. In other words, the owner or operator of a facility, including all contiguous property, that accumulates 5,000 kilograms or more total of universal waste, is subject to the notification requirements of § 273.32.

On the other hand, non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, are considered on-site property. Thus, a person who owns or operates two or more universal waste management facilities located on pieces of property which are connected by a right-of-way which he controls and to which the public does not have access, should add together the quantities of all universal waste accumulated at these facilities to determine if he exceeds the 5000 kilogram cut-off level. If the quantity of universal waste at his on-site facilities is greater than the 5,000 kg cut-off, notification would be necessary, if the owner has not already notified. The Agency believes that this clarification will redress any further confusion caused by the proposed notification requirements.

IV.E.3. Waste Management

The final waste management requirements for small and large handlers of universal waste are found in §§ 273.13 and 273.33 of this final rule. The subsections of §§ 273.13 and 273.33 address waste management issues specific to each waste category. Subsection (a) consists of requirements for universal waste battery management, subsection (b) consists of requirements for universal waste pesticide management, and subsection (c) consists of requirements for universal waste thermostat management. The three waste category-specific provisions are discussed in the following three subsections of this preamble.

Each of the subsections set forth a general performance standard requiring that handlers "manage universal waste in a way that prevents releases of any universal waste or component of a universal waste to the environment." The universal waste proposal included a similar provision, which was proposed for management of universal waste batteries. The proposed provision, however, required that persons manage batteries "in a way that *minimizes* releases* * *" Several commenters argued that the requirement to minimize releases was too lax and in essence allowed releases. They pointed out that such a standard implied that releases could occur, as long as the handler attempted to minimize them. These commenters suggested that the standard should be changed to require management in such a way that *prevents* releases. The Agency agrees with this point, and stresses that releases of universal waste or universal waste components to the environment *are not* allowed under the universal waste

regulations. For example, management in a container that has signs of visible leakage would unquestionably be out of compliance. The standard of performance for universal waste management is to prevent *any* release and therefore, leakages that are not visible are also not permissible. Thus, the Agency has revised the text of the provision to clarify that universal waste batteries, pesticides and thermostats are to be managed in such a way as to *prevent* releases.

In the final rule, this performance standard is applied to all universal waste rather than only to batteries. Thermostats are included because the Agency had discussed applying the proposed requirements for battery management to thermostats and commenters generally supported this approach. Pesticides are included simply to make it clear that releases are to be prevented, although this requirement is actually redundant.

IV.E.3.a. Universal Waste Batteries

Subsection (a) of the small and large quantity handlers of universal waste management sections sets forth requirements for the management of universal waste batteries. Three provisions are included.

The first provision of §§ 273.13(a)(1) and 273.33(a)(1) address containment of leaking or damaged batteries. The Agency added this provision to the final rule after reviewing comments on the issue of waste management requirements for batteries. Commenters disagreed on this subject. A number of commenters argued that the management requirements proposed for batteries were sufficient to ensure that universal waste battery management will be protective of human health and the environment. They believed that the general performance standard concerning releases and the prohibitions were sufficient and urged the Agency not to impose additional waste management requirements. In fact, several commenters argued that batteries should be subject to regulations like those of subpart G of 40 CFR part 266, which includes no requirements for handlers other than recyclers.

Several other commenters, however, argued that more stringent controls should be imposed on battery waste management. They believed that the proposed general performance standard and other requirements were inadequate to protect against environmental damage. These commenters recommended various additional requirements including accumulation of batteries on surfaces that can contain releases, detailed employee training, financial assurance, temperature and ventilation controls, water run-on and run-off controls, fire/explosion and security precautions.

In response to these comments the Agency has decided to add to the final rule a containment provision requiring that handlers "contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions." This means that the containers must be in good condition (no severe rusting, apparent structural defects, or deterioration). The Agency believes that this requirement will ensure that any potential releases to the environment from universal waste batteries are prevented. The Agency further believes that this requirement is specific enough to provide clear direction to handlers of universal waste batteries on how to prevent releases. Because the requirement is not technically difficult to follow, the Agency is confident that universal waste handlers will be able to comply. Although the Agency has added this new containment requirement for batteries, the Agency is sensitive to concerns that overly burdensome requirements will discourage participation in the universal waste system, resulting in decreased quantities of these wastes being collected for proper management. The Agency is confident that this requirement is rigorous enough to protect human health and the environment from the risks of battery management, but at the same time will not present a barrier to participation in universal waste collection programs.

The second provision of the waste management section for batteries, §§ 273.13(a)(2) and 273.33(a)(2), specifies conditions that must be met by handlers conducting these activities. This provision also identifies certain battery management activities that may be conducted by handlers. This provision was added in response to numerous commenters who all argued that certain activities that might be considered treatment, and thus banned under the prohibition on treatment of universal waste, are necessary to quality battery management and pose no increased health or environmental risks. Commenters mentioned the following activities: sorting batteries by type; mixing battery types in one container; discharging batteries so as to remove the electric charge; disassembling batteries or battery packs into individual batteries or cells; and removing batteries from discarded consumer products. According to these commenters, these activities are essential to effective battery management. For example, battery types are mixed in containers at collection points to avoid the complexity of requiring those dropping off batteries to identify and manage battery types separately. Collected mixed batteries must be sorted by type in order to send them to the appropriate destination facilities for proper recycling or treatment. Batteries must be removed from discarded consumer products to make shipping and handling economical. Discharging batteries may be conducted as a safety precaution prior to accumulation or shipping.

The Agency agrees with commenters that these activities are an important part of battery management and should be allowed under the universal waste regulations. The Agency also agrees with commenters' point that as long as the metal or plastic casing of each individual battery or cell is not breached and remains closed and intact, the risk of releases to the environment is not increased by these activities. Thus, the Agency has added this new provision to the final rule specifying that handlers may conduct the battery management activities listed above as long as the battery or cell casings are not breached and remain closed and intact.

The Agency notes that it has removed the 40 CFR 261.6 exemption for used batteries that are to be regenerated and has added a provision specifying that facilities regenerating used batteries are subject to the part 273 standards for small or large quantity handlers of universal waste. The Agency believes that regeneration of batteries is a management activity that should also be exempted from the treatment prohibitions. Thus, regeneration of used batteries has also been included as part of the management activities mentioned above for universal waste batteries (For further discussion regarding regenerated batteries, please refer to section IV.J of the preamble). To resolve commenters' concerns that these activities might be banned under the general prohibition on treatment, in the final rule the Agency has also revised the treatment prohibition to specifically exempt these activities. Removing electrolyte, which was allowed under the proposed rule and not opposed by commenters, has also been included in this provision as an allowable activity.

The third provision of the waste management section for batteries

273.13(a)(3) and 273.33(a)(3), has been expanded from a proposed provision discussing how electrolyte removed from batteries is regulated (see, for example, proposed 40 CFR 273.11(e)(1)). The final provision has been expanded to address not only electrolyte, but any non-universal waste generated in the process of managing universal wastes. These non-universal wastes could include any solid waste generated in the battery management activities discussed above (e.g., plastic or metal battery pack construction materials or consumer electronics hulks from which batteries have been removed). The provision has been expanded to address these other wastes because commenters raised the issue of battery management activities and the same issues arise with wastes generated in these activities as with electrolyte.

In addition, this provision has been expanded to address the question raised by commenters of how electrolyte (and other generated non-universal wastes) would fit into the hazardous waste regulations. Under the final rule the handler who generates hazardous waste electrolyte or other hazardous wastes are subject to the generator requirements of 40 CFR part 262. Compliance with the generator regulations of part 262 is appropriate because a generator begins the hazardous waste management procedures (e.g., manifesting, shipping to regulated facilities), which is what would be required for a non-universal waste generated as a result of universal waste management which must be moved into the full hazardous waste regulatory system.

Finally, this provision has also been expanded to clarify that if electrolyte or any other generated non-universal wastes are not hazardous wastes, they may be managed under applicable solid waste management regulations. This is always true under the hazardous waste regulations, but the Agency believes that restating this will make the regulations more clear and user friendly for battery handlers.

IV.E.3.b. Universal Waste Pesticides

In the proposed universal waste rule, the Agency proposed that suspended and/or canceled and recalled pesticides managed under the universal waste regulations must be packaged to meet one of the following four conditions: (1) The pesticide must be packaged in the original packaging (container or tank) used to contain the pesticide when it was being distributed or sold, which must be kept closed and not leaking; (2) the pesticide must be packaged in the original packaging and overpacked in a larger container that is closed and non-leaking; (3) the pesticides must be contained in a tank that meets the hazardous waste tank requirements; or (4) the pesticides must be contained in a non-leaking transport vehicle or vessel. The Agency also requested comment on whether the regulations should allow handlers of recalled pesticides to repackage universal waste pesticides from original packaging into other containers (i.e., physically transfer the pesticide from its original packaging into a different container).

In the final rule, the first, second, and fourth options for packaging have been substantially revised in response to comments. The third option, on which very little comment was received, has been retained as proposed. In addition, because the universe of pesticides included in the final rule has been expanded (see discussion in section IV.B.2.c. of this preamble), the packaging requirements in the final rule are applicable to unused pesticide products collected in collection programs as well as to suspended and/or canceled and recalled pesticides.

The first and second proposed packaging options (which were the only available options if a pesticide was to be managed in containers or portable tanks rather than tanks or transport vehicles), essentially required that the pesticide remain in the original packaging used when it was distributed or sold. If the original packaging was leaking, the second option required that it be overpacked in a larger, non-leaking container. However, both options required that original packaging be used. (See proposed 40 CFR 273.22(a)(1)(i) and 273.23(a)(1)(i).)

In the final rule, these packaging options have been substantially revised to allow management of pesticides in containers other than original packaging, as long as certain conditions are met. Specifically, the first revised option allows pesticides to be managed in "a container that remains closed, is structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions." See 40 CFR 273.13(b)(1) and 273.33(b)(1) of the final rule. The second revised option requires that a pesticide managed in a container not meeting the conditions of the first option be overpacked in a container that does meet the requirements of the first option. See 40 CFR 273.13(b)(2) and 273.33(b)(2) of the final rule.

The result of these revisions is that any universal waste pesticide that is managed in a container must be managed in a container that is in good condition (no severe rusting, apparent structural defects, or deterioration). The good-condition container may be the primary container (under the first option), or if the primary container is not acceptable, a good-condition container may be used to overpack the primary container (i.e., the primary container is placed into a good-condition overpack container). It should be noted that although original packaging is no longer required under these revisions, original packaging may be used to contain pesticides as long as the original packaging meets the conditions set forth in the options.

The Agency's decision to allow the use of packaging other than original packaging was based on a couple of factors. First, a number of commenters pointed out that a significant portion of waste pesticides found on farms (both recalled pesticides, and unused pesticide products collected in "clean sweep" programs) are in containers other than the original container. In most cases, the original containers for these pesticides are no longer available. Commenters argued that limiting the universal waste rule to those pesticides for which the original container is available would severely limit the quantities of waste that could be managed under the universal waste system. In turn, this would decrease the amounts of pesticides collected from farmers and others for proper management. Commenters argued that the risks of releases of these pesticides are likely to be less under the universal waste regulations than under conditions of long term accumulation on farms, particularly if the regulations ensure management in good-condition, non-leaking containers.

The Agency notes that its intent in requiring original packaging was to ensure that pesticides were managed in appropriate containers. The Agency believed that original packaging was most likely to remain in good condition since it was designed to store the pesticide during its product life. However, based on the comments received, the Agency now believes that requiring original packaging would unnecessarily limit the pesticides that can be managed under the universal waste system, and, at the same time, would not necessarily ensure adequate containment. Thus, the Agency has developed revised packaging requirements for containers that ensure that pesticides are managed in containers that are protective of human health and the environment, and that pesticides are not prohibited from management under the universal waste system merely because the original packaging is no longer available. The

Agency agrees with commenters' points and believes that the revised packaging requirements for containers are environmentally protective, but flexible enough to accommodate pesticides collected under recalls as well as waste pesticide collection programs ("clean sweeps").

Second, a number of other commenters argued that the proposed requirements to keep pesticides in original containers that are closed and non-leaking were not sufficiently protective. These commenters pointed out that cancellation may sometimes follow suspension by a considerable period of time, and that pesticide containers may not be properly maintained over this time period. Similarly, pesticides collected in "clean sweep" programs have frequently been accumulated for long periods of time. As a result, such containers may deteriorate or be damaged. These commenters believed that the proposed packaging provisions requiring that pesticides be kept in closed and non-leaking containers could be construed to allow the use of original containers that are damaged, but not yet actually leaking. Although the Agency did not intend to allow the use of damaged containers, the Agency agrees that the proposed language could have been interpreted to allow such containers. To resolve this problem, under the final rule universal waste pesticides must be contained in containers (or overpack containers) that remain closed, are structurally sound, compatible with the pesticides, and that lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The Agency believes that this requirement provides sufficient insurance that pesticide containers will be protective of human health and the environment.

The same conditions have also been added to the fourth packaging option, which as proposed, allowed the used of "non-leaking transport vehicles or vessels." This provision has been revised in the same way as the first two options since the "non-leaking" condition raises the same issue as the proposed non-leaking container requirements. To resolve the concern that damaged, but not yet leaking transport vehicles or vessels could be used to contain pesticides, the final rule requires that handlers use a transport vehicle or vessel that is "closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions."

The final rule has also been revised to clarify when overpacking is required for pesticide containers in response to confusion cited by some commenters regarding these requirements in the proposal. The Agency believes that the wording of the second revised packaging option makes it clear that overpacking is required when the primary container does not meet the good-condition requirements found in the first revised packaging condition. The Agency believes that this regulatory structure will be more clear to the reader than the proposed regulatory structure.

Several commenters addressed the question of whether the universal waste regulations should allow universal waste handlers to repackage pesticides (i.e., to transfer pesticides from one container to another). Most of these commenters supported allowing repackaging. The Agency generally prefers that handlers overpack leaking or damaged containers rather than transfer the pesticide to another container because the risk of spillage is likely to be less when overpacking. However, the Agency recognizes that in some cases, for example if no overpack materials are available, it may be preferable to repackage pesticides than to wait until overpacking is possible. In addition, there are other controls that will ensure that any repackaging of universal waste pesticides is conducted in an environmentally protective manner. For recalled pesticides, the recall procedures under FIFRA section 19b addresses repackaging. For example, under proposed regulations at 40 CFR part 165 (58 FR 26857; May 5, 1993) pesticide recallers would submit a recall plan for approval by the Agency. Part of the plan would include a description of the responsibilities of the recaller and pesticide holders with respect to interim storage, preparation for transportation, and transportation of the pesticide.

For unused pesticide products managed in collection programs, the pesticide management procedures required by the collection program will generally address repackaging and, if allowed, will specify precautions to be taken during repackaging. Because repackaging may be an important method of cost control for collection programs (e.g., consolidation of small containers of the same pesticide), the Agency does not wish to interfere with these practices. The Agency believes that waste pesticide collection programs will develop responsible procedures and would like to leave the decision of whether to allow repackaging, and what requirements to impose, to the collection programs or States.

Based on these factors, the Agency has decided not to prohibit repackaging in the final universal waste regulations. The Agency points out, of course, that any spillage of universal waste pesticide is required to be cleaned up immediately and managed appropriately under the universal waste release response provisions. The Agency also notes that any spillage that is not cleaned up would be considered illegal disposal under the hazardous waste regulations.

IV.E.3.c. Universal Waste Thermostats

In the proposed rule, the Agency requested comment on whether the waste management requirements proposed for universal waste batteries would be appropriate for managing mercury-containing thermostats. The Agency also requested comment on any additional requirements necessary to ensure that thermostats are collected in a manner that is protective of human health and the environment.

With the exception of one issue concerning mercury-containing ampule removal, commenters overwhelmingly supported applying the requirements proposed for universal waste batteries to used mercury-containing thermostats. These commenters agreed that the proposed part 273 requirements would facilitate collection and recycling of the mercury contained in the thermostats. Thus, in the final rule, persons managing universal waste thermostats are subject to the same basic requirements as persons managing other universal wastes: Requirements for small and large quantity handlers, transporters, and destination facilities. Specific waste management requirements have been added to the small and large quantity handler sections to address one commenter's concerns about ampule removal.

A manufacturer of thermostats who is developing a "take back" program for mercury-containing thermostats did suggest that some modifications to the waste management requirements proposed for batteries were necessary to reflect differences between the proposed waste mercury thermostat recycling program and procedures envisioned for battery recycling programs. The commenter expressed concerns as to whether the waste management provisions proposed for universal waste batteries would be sufficiently protective of human health and the environment if applied to the management of mercury-containing thermostats. Commenters recommended that for safety reasons, such removal

should only be performed by trained personnel in a setting where appropriate health and safety measures have been instituted.

Paragraph (c) of §§ 273.13 and 273.33 include requirements applicable to handlers of used mercury-containing thermostats. Subsection (c)(1) requires a universal waste handler to contain any universal waste thermostat that is leaking in a non-leaking container. Subsection (c)(2) sets forth requirements for universal waste handlers who remove mercury-containing ampules from thermostats. These requirements, based on controls suggested by the commenter, are designed to ensure that ampule removal is conducted in a safe and environmentally protective manner.

First, the handler must remove the ampules in a manner designed to prevent breakage of the ampules. Second, he must remove the ampules only over or in a containment device (e.g., tray or pan sufficient to contain any mercury released from an ampule in case of breakage). Third, he must ensure that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of 40 CFR 262.34. Fourth, he must immediately transfer any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of 40 CFR 262.34. Fifth, he must ensure that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury. Sixth, he must ensure that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers. Seventh, he must accumulate removed ampules in closed, non-leaking containers that are in good condition (no severe rusting, apparent structural defects, or deterioration); and finally, eighth, he must pack removed ampules in the container with packing materials adequate to prevent breakage during accumulation, handling, and transportation. Handlers not complying with these requirements for ampule removal are not managing universal waste, and are not subject to part 273. They are subject to the full hazardous waste requirement of parts 262 through 270. The Agency believes that these procedures ensure that the handler is removing the mercury ampule from the thermostat casing in a manner designed to prevent breakage of the ampules and to ensure proper containment of any spilled or leaked mercury.

The Agency recognizes that in some cases, spills or leaks resulting from ampule removal may occur. Thus, the Agency has added paragraph (c)(3) in §§ 273.13 and 273.33 to address concerns related to mercury residuals generated as a result of removal of mercury ampules from the thermostats. If spillage or leakage of mercury from a broken ampule or during ampule removal occurs, the handler must contain any universal waste thermostat that is leaking in a non-leaking container. A universal waste handler must determine whether such spillage or leakage exhibits a characteristic of hazardous waste. If the waste does exhibit a characteristic of hazardous waste, the handler is considered the generator of the mercury resulting from spills or leaks and is subject to all applicable requirements of 40 CFR parts 260 through 272, including 40 CFR part 262.

Similar to the battery waste management requirements, the handler must also determine whether or not any other solid waste (e.g., thermostat casing) generated during management activities exhibits a characteristic of hazardous waste. If the generated waste does exhibit a characteristic of hazardous waste, it must be managed under the hazardous waste management requirements mentioned above. If, however, the generated waste does not exhibit a characteristic of hazardous waste, it is not subject to the hazardous waste requirements, nor is it subject to the requirements of part 273. This waste is, however, required to be handled in compliance with applicable solid waste regulations and the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations. The Agency believes the specific requirements for ampule removal address the commenter's concerns regarding the improper removal of used mercury-containing ampules and ensure that such activities are safe and environmentally protective.

The Agency clarifies that if a handler determines that some waste he or she is managing as universal waste is actually not hazardous waste (and thus by definition is not universal waste), and it is therefore not required to be managed under the hazardous waste regulations, including the universal waste regulations. For example, a handler who receives shipments of mixed battery types may sort the batteries to separate the various battery chemistries. If one of the sorted battery types does not exhibit any characteristics of hazardous waste, it is not a hazardous waste and the handler may wish to manage it outside of the hazardous waste regulations.

IV.E.4. Labeling/Marking

In response to suggestions from commenters that the Agency include marking and labeling requirements in the part 273 regulations, the Agency has decided to implement marking and labeling requirements that were not proposed. Although commenters agreed that some form of labeling and marking requirement be required, commenters' recommendations on methods used to identify the materials contained within the tanks or containers differed. For example, one commenter suggested that EPA should require that all tanks or containers be marked with the words "hazardous waste", "hazardous material" or "waste destined for recycling". Another recommended that if the intent of the universal waste rule is to divert wastes into the recycle stream, the waste should not be labelled "universal hazardous waste", but simply "Universal Waste."

Under the final rule, labeling and marking requirements for universal waste have been included to identify the types of universal waste being managed. The Agency has added labeling and marking requirements for universal waste batteries, universal waste mercury-containing thermostats, and universal waste pesticides. The labeling requirements vary depending on the type of waste. These requirements are found in §§ 273.14 and 273.34 of the final rule. Paragraph (a) of these sections discusses the marking and labeling requirements for universal waste batteries. Under the final rule, a universal handler managing batteries at his facility is required to label each individual universal waste item or container holding the universal waste with the words "Universal Waste—Battery(ies)", or "Waste Battery(ies)", or "Used Battery(ies)." Similarly, a universal waste handler managing used mercury-containing thermostats under part 273 must label each universal waste item or container holding these universal wastes, with the words "Universal Waste—Mercury Thermostat(s)" or "Waste Mercury Thermostat(s)" or "Used Mercury Thermostat(s)." These requirements are in paragraph (d) of §§ 273.14 and 273.34 of the final rule.

Labeling and marking requirements similar to those described above for universal waste batteries and thermostats apply also to universal waste pesticides. Thus, a person managing universal pesticides must

mark or label his containers with the words "Universal Waste—Pesticide(s)" or "Waste—Pesticide(s)." Refer to § 273.14(c)(2) or § 273.34(c)(2). However, because there are many types of pesticides posing different management issues, the Agency has decided to require more specific labeling for pesticides in addition to the more general label discussed above. Due to differences in management practices between universal waste pesticides that are a part of a recall and pesticides that are a part of a state approved collection program, the requirements for each type of pesticide are different. Universal waste handlers managing recalled pesticides are required to mark or label tanks or containers holding the recalled pesticide with the original FIFRA label that would be required under FIFRA if the pesticide were a product (refer to § 273.14(b)(1)). While pesticides in a recall may be located at the individual user level, a larger volume is likely to be recalled from the dealer/retailer level. Pesticides shipped to dealers by producers are often sent in multiple container package units. For example, individual containers may be shipped grouped together in cartons and/or palleted and shrink-wrapped in plastic. This extra packaging (e.g., shrink-wrap, carton) typically is removed only at the time of sale. In the recall process, these multiple container package units would normally be shipped back intact. To require pesticide containers to be individually labeled as waste pesticides would require the dealer to break open such multiple package units to access the individual containers. EPA believes it is unnecessary to require that such multiple container package units be individually labeled merely for the purpose of being shipped to another universal waste handler as part of a recall. Accordingly, 40 CFR 273.14(b) permits the required label or marking to be placed on the outer packaging of multiple container packaged units.

On the other hand, unused pesticides that are universal wastes are typically products whose registration has been cancelled, which are no longer marketed, or no longer used by the farmer. Existing stocks often remain at the user level for extended times, sometimes years, because there is no formal recall in these circumstances. State collection programs are intended to collect and properly dispose of such wastes from the user level and rarely collect from the retail level as with a recall. Thus, the initial universal waste handler is a user typically having only single containers of pesticides whose labels may not be available or may have deteriorated due to adverse conditions or over time.

Universal waste handlers managing unused pesticide products that are collected and managed as part of a waste pesticide collection program have several options for labeling tanks and containers. The first option is to label the pesticide tank or container with a label that was on the accompanied product as sold or distributed, if still legible. Refer to §§ 273.14(c)(1)(i) or 273.34(c)(1)(i).

The Agency notes that this is the ideal labeling option for unused pesticide products, but the Agency also recognizes that the FIFRA label for the unused pesticide products may not be a realistic option because such a label may not be available. As an alternative, the Agency has developed additional labeling options under §§ 273.14(c)(1)(ii) and (iii) and 273.34(c)(1)(ii) and (iii).

The second option requires that handlers mark or label the container or containing unit with a label required by the Department of Transportation under 49 CFR part 172. If neither of these options are possible, the final option is to use another label that is approved in advance by the collection program. The Agency believes that these labeling and marking requirements will provide sufficient information to ensure that universal waste pesticides can be managed in a safe and environmentally protective manner, yet provides sufficient flexibility for universal handlers who are users or dealers, without requiring undue cost or burden of labeling.

IV.E.5. Accumulation Time Requirements

The final accumulation time requirements for small and large quantity handlers of universal waste are found in §§ 273.15 and 273.35 of this final rule. In the proposed universal waste rule, generators and consolidation points were prohibited from accumulating universal waste for longer than one year from the date the universal waste was generated, or received from another facility. Generators and consolidation points were also required to document that universal wastes were not accumulated for longer than this time. See proposed §§ 273.11(b) and 273.21(c). This accumulation time limitation was designed to implement, for universal wastes, a statutory prohibition that is part of the 1984 Hazardous and Solid Waste Amendments to RCRA (section 3004j). Pursuant to the Land Disposal Restrictions (LDR) provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA), all hazardous wastes listed or identified in accordance with RCRA section 3001 are prohibited, on specified timetables, from land disposal. The regulations for the LDR program in 40 CFR part 268 apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities, unless they are specifically excluded from regulation in parts 261 or 268. In addition, the statutory provision prohibits the storage of restricted hazardous, unless the restricted hazardous wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. This prohibition is currently codified for restricted hazardous wastes in 40 CFR 268.50. For universal wastes, the Agency proposed to simplify this prohibition by simply prohibiting accumulation for more than one year. The simplified provision was based on the assumption that the sole reason for accumulating universal waste for up to one year was to accumulate the quantities necessary for proper recovery, treatment, or disposal.

In the final rule, the Agency has retained the proposed one year accumulation limit, but has added an additional provision allowing accumulation for more than one year if such accumulation is solely for accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. See §§ 273.15(b) and 273.35(b) of the final rule. For any accumulation longer than one year, the handler must be able to prove that such accumulation is solely for accumulating quantities necessary to facilitate proper recovery, treatment, or disposal. Thus, under the final rule it is assumed that any accumulation up to one year is for this purpose, but for any accumulation beyond one year the handler bears the burden of proving that accumulation is solely for this purpose. This approach to implementing the statutory prohibition is taken directly from existing 40 CFR 268.50(c) (This approach has been held to be consistent with section 3004(j). *Hazardous Waste Treatment Council* v. *EPA*, 886 F.2d 355, 366–68 (D.C. Circuit Court, 1989)). The Agency believes that this provision will ensure that any universal waste accumulation will meet the statutory LDR storage prohibition. For further discussion on the LDR program regarding its applicability to universal waste, see Section IV.I. of the preamble.

The Agency's decision to revise the accumulation prohibition is based on numerous commenters' arguments that

the one year accumulation limitation was too restrictive and would not provide enough time to accumulate sufficient quantities of waste to facilitate proper recovery, treatment, or disposal. Because universal wastes are likely generated and managed in relatively small quantities (compared with other industrial hazardous wastes), the Agency recognizes that an absolute one year accumulation limit may not be enough time for some handlers to accumulate sufficient quantities of universal waste to properly recover, treat, or dispose of the waste. The Agency believes that the revised accumulation time limit discussed above will allow additional time for accumulation when it is truly needed, while retaining the simplified approach to accumulation (as proposed) for the first year.

A number of other commenters argued that the proposed part 273 provisions should provide a provision analogous to § 262.34(c), known as the generator satellite accumulation provision. Under this provision, a generator may accumulate small quantities of hazardous waste at or near the point of generation before moving it to the generator accumulation area where accumulation time is limited to 90/180/270 days. Accumulation time is unlimited at satellite accumulation points. Commenters argued that universal waste handlers should also be allowed unlimited accumulation time for small quantities of waste at points of generation, and that the one year accumulation time limit would make the universal waste rules more restrictive than the existing hazardous waste generator regulations.

The Agency has decided not to add a provision analogous to the satellite accumulation provision to the universal waste regulations for several reasons. First, under the universal waste final rule, handlers may already manage their wastes very similarly to management under the satellite accumulation provision. For example, the proposed and final universal waste regulations do not limit the location, or number of locations, at which a handler of universal waste may accumulate universal wastes. Thus a handler may continue to accumulate universal wastes at points of generation. A handler may accumulate these wastes for up to one year (which is two or four times longer than the 90 or 180 days allowed under the existing hazardous waste generator regulations), and under the revised final regulation a handler may accumulate universal waste for longer than one year if certain conditions are met. Further, the quantity of universal waste that can be accumulated at a point of generation is not limited to 55 gallons (a handler of universal waste must notify, however, if the total quantity of universal wastes accumulated on-site equals or exceeds the 5,000 kilogram notification limit). The only substantive additional requirement under the universal waste rule will be to mark or label the container (or use an alternate method) to document the earliest date any universal waste accumulated at the location became a waste.

Second, although the time limit may appear to be a constraint when compared to the satellite accumulation provision, with the revision discussed above, handlers of universal waste who need to accumulate wastes for more than one year to facilitate proper recovery, treatment, or disposal will have the option to do so. The handler, however, bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. In addition, the Agency points out that the existing satellite accumulation provisions are available only to regulated generators who have EPA identification numbers and are complying with the full part 262 requirements including 90- or 180-day accumulation time limits 40 CFR 262.34 accumulation unit standards, biennial reports, and manifests. The Agency does not believe it would be appropriate to allow unlimited accumulation time for handlers of universal waste who are not required to comply with the part 262 controls, but are instead following the streamlined requirements of the universal waste regulations.

Third, the Agency points out that one of its major goals in developing the universal waste regulations is to make the regulation clear and easy to work with for both the regulated community and implementing agencies. The Agency believes that having one consistent time limit for all universal waste managed at one site is important to this goal. The Agency also notes that handlers of universal waste who generate extremely small quantities of hazardous waste (<100 kg per month) would, under the final rule, still have the option to manage their wastes under the Conditionally Exempt Small Quantity Generator provisions of 40 CFR 261.5 rather than the universal waste regulations (or the full Subtitle C regulations).

IV.E.6. Employee Training

The final employee training requirements for small and large handlers of universal waste are found in §§ 273.16 and 273.36 of this final rule. In the proposed rule, the Agency proposed to require that generators and consolidation points provide basic training on waste handling and emergency response procedures. The Agency requested comment on whether these requirements should be further reduced or eliminated.

The Agency has decided to retain these training requirements in the final rule for all large quantity handlers of hazardous waste. Thus, large quantity handlers of universal waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures related to their responsibilities during normal facility operations and emergencies. Small quantity handlers of universal waste, however, are subject to a less burdensome requirement. Small quantity handlers of universal waste must inform all employees that handle or have responsibilities for managing universal waste. The information must include proper handling and emergency procedures appropriate to the type(s) of universal waste managed at the facility.

Although most commenters supported EPA's proposed requirements for basic training of personnel regarding potential safety hazards posed by universal waste, a number of commenters recommended that the Agency adopt a two-tier approach for training requirements. These commenters argued that dissemination of safety instructions would be sufficient training for employees at front-line collection centers, and the more comprehensive training requirements should apply only to larger consolidation points, because the consolidation point will be handling large quantities of universal waste while small front-line collectors will manage only small quantities, often in a retail setting.

The Agency believes the final rule mirrors the commenter's recommendations in that the level of training required for small quantity handlers of universal waste is less stringent than that for large quantity handlers of universal waste. The Agency agrees with commenters that the level of training should be greater for people who handle larger quantities of universal waste.

Other commenters argued that the cost of implementing a training program as proposed would be unduly burdensome. Although the Agency recognizes these commenter's concerns, the Agency believes that the employee training requirements in the final rule will not be too costly or burdensome for universal waste handlers. First, in response to these concerns, the Agency

has reduced the training required for small quantity handlers of universal waste. A small quantity handler of universal waste must inform all employees that handle or have responsibility for managing universal waste. The information must include proper handling and emergency procedures appropriate to the type or types of universal waste handled at the facility. Although providing the information through oral communication would be allowed, the Agency expects that brochures or documents providing such information have already been or will be developed by trade associations and the organizations running centralized collections programs (e.g., battery manufacturers, thermostat manufacturers, and pesticide registrants). Thus, small quantity handlers of universal waste participating in these collection programs will be able to distribute information of higher quality than they would be able to produce individually with little or no development costs.

Second, the Agency further believes that the training requirements as proposed will not be unduly burdensome for large quantity handlers of universal wastes. The Agency points out that the employee training requirement as proposed, and as retained in the final rule for large quantity handlers of universal waste, does not require that any records be kept for training provided to employees, requires only that employees that have responsibilities for managing universal waste or for responding to emergencies be trained, and requires only that these employees be trained as is appropriate for their universal waste management responsibilities. Thus, employees who only minimally handle universal waste need only be trained to properly carry out that activity and to carry out their responsibilities, if any, in case of an emergency. These requirements are analogous to those currently required for hazardous waste small quantity generators. They basically require that the large quantity handler of universal waste provide sufficient training to ensure that employees are familiar with proper handling procedures and that employees who would have responsibilities during emergencies are familiar with emergency procedures.

Finally, a number of commenters maintained that an employee training requirement is not necessary because training required under other programs provides adequate assurance that employees will be sufficiently trained to properly manage universal waste (e.g., OSHA, worker right-to-know, pesticide licensing, etc.). The Agency continues to believe that a basic employee training requirement is necessary to ensure that employees are specifically familiar with waste handling procedures, including, if appropriate, RCRA requirements. The Agency notes that any training provided under other programs that would meet any or all of the part 273 training requirements may be used to fulfill the RCRA requirements. As long as the substantive standards of the training provisions are met, the handler has fulfilled the training requirement. There is no requirement that training provided to meet the RCRA requirements be separate from other training given to employees.

IV.E.7. Response to Releases

The final response to releases requirements for small and large quantity handlers of universal waste are found in §§ 273.17 and 273.37 of this final rule. Under the proposed rule, basic release response requirements were imposed on universal waste generators, transporters, and consolidation points. These universal waste collectors were required to immediately contain all releases of or from universal wastes, and to appropriately manage any materials resulting from a release (e.g., cleanup equipment, contaminated soils, etc.). Specifically, they were required to determine if any of the resulting materials were hazardous wastes, and if so, manage them under the full hazardous waste regulations.

In the final rule, these release response requirements have been retained essentially as proposed for all collectors of universal waste. Since the categories of collectors have been changed in the final rule, these requirements are now imposed on small and large quantity handlers of universal wastes and universal waste transporters. Commenters who addressed this issue overwhelmingly supported the release response requirements as proposed. They agreed that the requirements to immediately contain releases and properly manage residues were sufficient to protect human health and the environment from any releases of universal waste that might occur and that facility-wide corrective action is not necessary for universal waste management.

Under the final rule, as under the proposal, destination facilities are subject to the full hazardous waste regulations applicable to treatment, storage, disposal, and recycling facilities. These regulations include extensive release response requirements.

One commenter argued that collectors should be allowed to send residues from cleanups along with universal waste to destination facilities. The Agency disagrees for several reasons and has not revised the final regulation to allow this. First, cleanup residues are likely to be quite different in form and composition from the universal waste they come from. The universal waste regulations are designed specifically for universal wastes, and are not designed to address the varied risks that may be posed by cleanup residues. Thus, it is not appropriate that subsequent collectors manage such residues under the universal waste regulations. Second, the destination facility to which universal waste is sent may not be able to, or permitted to, treat or dispose of cleanup residues. It is not unlikely that universal waste destination facilities' processes are designed to handle universal wastes but are not designed to handle residues that may have very different compositions. Thus, the final rule retains the requirement that collectors determine whether any residues are hazardous waste, and if so, manage them under the full hazardous waste regulations.

In the preamble to the proposed rule, the Agency noted that under the existing hazardous waste regulations hazardous waste facilities are subject to facility-wide corrective action. The Agency requested comment on whether some form of corrective action should be imposed on universal waste collection facilities, which were called consolidation points in the proposal. The majority of commenters addressing this issue argued that facility-wide corrective action requirements should not be imposed on universal waste collectors. They contended that facility-wide corrective action is currently one of the biggest barriers to participation in waste management systems, and that if these requirements are imposed on universal waste collectors it will prevent many people from participating in universal waste collection systems. The hazardous waste corrective action requirements could thus impede development of collection systems and undermine the goals of the universal waste regulations. Commenters also pointed out that, due to the relatively low risk nature of wastes identified as universal wastes, as well as the release response requirements discussed above, corrective action for universal waste handlers would be unnecessarily burdensome.

Commenters also agreed that the existing imminent hazard provisions of RCRA section 7003 provide the Agency sufficient authority to compel

immediate action in response to releases if necessary. The Agency also notes that any releases of universal waste not cleaned up would constitute illegal disposal, further allowing action under RCRA. In addition, any releases of hazardous substances above reportable quantity (RQ) thresholds must be reported under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund. Since universal wastes are hazardous wastes, and thus hazardous substances under CERCLA, reporting for universal waste releases is required (if over RQs). Such reports provide notification to the Agency concerning releases and would thus allow the Agency to take action, if necessary, under either RCRA or CERCLA.

Although several commenters did argue that facility-wide corrective action should be imposed on universal waste collectors, the Agency decided not to do so in the final rule. The Agency agrees with the commenters' points discussed above, and believes that on balance, given the desire to encourage participation in the universal waste program, and the availability of response to release requirements in today's rule (as well as additional authorities available to impel cleanup if necessary), the risks of impeding the development of universal waste collection systems outweigh the risks of not including facility-wide corrective action requirements. It should be noted that under the final rule (as under the proposal), full facility-wide corrective action does apply to destination facilities as part of the treatment, storage, and disposal facility regulations.

IV.E.8. Off-Site Shipments

The Agency has added new sections in the final rule for small and large quantity handlers of universal waste and destination facilities, entitled off-site shipments. It was clear from the comments that off-site shipments present various issues, thus warranting separate sections covering these issues. The Agency has included the requirements for off-site shipments in subpart B (standards for small quantity handlers of universal waste), subpart C (standards for large quantity handlers of universal waste), and subpart E (destination facilities). Including these provisions in separate off-site shipments sections for each category of person managing universal waste makes the provision easy to locate, and thus makes the entire regulation easier to follow. The off-site shipments sections for handlers, found at §§ 273.18 and 273.38, address one issue discussed in the proposal, as well as a new issue raised by commenters. The off-site shipments section for destination facilities, 40 CFR 273.62, addresses only the new issue raised by commenters. These two issues are discussed below.

First, in the proposed rule, requirements concerning off-site shipments of universal waste were found in the prohibitions section of each of the universal waste handler categories (generator, transporter, and consolidation point). Generators were allowed to send universal waste only to consolidation points, destination facilities, or foreign destinations. Transporters were allowed to transport universal waste only to consolidation points, destination facilities, or foreign destinations. Consolidation points were allowed to send universal waste only to other consolidation points, destination facilities, or foreign destinations. The prohibitions concerning off-site shipments, in today's final rule, have been moved into paragraphs (a) of 40 CFR 273.18 and 273.38, the new off-site shipments sections, and, except as discussed below are substantially retained as proposed.

This off-site shipment provision has also been revised to fit the new categories of universal waste handlers used in the final rule. Handlers of both small and large quantities of universal waste are prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination. This change results in one substantive difference from the proposed prohibition. Under the proposal, generators were prohibited from sending universal waste to other generators, and consolidation points were prohibited from sending universal waste to generators. Under the final rule, universal waste handlers (which include both generators and consolidation points, classified by quantity of waste managed rather than by whether wastes are generated or collected) may send waste to any other universal waste handler.

The Agency has decided to make this change in response to several commenters who argued that companies or organizations that generate universal waste at numerous locations should not be penalized by being categorized as consolidation points merely because they centralize their waste by bringing it to one location to facilitate better management (e.g., bringing waste from unstaffed locations to staffed locations where waste can be better monitored). Under the proposed prohibition, such consolidation could only be conducted if the central location was categorized as a consolidation point, which was based only on the fact that universal waste was transported to the location. As discussed earlier in the section of this preamble entitled "Universal Waste Handlers (section IV.D.1)—Small and Large Quantity Handlers of Universal Waste", the Agency believes that the appropriate variable for applying more stringent requirements is the quantity of waste managed, not whether waste is generated on-site or received from off-site. Thus, the prohibition in the final rule allows shipment to any universal waste handler, and the level of requirements applicable to any handler (i.e., small or large quantity handler requirements) is based purely on how much universal waste is accumulated at the location.

In addition, a provision has been added to the small and large quantity handler off-site shipments sections of the final rule, 40 CFR 273.18(b) and 273.38(b), to clarify the language of the proposed off-site shipment prohibition. Several commenters exhibited some confusion about the language "sending or taking" universal waste. This language was intended to indicate that handlers could either contract with someone else to transport their universal waste or transport it themselves. The language was not intended to imply that handlers who transport their own universal waste are not subject to the transporter requirements. In fact, the proposed definition of transporter (which is retained in the final rule) clearly stated that anyone engaged in off-site transportation of universal waste is considered a transporter, and the transporter requirements (proposed and final) make it clear that any universal waste transporter is subject to the universal waste transporter requirements. To clarify this point, a paragraph (b) has been added to the off-site shipments sections of the final rule clarifying that a handler who self-transports universal wastes off-site becomes a universal waste transporter for those self-transportation activities and must comply with the universal waste transporter requirements while transporting the waste. (See 40 CFR 273.18(b) and 273.38(b)). Paragraph (c) of §§ 273.18 and 273.38 have been added to clarify that if a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 171–180, the handler of universal waste must package, label, mark, and placard the shipment in accordance with the applicable Department of

Transportation regulations under 49 CFR parts 172–180 and must prepare the proper shipping papers. Because persons who offer for transportation or who transport a hazardous material must do so in conformance with requirements specified in the Department of Transportation's Hazardous Materials Regulations, these revisions to the regulatory text do not constitute new requirements. Rather, paragraph (c) serves to communicate more clearly that applicable DOT requirements still apply to all persons managing universal waste.

Second, in the final rule, paragraphs (d) through (h) have been added to the small and large quantity handler off-site shipments sections, and 40 CFR 273.61(a) through (d) have been added to the destination facility requirements, addressing a new issue raised by commenters. Specifically, commenters argued that consolidation points (in the final rule referred to as either small or large quantity handlers) should be allowed to return shipments of universal waste to generators (in the final rule referred to as either small or large quantity handlers) in cases where generators (shipping handlers) send materials that the collection facility (receiving handler) is not able or prepared to manage. The Agency agrees with this point and reiterates that nothing in the universal waste rule is intended to imply that universal waste handlers are required to accept any particular type of universal waste, any universal waste that they are not willing or able to handle, or any particular shipment of universal waste. It should be noted, however, that there may be other regulations that do require handlers to accept such waste. For example, under FIFRA regulations, pesticide recallers are not allowed to return pesticides that are part of a recall. On the contrary, although persons who choose to manage universal wastes are subject to the applicable requirements of part 273, no one is required to manage any universal waste.

In response to these concerns, the Agency has added provisions to part 273 addressing this issue of rejected shipments. Under the final rule, both the shipper (a small or large quantity handler of universal waste who is shipping universal waste to another handler or destination facility) and the receiving facility (a small or large quantity handler of universal waste, or destination facility, receiving a shipment of universal waste from another universal waste handler) share certain responsibilities for the protective handling of the universal wastes being shipped.

In order to prevent or limit rejected shipments, §§ 273.18(d) and 273.38(d) of the final rule specify that a shipper sending universal waste to a receiving facility must ensure, before the shipment is sent, that the receiving facility agrees to receive the load. In addition, §§ 273.18(e) and 273.38(e) of the final rule specify that if the shipper sends universal waste to another handler or destination facility and the shipment is rejected, the shipping handler must receive the waste back or agree with the receiving facility on a destination facility to which the shipment will be sent.

Sections 273.18(f), 273.38(f), and 273.61(b) require that if an unsuitable shipment containing universal waste is received, the receiving facility, in turn, may reject the full shipment or a portion of the shipment. Examples of unsuitable shipments include, but are not limited to: Universal waste that the facility is not willing to handle (e.g., a load of universal waste batteries that also contains "junk rechargeable items"; or, universal waste that the facility is not able to handle (e.g., universal waste thermostats sent to a battery reclamation facility). In such a scenario, the receiving facility must notify the shipper of the rejection and discuss reshipment of the load. The receiving facility may send the shipment back to the original shipper or send the shipment to a mutually agreed upon destination facility. Finally, a handler of universal waste who receives a shipment of non-hazardous, non-universal waste may handle the waste in any way that is in compliance with applicable federal or state solid waste regulations.

Commenters were also concerned about procedures to follow if a handler receives a shipment of hazardous waste that is not a universal waste. Sections 273.18(g), 273.38(g), and 273.61(c) have been added to the final rule to address this scenario. These procedures are actually not specific to universal waste handlers but merely clarify what anyone should do if they receive an illegal shipment of hazardous waste. Specifically, these subsections state that should such a shipment be received, the receiving facility must immediately notify the appropriate regional EPA office of the illegal shipment, and provide the name, address, and phone number of the shipper. The EPA regional office will provide instructions for managing the hazardous waste.

IV.E.9. Tracking Universal Waste Shipments

Under the proposed universal waste rule the use of a hazardous waste manifest was required for some shipments of universal wastes, but not others. Those shipments that required manifests also required the use of a transporter with an EPA transporter identification number.

More specifically, manifests were required for shipments from consolidation points to destination facilities, but were not required for shipments from generators to either destination facilities or consolidation points or for shipments from one consolidation point to another. The reasoning behind requiring manifests only for shipments from consolidation points to destination facilities was that it was believed that shipments from these "last" consolidation points would be relatively larger shipments and thus warranted a higher level of tracking and control.

The tracking requirements in the final rule have been substantially revised from the proposal in response to comments. In general, under the final rule, manifests are not required for any shipments of universal waste, but a basic recordkeeping requirement has been added to track waste shipments arriving at and leaving from handlers of large quantities of universal waste. In addition, a similar provision has been added to the destination facility requirements to require retention of basic documentation of universal waste shipments arriving at destination facilities. This basic tracking requirement is found in §§ 273.39 and 273.62 of the final rule. The required records may take the form of a log, invoice, manifest, bill of lading, or other shipping document, and are to be maintained for three years. No specific form is required for maintaining these records, and the Agency believes that standard business records that would normally be kept by any business will fulfill this requirement.

For each shipment of universal waste received at or by a large quantity handler, the record must include the name and address of the universal waste handler or foreign shipper from whom the universal waste was sent; the quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats); and the date of receipt of the shipment of universal waste. For each shipment sent from a large quantity handler, the record must include the name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent; the quantity of each type of universal waste sent (e.g., batteries, pesticides, thermostats); and the date the shipment of universal waste left the facility.

It should also be noted that under the proposal, the owner or operator of a destination facility would have been required to keep, for three years, manifests documenting receipt of shipments of universal wastes from consolidation points. (See proposed 40 CFR 273.14(a) and 273.24(a), and existing 40 CFR 264.71(b)(5) and 265.71(b)(5)). Records of shipments received from generators, without manifests, would have been required as part of the operating record (see existing 40 CFR 264.73(b)(1) and 265.73(b)(1)) and biennial report (see existing 40 CFR 264.75(c) and (d) and 265.75(c) and (d)). Since no manifests will be used for shipments received by destination facilities, the final rule requires that the owner or operator of a destination facility keep the same records for receipt of universal waste shipments as those kept by handlers of large quantities of universal wastes. This will complete the record of universal waste shipments, providing documentation of receipt and allowing comparison of outgoing shipments from handlers against received shipments at destination facilities.

The Agency decided to make these changes in the tracking requirements based on comment received on the issue. First, a number of commenters opposed requiring manifests and hazardous waste transporters for any shipments of universal wastes, arguing that the increased costs and administrative burden of using manifests and hazardous waste transporters would be a disincentive for collection of universal waste and would inhibit removal of these wastes from the municipal waste stream. Many commenters, however, including some of those opposing manifests, did support some form of tracking requirement to document transport of universal wastes. These commenters argued that a less burdensome tracking requirement would not inhibit participation, but could be used to reduce the liability of persons managing universal waste, increase enforceability of the universal waste system, and decrease potential abuses of the streamlined universal waste requirements. The Agency found these arguments compelling and thus has revised the final rule to include a basic recordkeeping requirement for tracking, but not to require use of manifests for any universal waste shipments.

A number of commenters also pointed out that the proposed approach of requiring manifests for some shipments but not others, based on the type of facility originating and receiving the shipment, was overly complex and would be confusing to participants. Commenters also pointed out that it is not necessarily true that the shipments for which manifests would have been required would actually be larger shipments than those for which manifests were not required. In fact, the requirement that manifests and hazardous waste transporters be used for shipments from consolidation points to destination facilities might increase the administrative burden and cost for such a transportation pattern such that more universal waste would actually be sent directly from generators to destination facilities, for which no manifest would be required. It was not the Agency's intent to make the tracking requirement complicated or confusing, or to discourage the use of centralized facilities to consolidate universal waste if that is the most efficient way to manage these wastes.

To address this concern about complexity, in the final rule, the Agency has decided to require tracking for all shipments received by and shipped from handlers of large quantities of universal waste, and not to require any tracking for handlers of small quantities of universal wastes. The Agency believes that this tracking requirement is less complex than the proposed approach because handlers generating universal wastes will know generally the rates at which they generate and the procedures used for shipping these wastes, and so will know whether they are handlers of large or small quantities (i.e., whether they will be accumulating 5,000 kilograms or more total of universal waste). Similarly, handlers collecting universal wastes will know, based on the types of universal waste accepted and the procedures used for shipping these wastes, whether they are handlers of large or small quantities. Thus, those persons who know they are handlers of large quantities will keep records for all shipments received and sent off-site, regardless of where the shipments come from or are sent to. In comparison, those persons who know they are handlers of small quantities will not be required to keep records of any shipments, although they may, of course, maintain any records they believe are appropriate based on their individual circumstances.

As discussed elsewhere in this preamble, the Agency has decided to require tracking (and other requirements such as notification and more in-depth training) only for handlers of large quantities of universal waste. This decision was made in order to impose these more protective requirements only in cases where facilities are handling larger quantities of universal waste and thus the risks from management of these wastes are greater. The Agency has decided not to impose these requirements on handlers of small quantities of universal waste based on numerous commenters' argument that the administrative burden of tracking would be such a strong disincentive that retail establishments, service centers, and other "front line" collectors managing small quantities would not participate in collection programs, thus undermining the goal of the universal waste program. In addition, because these operations accumulate smaller quantities of universal wastes, if managed properly, they will pose less risk than the accumulation of larger quantities. The Agency believes that the risk associated with management of small quantities of universal waste is lower than the management of larger quantities due to the reduced amount of waste handling involved and the lesser chance of mismanagement opportunities.

The Agency selected 5,000 kilograms of accumulated waste as the cutoff for this tracking requirement (i.e., as the cutoff between small and large handlers), because the universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous wastes), and thus it is appropriate to have a higher cut off limit for the tracking requirement than applies under the full hazardous waste regulations (i.e., the conditionally exempt small quantity generator accumulation limit of 1,000 kg).

Finally, in commenting on the tracking requirements a number of commenters suggested that the biggest barrier to farmer's participation in programs to collect and properly manage unused pesticides products is their unwillingness to sign manifests for the wastes. Several of these commenters suggested that collection sites should be identified as the generator for waste pesticides, thus removing any requirement that farmers act as the generator and sign manifests. The Agency notes that the issue of when a material becomes a waste, and thus potentially subject to regulation, is a general concept that applies consistently to all materials potentially subject to the hazardous waste program and is much broader than just the universal waste rule. The Agency does not believe it is appropriate or defensible to try to alter that concept for specific wastes. The final rule explains the concept that waste pesticides become wastes at the point the generator decides to discard them (see § 261.33), but this provision merely clarifies how

the point of generation concept imbedded in the entire hazardous waste regulatory program applies specifically to waste pesticides.

In response to these commenters, however, the Agency notes that under the final rule, manifests are not required for universal waste shipments. Thus, the major barrier identified to farmers' participation in waste pesticide collection programs has been removed. Farmers who decide to discard universal waste pesticides would be considered universal waste handlers and would be required to comply with the small or large quantity handler regulations, depending on the amount of waste pesticides that they accumulate.

IV.E.10. Exports

The final export requirements for small and large handlers of universal waste are found in §§ 273.20 and 273.40 of this final rule. In the universal waste proposed rule, the Agency proposed export requirements for generators and consolidation points managing hazardous waste under part 273. As proposed, a generator sending universal waste to a foreign destination, without first sending the waste to a consolidation point or destination facility, would be subject to requirements equivalent to the existing hazardous waste export requirements, subpart E of part 262, even though a manifest would not have been required. (See proposed 40 CFR 273.15 and 40 CFR 273.25.) These requirements included advance notification to the receiving country and prior consent by the receiving country before the shipment could occur.

The Agency also proposed export requirements for consolidation points. However, depending upon the type of foreign facility receiving the exported hazardous waste (e.g., consolidation point or destination facility), a manifest may or may not have been required for each shipment. Shipments from consolidation points requiring a manifest would have followed the existing subpart E of part 262 export requirements. Shipments from consolidation points not requiring a manifest would have followed the export procedures for generators, which required notification and consent independent of a manifest.

Commenters generally supported EPA's proposal to adopt existing notification and consent requirements for exports. Thus, in the final rule, notification and consent requirements have been retained for all exports, although the proposed provisions have been revised somewhat. The revisions are discussed below.

First, the export provisions have been revised to apply to the new categories of universal waste managers used in the final rule. Generators and consolidation points are now designated as universal waste handlers, who are classified by quantity of waste managed rather than by whether wastes are generated or collected. In addition, the export provision applicable to each type of participant in the universal waste system has been moved into the subparts of part 273 applicable to each participant. For example, the export requirements for handlers of small quantities of universal waste are now located in subpart B, which contains all of the requirements for handlers of small quantities.

Second, under the final rule, manifests are not required for any universal waste shipments (see tracking section of preamble for more detailed discussion). Thus, under the final rule, all universal waste shipments will follow procedures for notification and consent which, as proposed, are independent of the manifest procedures. The Agency also notes that under the tracking requirements of the final rule, large quantity handlers of universal waste are required to keep records of where they send waste, and from where they receive universal waste, including foreign destinations or shippers.

In addition, commenters raised several other issues related to exports of universal waste. First, one commenter noted that the proposed export requirements did not conform to the Organization for Economic Cooperation and Development (OECD) Council Decision on waste exports. The Agency agrees, and notes that it will shortly promulgate a rule which will revise the relevant hazardous waste export requirements to conform to the OECD Council Decision. All pertinent revisions to the universal waste final regulations for shipments of universal waste to and from OECD countries pursuant to the OECD Council Decision will be made in that rule.

Third, the Agency explained in the proposal that it does not have the authority under RCRA to regulate registrants exporting suspended or canceled and recalled pesticides to a foreign country for use as a product. See proposed 40 CFR 273.25(e). One commenter argued that commercial chemical products (e.g., recalled pesticides exported to foreign countries) that have been banned for use in the United States should not be exported to foreign countries because they will invariably find their way back into the United States. The commenter further argued that if there are health or environmental reasons for banning a chemical in the United States, it would undoubtedly pose an identical health or environmental problem elsewhere.

The Agency sympathizes with the commenter's concerns, but reiterates that it does not have statutory authority under RCRA to regulate materials which are products and not wastes. In cases where the registrant decides to export a suspended or canceled pesticide for use as a product, the RCRA hazardous waste regulations, including the export requirements, do not apply because the pesticide would not be a solid or hazardous waste. To make this clear, the final rule retains language explaining the non-waste status of pesticides that are to be used as products. In the final rule, however, this language is no longer in the export section, but has been moved to the applicability section for pesticides (see 40 CFR 273.3(b)(4)). This section explains that pesticides that are to be used, reused, or reclaimed are not solid wastes and thus are not subject to hazardous waste regulations, including part 273.

The Agency notes, however, that the requirements of FIFRA section 17(a) do apply in such situations. These requirements include providing notice to the foreign purchaser that the product is not registered for use in the United States and cannot be sold in the United States. The foreign purchaser must sign a purchaser acknowledgement statement indicating that he is aware of that fact. A copy of the acknowledgement statement is to be submitted to EPA and thereafter is transmitted to an appropriate official of the importing country. The product to be exported must also be packaged according to the specifications of the foreign purchaser.

IV.F. Transporter Requirements

In the proposed part 273 regulations, the Agency proposed five provisions addressing requirements for transporters of universal waste. These five provisions included requirements for condition of the waste, prohibitions, waste management, storage, and exports. The Agency requested comment on the application and adequacy of the transporter requirements proposed in part 273, the in-transit ten-day storage limit, and the adequacy of DOT shipping requirements and/or the need for supplemental RCRA requirements for the transport of universal wastes.

Today's final rule includes requirements for transporters in subpart D of part 273. The standards include six substantive sections: prohibitions, waste management, storage time limits, response to releases, off-site shipments,

and exports (§§ 273.50 through 273.56 of the final rule). Each section of subpart D is discussed below.

The prohibitions for transporters are found in § 273.51 in today's final rule and are essentially the same as those presented in the proposed rule, with one minor modification regarding off-site shipments of universal waste. In the proposed rule, the prohibitions section for each of the universal waste handler categories contained requirements concerning off-site shipments of universal waste. This provision, in today's final rule, has been moved into a new off-site shipments section (§ 273.55); however, the requirements have been substantially retained.

Waste management standards for transporters are found in § 273.52 in today's final rule. Section 273.52 specifies that transporters must manage universal wastes in compliance with all applicable U.S. Department of Transportation (DOT) regulations. In the final rule, new text has been added in response to comments which indicated a lack of clarity regarding which DOT requirements were being referenced. In the final rule, the Agency has clarified this matter in § 273.52 by explicitly directing the reader to the applicable DOT regulations at 49 CFR parts 171 through 180. In addition, the Agency also provides the pertinent references for the Department of Transportation's definition of hazardous materials (49 CFR 171.8) and the Hazardous Materials Table (49 CFR 172.101). Adding new text to the waste management section for transporters clarifies the requirements of the proposed standard but does not add any additional requirements.

The Agency notes that the Hazardous Materials Regulations (HMR, 49 CFR parts 171–180) define a hazardous waste as any material that is subject to the Uniform Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR part 262. As shipments of universal waste do not require this manifest, it is not considered a "hazardous waste" by the DOT. However, such material may still be regulated under the defining criteria for one or more of the DOT hazard classes. Therefore, for any universal waste shipments, transporters of universal waste must decide if the waste falls under any of the other DOT hazard classes in order to determine if compliance with the DOT requirements under 49 CFR parts 171 through 180 is required. (A discussion of the manifest is found in the tracking section of today's preamble at IV.E.9.).

If the waste material does not meet the definition in the HMR for hazardous waste or any other type of hazardous material, its shipping description on shipping papers may not include a hazard class or identification number shown in the HMR.

Storage time limits for transporters are found in § 273.53 of today's final rule. Under the proposed rule, transporters could only store universal waste at a transfer facility for ten days or less. This requirement remains the same in today's final rule. Comments revealed some confusion about the status of the person handling the waste if the waste is stored for greater than 10 days. In § 273.53(b), the Agency has added text clarifying that if the waste is stored for greater than 10 days, the transporter becomes a small or large quantity handler of universal waste and is subject to the applicable regulations under subparts B or C of part 273 while storing the universal waste.

Several commenters expressed agreement with the 10 day in-transit storage time limit. One commenter argued that a longer period for storage should be allowed, while another commenter stated that the focus of the rule should be on the total time for the universal waste to reach its final destination, not the time it is stored in-transit. Commenters, however, provided little information to justify a longer in-transit storage time limit. EPA believes that, while the total time period required for a shipment of universal waste to reach its specified destination is important, the transportation phase requires more handling of the universal waste and presents certain exposure scenarios not likely when only storage of the universal waste is required. Transportation increases handling and movement of the waste, increased risk of spills and releases, and a greater likelihood of public exposure. For these reasons, EPA is continuing to require a ten-day storage limitation for transporters of universal waste. As stated above, the text in § 273.53(b) has been revised in order to clarify that if a transporter stores universal waste for greater than 10 days, the transporter becomes a small or large quantity handler of universal waste. Under this circumstance, the small or large quantity handler requirements apply, which allow for up to one year accumulation.

The fourth section of Subpart D contains the response to release standards for transporters. In the final rule, these requirements remain essentially unaltered from those in the proposed rule. These response to release requirements are found in § 273.54 of today's rule. Section IV.E.7. of today's preamble contains a full discussion of this subject.

The off-site shipment provision for transporters is found in § 273.55 of today's final rule. This requirement was located with other prohibitions in the "Transporter Requirements" section of the proposed rule. In the final rule, the Agency has moved the requirement to a new off-site shipments section, § 273.55, under Subpart D. This modification makes the provision easier to locate, and thus makes the entire regulation easier to follow. Although the Agency has shifted the placement of this provision, the requirement has been substantially retained.

Additionally, in the proposed rule, transporters were only authorized to transport universal waste to consolidation points or destination facilities. In today's final rule, the terms generator and consolidation point have been redefined and replaced with small quantity handler of universal waste and large quantity handler of universal waste. In today's final rule, a transporter may transport a shipment of universal waste to a small quantity handler, large quantity handler, or destination facility.

The final section of subpart D contains the export requirements for transporters shipping universal waste to a foreign destination. These requirements have been moved from the "Export Requirements" section of the proposed rule and are now found in § 273.56 of today's final rule. This modification makes it easier for transporters shipping universal waste to a foreign destination to locate the requirements. A full discussion of this topic is found in section IV.E.10. of this preamble. Again, although the Agency has relocated this provision, the requirement has been substantially retained.

IV.G. Destination Facility Requirements

Under the proposed part 273 regulations, destination facilities were referred to the current parts 264, 265, and 270 and § 261.6(c)(2) requirements applicable to permitted or interim status hazardous waste treatment, storage, and disposal (TSD) facilities, or recycling facilities that do not store hazardous waste prior to recycling. These sections include notification requirements, general facility standards, unit-specific management standards, and permitting requirements.

In the final rule, the requirements for destination facilities remain substantially unchanged, with two minor modifications and added provisions related to off-site shipments and recordkeeping. The destination facility requirements are found in

subpart E of today's final rule. The first modification revises the language of § 273.60(a) to correlate with the revised definition of destination facility in the final rule. (In response to comments, EPA has redefined destination facility to mean "a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in paragraphs (a) and (c) of §§ 273.13 and 273.33. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste." A full discussion of this revision can be found at section IV.D.3 of today's preamble under Universal Waste Handlers - Destination Facilities). The second modification is that the export requirements applicable to destination facilities have been moved into subpart E, § 273.63, to make them easier for destination facility owners and operators to locate (see III.F.10 of this preamble for a discussion of issues related to Exports).

In addition to these modifications, two additional provisions have been added to part 273, subpart E. The first new provision, 40 CFR 273.61, was added in response to several commenters who expressed concern regarding the authority of destination facilities to reject shipments of universal waste and the appropriate measures to be taken if a shipment is rejected. This new requirement is discussed in detail in the section of this preamble entitled "Off-site Shipments."

The second provision added to subpart E of part 273, 40 CFR 273.62, requires that the owner or operator of a destination facility keep basic documentation tracking universal waste shipments that arrive at the destination facility. Under the proposal, owners and operators of destination facilities would have been required to keep, for three years, manifests documenting receipt of shipments of universal wastes from consolidation points. (See proposed 40 CFR 273.14(a) and 273.24(a), and existing 40 CFR 264.71(b)(5) and 265.71(b)(5)). Records of shipments received from generators, without manifests, would have been required as part of the operating record (see existing 40 CFR 264.73(b)(1) and (d) and 265.75(c) and (d)).

In the final rule, no manifests will be used for shipments received by destination facilities (see IV.E.9 of this preamble for a discussion of tracking issues). Therefore, in § 273.62 of today's final rule, owners and operators of destination facilities must keep the same records for receipt of universal waste shipments as those kept by handlers of large quantities of universal wastes. Section 273.62(a) requires the owner or operator of a destination facility to keep a record of universal waste received at the facility. The record must include information on the name and address of the universal waste handler or foreign shipper from whom the universal waste was sent; the quantity of each type of universal waste received; and the date of receipt of the shipment of universal waste. Section 273.62(b) requires that these records be retained for at least three years from the date of receipt of a shipment of universal waste. This provision will complete the record of universal waste shipments, providing documentation of receipt and allowing comparison of outgoing shipments from handlers against received shipments at destination facilities. No specific form is required for maintaining these records, and the Agency believes that standard business records that would normally be kept by any business will fulfill this requirement.

Several commenters requested that EPA relax the destination facility requirements for recycling facilities in order to stimulate recycling efforts. Commenters argued that obtaining a RCRA Permit is time consuming and cost prohibitive and, in most cases unprofitable for the recycling facilities. They stated, also, that the requirement for obtaining a RCRA part B permit is a disincentive for recycling facilities to accept the wastes and assume the associated liabilities. In addition, one commenter believed that lack of reclamation capacity is one of the factors limiting recycling efforts, and that one of the principal causes of this lack of capacity is subtitle C requirements applicable to reclamation facilities.

While EPA supports recycling, a change to the requirements for destination facilities that recycle universal waste is beyond the scope of this regulation which is intended to focus on the collection phase of universal waste management rather than the final treatment, disposal, or recycling phase. As discussed in the background section of this preamble entitled "Definition of Solid Waste Task Force," the Agency has an ongoing effort to broadly address the question of how hazardous waste recycling should be regulated. Any modification of regulatory requirements for recyclers, including universal waste recyclers, will be a part of this broader effort. Therefore, in today's final rule, the Agency is maintaining the requirements proposed for destination facilities that recycle waste.

IV.H. Imports of Universal Waste

Several commenters pointed out that the Agency did not address the issue of imports in the proposed universal waste rule. This was an oversight. The Agency intended that once universal waste entered the country it would be subject to the same universal waste rules as any other universal waste. To clarify this, the final rule includes import requirements in 40 CFR 273.70, which is Subpart F of Part 273. Section 273.70 clarifies that universal waste that is imported from another country must be managed, upon entry into the country, in compliance with the appropriate universal waste requirements for transporters, handlers, or destination facilities, depending on the universal waste management activities conducted within the United States.

For example, if a person imports universal waste into the United States and only transports the imported waste to a facility owned and operated by someone else, he is subject to the transporter requirements of subpart D of part 273. However, if a person imports universal waste into the United States and subsequently transports the universal waste to his own facility, the universal waste handler is subject to the transporter requirements for transport of the universal waste, and to the small or large handler requirements of subparts B or C for management at the receiving facility. To determine whether the handler is a small or large quantity handler, universal waste imported from a foreign country is counted toward the quantity of waste accumulated as any other universal waste would be. If the handler is a large quantity handler of universal waste, he must also comply with the tracking requirements for receipt of shipments at 40 CFR 273.39(a). If a person imports the waste into the United States and subsequently transports the universal waste to his own destination facility, he is subject to the destination facility Subpart E requirements for management at the receiving facility.

IV.I. Land Disposal Restrictions

Pursuant to the Land Disposal Restrictions (LDR) provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA), all hazardous wastes listed or identified in accordance with RCRA section 3001 require treatment prior to land disposal, on specified timetables, from land disposal. The regulations for the LDR program in 40 CFR part 268 apply to persons who generate or transport

hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities, unless they are specifically excluded from regulation in parts 261 or 268.

To address the LDR program for universal wastes, the proposed universal waste rule required that generators, transporters, and consolidation points managing universal waste comply with all of the substantive land disposal restrictions requirements, but not the administrative requirements. These substantive requirements included: (1) A prohibition on accumulating prohibited wastes directly on the land (land disposal); (2) a requirement to treat wastes to meet treatment standards prior to land disposal; (3) a prohibition on dilution; and (4) a prohibition on waste accumulation except for purposes of accumulating quantities sufficient for proper recovery, treatment or disposal. See Universal Waste proposed rule at 58 FR 812 and 8124 for a detailed discussion of how each of these substantive requirements were to be implemented for universal wastes. Under the proposal, destination facilities remained subject to all of the part 268 land disposal restrictions.

Commenters overwhelmingly supported the proposed approach of requiring collectors of universal waste to comply with the substantive LDR requirements but not the LDR administrative requirements (e.g., notification to all handlers of applicable treatment standards). They agreed that the procedural land disposal restrictions requirements would be a significant disincentive to persons managing universal waste under Part 273. Commenters also agreed that due to the unique nature of universal wastes (i.e., easily identifiable, treatment standards easily identifiable, contained), the substantive requirements proposed would be sufficient to ensure that the goals of the land disposal restrictions program are met for universal waste managed under part 273.

Based on these comments, the final rule generally retains the proposed approach to ensuring that collectors of universal waste (small and large handlers and transporters) manage the waste in compliance with the substantive requirements of the LDR program. Each of the proposed requirements, comments received on the proposed requirements, and any changes made in the final rule are discussed in detail in the sections of this preamble addressing the specific requirements. As in the proposal, under the final rule, destination facilities are required to comply with all of the Part 268 LDR requirements for universal waste, including both the substantive and administrative requirements. Thus, all universal waste will be treated or disposed of in compliance with LDR treatment standards and the appropriate documentation regarding such compliance will be maintained by destination facilities.

A number of commenters did, however, raise specific concerns about the proposed approach to implementing the LDR requirements for universal waste. These comments and changes made to the final rule to address them are discussed in detail in the section IV.E.5 of this preamble, entitled "accumulation time limits."

IV.J. Regenerated Batteries

In the proposed rule, the Agency requested comment on whether the existing 40 CFR 261.6(a)(3)(ii) exemption from regulation for used batteries that are returned to a battery manufacturer for regeneration should be retained, or changed to correspond with the changes proposed for management of other batteries (58 FR 81250). Although the Agency expressed concern that having multiple special provisions for batteries would be confusing for regulated parties and implementing agencies, EPA proposed to retain the exemption to avoid disrupting the regeneration of used batteries.

The final rule removes the 40 CFR 261.6 exemption for used batteries that are to be regenerated, and adds a provision at § 273.13(a) and 273.33(a) such that facilities regenerating used batteries are now subject to the part 273 standards for small or large quantity handlers of universal waste, depending on the quantity of batteries they accumulate. In effect, this change results in the management of batteries that are to be regenerated together with all other batteries under part 273 during collection, and subjects the regeneration facility to the same requirements as other facilities receiving batteries but not breaking open battery casings.

40 CFR 266.80(a) and (b) have also been revised to clarify that lead-acid batteries that are regenerated remain exempt from the hazardous waste regulations throughout the management cycle. Since the final rule retains the lead-acid battery provisions of 40 CFR 266.80, it is most appropriate to also include regenerated lead-acid batteries so that all lead-acid batteries may be managed similarly. However, since the activities of a regeneration facility are more similar to a facility that accumulates waste than a facility that processes a waste to recover a usable product, batteries that are regenerated have also been exempted from the requirements for lead-acid battery reclamation facilities.

The Agency decided to include regenerated batteries under part 273 for several reasons. First, although a number of commenters supported retaining the exemption, several commenters documented the confusion that already exists concerning applicability of the current exemption, and several expressed concern about the additional confusion that would be added by having multiple provisions for battery management. Regulating all used batteries under the same provisions will eliminate this confusion, making it easier for the regulated community and regulating agencies to implement the battery management regulations. In addition, regulating all hazardous waste batteries under the same provisions will eliminate the confusion expressed by several commenters about how the exemption applies in situations where those handling the battery do not know whether the battery is regenerable, and thus do not know whether the battery will be regenerated or recycled. The applicable requirements will be the same whether the battery is determined to be regenerable, or is sent on for reclamation at another facility.

Second, because the risks of accumulating and transporting used batteries that are to be regenerated (and particularly those that may or may not be regenerated) are similar to the risks of managing any other used battery, the two should be regulated similarly. Because the Agency believes that the risks are low relative to other hazardous wastes because the battery casings remain intact, both battery types should be subject to the same basic management standards included in Part 273.

Third, the Agency does not believe that compliance with part 273 requirements will be overly burdensome for persons managing batteries that are to be regenerated. As discussed previously, the requirements for generators, transporters, and consolidation points (which would be applicable to regenerators) generally consist of basic good management practices and only require notification or recordkeeping if large quantities of batteries are managed. In addition, these requirements would be applicable in any case if a battery is determined not to be regenerable and thus is otherwise recycled.

Finally, the Agency decided to subject regeneration facilities to the requirements for small or large quantity handlers of universal waste, depending on the quantity accumulated) because

the activities conducted by such facilities are basically the same and thus the risks are basically the same. Both facilities accumulate batteries, but do not damage the integrity of the battery casings. Thus, the Agency believes that the regulations applicable to such facilities should be the same.

V. State Authority

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. Following authorization, EPA retains enforcement authority under sections 3008, 3013, and 7003 of RCRA, although authorized States have primary enforcement responsibility. The standards and requirements for authorization are found at 40 CFR part 271.

Prior to enactment of the Hazardous and Solid Waste Amendments of 1984 (HSWA), a State with final RCRA authorization administered its hazardous waste program entirely in lieu of EPA administering the federal program in that State. The federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities in that State, since only the State was authorized to issue RCRA permits. When new, more stringent federal requirements were promulgated or enacted, the State was obliged to enact equivalent authorities within specified time frames. However, the new federal requirements did not take effect in an authorized State until the State adopted the federal requirements as State law.

In contrast, under RCRA section 3006(g) (42 U.S.C. 6926(g)), which was added by HSWA, new requirements and prohibitions imposed under HSWA authority take effect in authorized States at the same time that they take effect in unauthorized States. EPA is directed by statute to implement these requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA related provisions as State law to retain final authorization, the HSWA provisions are implemented by EPA in authorized States in the interim.

B. Effect on State Authorization

Today's amendments to the hazardous waste regulations are not effective in authorized States since the requirements are not being promulgated pursuant to HSWA. Thus, the universal waste standards are applicable as part of the RCRA program upon the effective date only in those States that do not have final RCRA authorization. In authorized States, the amendments will not be applicable until the State revises its program to adopt equivalent requirements under State law and is authorized by EPA for the amendments.

It should be noted that authorized States are only required to modify their programs when EPA promulgates Federal standards that are more stringent or broader in scope than the existing Federal standards. Section 3009 of RCRA allows States to impose standards more stringent than, or in addition to those in the Federal program. The amendments in today's rule are not considered to be more stringent than the existing Federal requirements. Therefore, authorized States are not required to modify their programs to adopt requirements equivalent to the provisions contained in today's rule.

Even though States are not required to adopt today's rule, EPA strongly encourages them to do so. In addition to the expected benefits of the universal waste program discussed in the proposed and final rules, EPA also believes that the new streamlined approach to management of universal wastes will contribute to more efficient and effective State programs. For these reasons, States are therefore urged to adopt today's rule and submit to EPA the program modification for approval in advance of, or according to, the schedule that applies to mandatory program revisions pursuant to 40 CFR 271.21(e).

C. Comments Regarding the Proposed Rule

A number of commenters disagreed with the Agency's conclusion that the universal waste regulations are based on pre-HSWA authorities in RCRA. Commenters argued that because the universal waste regulations will further many of the broad goals outlined in HSWA, EPA could consider the regulation to be part of HSWA authority. In addition, several commenters stated that the varying effective dates from State to State will make participation in multi-state universal waste collection programs more difficult. These commenters urged the Agency to promulgate the rule as a HSWA rule in order to ease these difficulties and speed realization of the benefits of the rule.

Several commenters suggested specific changes to the proposed universal waste regulations that they argued would be more stringent than the current hazardous waste program and would allow the Agency to require authorized states to adopt the universal waste program. A number of commenters also urged the Agency to promulgate the existing proposed rule as a more stringent rule ensure that authorized States would be required to adopt the rule, thus ensuring that it would be effective in all States. They again noted that having the rule effective in some States but not others would result in implementation difficulties. The commenters also note that the full benefits which could be realized from a national universal waste program may not be achieved if the program is not implemented in all States across the country.

The Agency agrees with the aim of those commenters who wish to achieve the uniform application of the universal waste rule that would be possible if the rule were to be promulgated under HSWA authority. However, EPA believes that the authority to promulgate today's amendments is not sufficiently linked to HSWA provisions to be a rule implementing HSWA. Thus, the Agency believes that the appropriate authority for promulgation of this rule is non-HSWA.

The Agency agrees with the commenters that because the promulgated rule is less stringent than the current RCRA program, difficulties may arise if the universal waste regulations are not adopted by all States. However, the changes necessary to make the universal waste rule more stringent would significantly diminish the benefits to be gained from this rule. Thus, because today's rule is less stringent than the existing requirements for managing hazardous wastes, authorized States are not required to adopt the universal waste regulations.

The Agency is encouraged however, by comments on the proposed rule received from program offices in 28 different States. The overwhelming response from these State agencies demonstrates strong support for the universal waste program. The Agency believes that many States will modify their current State programs to include the provisions of the final rule, and strongly encourages States to adopt the universal waste regulations.

As an incentive to encourage States to adopt the universal waste regulations, and become authorized for them, EPA is planning to use a streamlined application procedure. This procedure will reduce in scope several program revision application components. In addition, EPA will make electronic versions of this rule and its associated authorization checklists available on the State Authorization Bulletin Board system. The Agency believes that these

efforts, together with the aforementioned benefits to be gained from adopting the universal waste regulations, will help encourage most, if not all, States to adopt the universal waste regulations within a reasonable period of time.

D. Universal Waste State Authorization Issues

1. Addition of New Universal Wastes to State Programs

The Agency notes that States, if they so choose, may seek authorization for the portions of § 260.20 that address petitions to add new universal wastes, and for 40 CFR 260.23 and subpart G of part 273, which address the petition process and include the factors to be used to evaluate petitions. The authorization of States for the petition process is similar in many respects to the authorization of States for the delisting program (see 40 CFR 260.20 and 260.22) or the variance from classification as a solid waste (see 40 CFR 260.31).

States authorized for the petition process would use evaluation factors analogous to those in § 273.81 to review petitions and make decisions as to whether to add hazardous wastes to the State universal waste regulations. Management standards for these wastes would also be developed by the State using the criteria in subpart G of part 273. The individual wastes and management standards would not be subject to the authorization revision provisions in 40 CFR 271.21, since the State would already be authorized for the universal waste regulations and the regulation of hazardous wastes. Moreover, the State rulemaking procedures, including those addressing public participation, are equivalent to the rulemaking procedures EPA employs. Of course, a State could not approve a petition for a waste it is not authorized to regulate as hazardous. For example, a State could not approve a petition for a waste that is hazardous due to the Toxicity Characteristic (TC) if the State is not authorized for the TC. Although such a petition would properly be directed to EPA for a decision, the Agency does not expect this situation to occur frequently.

If an authorized State adds new hazardous wastes to its universal waste program, management of that waste under the universal waste regulations would only be allowed within that State or other States that have added the wastes to their universal waste regulations. Thus, the waste could be collected and consolidated within a State that has added a waste, but shipments to a State where the universal waste standards do not apply to that waste would have to comply with the full hazardous waste requirements (e.g., for transportation, manifests, interim storage). It should be noted that States are not required to apply for or obtain authorization to receive and review petitions to add new wastes. If they so choose, States may apply for and obtain authorization to implement the part 273 universal waste regulations other than subpart G. These States would still have the ability to adopt wastes that EPA adds to its universal waste program.

2. Authorization for Individual Universal Wastes

In order to aid expedited adoption and authorization of as much of today's rule as possible, States will not be required to apply for and obtain authorization to implement the universal waste program for all wastes covered under the federal program. For example, a State could choose to include in its authorized program batteries and pesticides, but not thermostats. EPA believes that this approach will aid quick adoption for those States that may need to make statutory changes to be able to implement a universal waste program for a particular wastestream.

To ensure that all the relevant waste management and transportation standards apply to a particular universal waste, to obtain authorization for the universal waste rule, EPA will require States to adopt all the applicable general standards even if they are applying for authorization for only one universal waste. EPA believes that this is a rational approach to this type of adoption, and that it will not be a significant barrier to authorization. This authorization policy will be reflected in EPA's authorization guidance on this rule.

3. Interstate Transportation

Several commenters noted that interstate transportation of universal wastes will be complicated if some States have adopted the universal waste regulations and some have not. Similar complications will arise if some states add new wastes to their universal waste regulations but other states do not add the same wastes. The Agency believes it is important to explain how the regulations will apply because interstate transportation will be necessary for many universal wastes since there may be only a few destination facilities that accept and manage these wastes.

First, a waste which is subject to the universal waste regulations may be sent to a state where it is not a universal waste, but it would be subject to the full hazardous waste regulations in states where it is not regulated as a universal waste. In this scenario, for the portion of the trip through the originating state, and any other states where the waste is a universal waste, a transporter with an EPA identification number per 263.11 (hazardous waste transporter), or a manifest would not be required. However, for the portion of the trip through the receiving state, and any other states that do not consider the waste to be a universal waste, a manifest is required, and the waste must be moved by a transporter in compliance with 40 CFR part 263. In order for the final transporter and the receiving facility to fulfill their requirements concerning the manifest (40 CFR 263.20, 263.21, 263.22, 264.71, 264.72, and 264.76 or 265.71, 265.72, and 265.76), the initiating facility should complete a manifest and forward it to the first transporter to travel in a state where the waste is not a universal waste. The receiving facility would sign the manifest and send a copy to the initiating facility. EPA recommends that the initiating facility note in block 15 of the manifest (Special Handling Instructions and Additional Information) that the waste is covered under universal waste regulations in the initiating state but not in the receiving facility's state.

Second, a hazardous waste generated in a state which does not regulate it as a universal waste may be sent to a state where it is a universal waste. In this scenario, the waste must be moved by a hazardous waste transporter while the waste is in the generator's state, or any other states where it is not a universal waste. The initiating facility would complete a manifest and give copies to the transporter as required under 40 CFR 262.23(a). Transportation within the receiving state and any other states that regulate the waste as a universal waste would not require a manifest or be conducted by a hazardous waste transporter. However, it is the initiating facility's responsibility to ensure that the manifest is forwarded to the receiving facility by any non-hazardous waste transporter and sent back to the initiating facility by the receiving facility. See 40 CFR 262.23 and 262.42. EPA recommends that the generator note in block 15 of the manifest (Special Handling Instructions and Additional Information) that the waste is covered under universal waste regulations in the receiving facility's state but not in the generator's state.

Third, a waste may be transported across a state in which it is subject to the full hazardous waste regulations

although other portions of the trip may be from, through, and to states in which it is covered under universal waste regulations. Transport through the state must be conducted in a hazardous waste transporter and must be accompanied by a manifest. In order for the transporter to fulfill its requirements concerning the manifest (subpart B of part 263), the initiating facility would complete a manifest as required under the manifest procedures and forward it to the first transporter to travel in a state where the waste is not a universal waste. The transporter would deliver the manifest to, and obtain the signature of either the next transporter or the receiving facility.

As noted previously, States are not required to adopt today's rule. However, EPA strongly encourages them to do so. As more states adopt the program, not only will this assist in achieving the most benefits of the universal waste program, it will also reduce the complexity of interstate transport of these universal wastes. In the interim, while states are in the process of adopting today's rule, the Agency plans to discuss with the states, an approach for coordinating an interim implementation strategy.

VI. Executive Order 12866—Regulatory Impacts

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether a regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order."

Pursuant to the terms of the Executive Order 12866, it has been determined that this rule is a "significant regulatory action" because it raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

This section of the preamble summarizes the costs (savings) and the cost analysis of the final universal waste regulations. Based upon the cost analysis, the Agency's best estimate is that the universal waste regulations may result in nationwide annualized savings of approximately $76 million.

For the cost analysis, EPA estimated the incremental cost differences between compliance with the full RCRA Subtitle C requirements (parts 260–272) and the part 273 standards for universal waste management. The universal wastes examined for this analysis are: vented nickel-cadmium batteries, sealed nickel-cadmium batteries, mercuric-oxide batteries, used mercury-containing thermostats, cancelled and/or suspended pesticides that are recalled, and unused pesticide products collected in a waste pesticide collection program.

For recalled pesticides only, EPA assumed that a national pesticide recall producing hazardous waste would occur once every five years. All other universal wastes were assumed to be generated and disposed of annually.

For each of these types of waste, the Agency identified and estimated the costs of all the requirements that should result in an incremental cost difference between the existing full RCRA Subtitle C regulations and the part 273 Rule. EPA reviewed how wastes would move through the RCRA system from the generator to the final treatment or disposal facility under each regulatory structure, and identified the areas where compliance costs would differ from the existing RCRA Subtitle C requirement costs.

The Subtitle C requirements that differ from those required under part 273 (and therefore produce an incremental savings) include: Employee training; maintenance costs for a contingency plan; filing hazardous waste biennial reports; manifest completion and recordkeeping per shipment; and Land Disposal Restriction Notification. In addition, shipping and disposal costs were reduced for some of the universal wastes because common carriers could be used instead hazardous waste transporters, and the one-year storage limit under part 273 would allow handlers to ship less often than under the current Subtitle C and therefore take advantage of economies of scale.

The Agency considered the annual compliance costs that would result from four different compliance options under the part 273 Rule for handlers of each type of battery and for thermostats covered in this analysis: Shipment of wastes by common carriers (trucks) to a collection facility; shipping wastes directly to a reclamation facility via common carriers (trucks); shipment of wastes via a parcel carrier (i.e., UPS); and, for thermostats only, a reverse distribution system where handlers ship their used thermostats to Honeywell Corporation, that then has the mercury-containing component (ampule) of the thermostat reclaimed by a commercial facility.

For each type of waste handler, the Agency identified the least-cost method of compliance with part 273 in order to determine the savings that would result from handlers no longer subject to the requirements of 40 CFR parts 262–270.

The least-cost method of compliance with part 273 yielded annual national cost estimates (of those elements expected to vary between the current RCRA Subtitle C requirements and the part 273 requirements) of $0.3 million for vented nickel-cadmium batteries, $10.3 million for sealed nickel-cadmium batteries, $1.6 million for mercuric-oxide batteries, and $1.2 million for used mercury-containing thermostats, for an annual cost of $13.4 million for battery and thermostat waste. Subtitle C national annual costs (of those elements expected to vary between the current RCRA Subtitle C requirements and the part 273 requirements) for battery and thermostat waste are estimated to be $46.2 million, resulting in an annual savings of $32.9 million per year for battery and thermostat waste.

For recalled pesticides, part 273 costs (of those elements expected to vary between the current RCRA Subtitle C requirements and the part 273 requirements) are estimated to be $15.5 million per recall, while Subtitle C requirement costs (of those elements expected to vary between the full RCRA Subtitle C requirements and the part 273 requirements) are estimated to be $230.0 million per recall, resulting in a savings of $214.5 million per recall. Assuming one recall every five years, and a seven percent discount rate, the annualized savings for recalled pesticides is $42.7 million per year.

For unused pesticide products collected in a waste pesticide collection program, part 273 annual costs (of those elements expected to vary between the current RCRA Subtitle C requirements and the part 273 requirements) are estimated to be $130,000, while Subtitle C requirement costs (of those elements

expected to vary between the full RCRA Subtitle C requirements and the part 273 requirements) are estimated to be $360,000, resulting in an annual savings of $230,000 per year for unused pesticide products collected under waste pesticide collection programs.

Summing up the savings from the various universal wastes, the Agency's best estimate of the total annualized savings of today's rule is $76 million. A complete discussion of the cost analysis is available in the regulatory docket for today's rule.

VII. Paperwork Reduction Act

The information collection requirements in this rule have been approved by the Office of Management and Budget (OMB) under the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* and have been assigned control number 2050–0145.

This collection of information has a reporting burden per response of 0 hours for Small Quantity Handlers of Universal Waste, 4 minutes for Large Quantity Handlers of Universal Waste, and 12 hours for Destination Facilities; and an estimated annual recordkeeping burden averaging 1.6 hours per respondent. These estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Chief, Information Policy Branch; EPA; 401 M St., SW. (Mail Code 2136); Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

Display of OMB Control Numbers

EPA is also amending the table of currently approved information collection request (ICR) control numbers issued by OMB for various regulations. This amendment updates the table to accurately display those information requirements contained in this final rule. This display of the OMB control number and its subsequent codification in the Code of Federal Regulations satisfies the requirements of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*) and OMB's implementing regulations at 5 CFR part 1320.

The ICR was previously subject to public notice and comment prior to OMB approval. As a result, EPA finds that there is "good cause" under section 553(b)(B) of the Administrative Procedure Act (5 U.S.C. 553(b)(B)) to amend this table without prior notice and comment. Due to the technical nature of the table, further notice and comment would be unnecessary. For the same reasons, EPA also finds that there is good cause under 5 U.S.C. 553(d)(3).

VIII. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980, 5 U.S.C. 601 *et seq.*, requires federal agencies to consider "small entities" throughout the regulatory process. Section 603 of the RFA requires an initial screening analysis to be performed to determine whether small entities will be affected by the regulation. If affected small entities are identified, regulatory alternatives must be considered to mitigate the potential impacts. Small entities as described in the Act are only those "businesses, organizations and governmental jurisdictions subject to regulation."

The only entities directly subject to today's final rule are small and large quantity handlers of universal waste batteries, pesticides, and thermostats (who generate more than 100 kilograms of hazardous waste), and transporters and collectors of universal waste batteries, pesticides, and thermostats. Conditionally exempt small quantity generators (who generate less than 100 kilograms of hazardous waste) are not directly subject to today's rule. It is likely that some small and large quantity generators, transporters, and collectors of universal waste would meet the definition of "small business" as defined by the RFA. However, the Agency does not have an estimate of the number of such "small entities." However, the universal waste regulations are expected to result in net savings to any regulated entities because it reduces requirements overall for these entities. Thus, since the impacts are positive for all regulated entities, including "small entities," EPA has determined that small regulated entities will not be adversely impacted. Accordingly, I hereby certify, pursuant to 5 U.S.C. 601(b), that this rule will not have a significant impact on a substantial number of small entities.

IX. Unfunded Mandates

Under section 202 of the Unfunded Mandates Reform Act of 1995, signed into law on March 22, 1995, EPA must prepare a statement to accompany any rule where the estimated costs to State, local, or tribal governments in the aggregate, or to the private sector, will be $100 million or more in any one year. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objective of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly impacted by the rule.

EPA has determined that this rule does not include a Federal mandate that may result in estimated costs of $100 million or more to either State, local or tribal governments in the aggregate, or to the private sector.

List of Subjects

40 CFR Part 260

Administrative practice and procedure, Confidential business information, Hazardous materials, Recycling, Reporting and recordkeeping, Waste treatment or disposal.

40 CFR Part 261

Hazardous materials, Recycling, Waste treatment and disposal.

40 CFR Part 262

Administrative practice and procedure, Hazardous materials, Reporting and recordkeeping.

40 CFR Parts 264 and 265

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Waste treatment and disposal.

40 CFR Part 266

Hazardous waste, Management, Spent lead-acid batteries.

40 CFR Part 268

Hazardous waste, Reporting and recordkeeping requirements.

40 CFR Part 270

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Waste treatment and disposal.

40 CFR Part 273

Hazardous materials, Packaging and containers.

Dated: April 25, 1995.

Carol M. Browner,

Administrator.

For the reasons set out in the preamble, title 40 of the Code of Federal Regulations is amended as follows:

PART 9—[AMENDED]

1. In Part 9:

a. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 *et seq.*, 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 et seq., 1311, 1313d, 1314, 1321,

1326, 1330, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 et seq., 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

b. Section 9.1 is amended by adding a new center heading and new entries to the table to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

40 CFR citation	OMB control No.
* * * * *	
Hazardous Waste Management System:	
General	
260.23	2050–0145
* * * * *	
Standards for Universal Waste Management:	
273.14	2050–0145
273.15	2050–0145
273.18	2050–0145
273.32	2050–0145
273.34	2050–0145
273.35	2050–0145
273.38	2050–0145
273.39	2050–0145
273.61	2050–0145
273.62	2050–0145
273.80	2050–0145
* * * * *	

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921–6927, 6930, 6934, 6935, 6937, 6938, 6939, and 6974.

Subpart B—Definitions

2. Section 260.10 is amended by revising the introductory text and adding, in alphabetical order, definitions for "battery," "destination facility," "pesticide," "thermostat," "universal waste," "universal waste handler," and "universal waste transporter" to read as follows:

§ 260.10 Definitions.

When used in parts 260 through 266, 268, and 270 through 273 of this chapter, the following terms have the meanings given below:

* * * * *

Battery means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

* * * * *

Destination facility means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in paragraphs (a) and (c) of §§ 273.13 and 273.33 of this chapter. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

* * * * *

Pesticide means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

(1) Is a new animal drug under FFDCA section 201(w), or

(2) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(3) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (1) or (2) of this definition.

* * * * *

Thermostat means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of 40 CFR 273.13(c)(2) or 273.33(c)(2).

* * * * *

Universal Waste means any of the following hazardous wastes that are managed under the universal waste requirements of 40 CFR part 273:

(1) Batteries as described in 40 CFR 273.2;

(2) Pesticides as described in 40 CFR 273.3; and

(3) Thermostats as described in 40 CFR 273.4.

* * * * *

Universal Waste Handler:

(1) Means:

(i) A generator (as defined in this section) of universal waste; or

(ii) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(2) Does not mean:

(i) A person who treats (except under the provisions of 40 CFR 273.13 (a) or (c), or 273.33 (a) or (c)), disposes of, or recycles universal waste; or

(ii) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

* * * * *

Universal Waste Transporter means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

* * * * *

Subpart C—Rulemaking Petitions

3. Section 260.20 paragraph (a) is revised to read as follows:

§ 260.20 General.

(a) Any person may petition the Administrator to modify or revoke any provision in parts 260 through 266, 268 and 273 of this chapter. This section sets forth general requirements which apply to all such petitions. Section 260.21 sets forth additional requirements for petitions to add a testing or analytical method to part 261, 264 or 265 of this chapter. Section 260.22 sets forth additional requirements for petitions to exclude a waste or waste-derived material at a particular facility from § 261.3 of this chapter or the lists of hazardous wastes in subpart D of part 261 of this chapter. Section 260.23 sets forth additional requirements for petitions to amend part 273 of this chapter to include additional hazardous wastes or categories of hazardous waste as universal waste.

* * * * *

4. Section 260.23 is added to read as follows:

§ 260.23 Petitions to amend 40 CFR part 273 to include additional hazardous wastes.

(a) Any person seeking to add a hazardous waste or a category of hazardous waste to the universal waste regulations of part 273 of this chapter may petition for a regulatory amendment under this section, 40 CFR 260.20, and subpart G of 40 CFR part 273.

(b) To be successful, the petitioner must demonstrate to the satisfaction of the Administrator that regulation under the universal waste regulations of 40 CFR part 273: Is appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve

implementation of the hazardous waste program. The petition must include the information required by 40 CFR 260.20(b). The petition should also address as many of the factors listed in 40 CFR 273.81 as are appropriate for the waste or category of waste addressed in the petition.

(c) The Administrator will grant or deny a petition using the factors listed in 40 CFR 273.81. The decision will be based on the weight of evidence showing that regulation under 40 CFR part 273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

(d) The Administrator may request additional information needed to evaluate the merits of the petition.

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

5. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, and 6938.

Subpart A—General

6. Section 261.5 is amended by revising paragraphs (c), (f)(3), and (g)(3) to read as follows:

§ 261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

* * * * *

(c) When making the quantity determinations of this part and 40 CFR part 262, the generator must include all hazardous waste that it generates, except hazardous waste that:

(1) Is exempt from regulation under 40 CFR 261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8; or

(2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10; or

(3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 40 CFR 261.6(c)(2); or

(4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR part 279; or

(5) Is spent lead-acid batteries managed under the requirements of 40 CFR part 266, subpart G; or

(6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273.

* * * * *

(f) * * *

(3) A conditionally exempt small quantity generator may either treat or dispose of his acute hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the U.S., is:

(i) Permitted under part 270 of this chapter;

(ii) In interim status under parts 270 and 265 of this chapter;

(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under part 271 of this chapter;

(iv) Permitted, licensed, or registered by a State to manage municipal or industrial solid waste;

(v) A facility which:

(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or

(vi) For universal waste managed under part 273 of this chapter, a universal waste handler or destination facility subject to the requirements of part 273 of this chapter.

* * * * *

(g) * * *

(3) A conditionally exempt small quantity generator may either treat or dispose of his hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the U.S., is:

(i) Permitted under part 270 of this chapter;

(ii) In interim status under parts 270 and 265 of this chapter;

(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under part 271 of this chapter;

(iv) Permitted, licensed, or registered by a State to manage municipal or industrial solid waste;

(v) A facility which:

(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or

(vi) For universal waste managed under part 273 of this chapter, a universal waste handler or destination facility subject to the requirements of part 273 of this chapter.

* * * * *

7. Section 261.6 is amended by removing paragraph (a)(3)(ii) and redesignating paragraphs (a)(3)(iii) through (a)(3)(vii) as paragraphs (a)(3)(ii) through (a)(3)(vi).

8. Section 261.9 is added to subpart read as follows:

§ 261.9 Requirements for Universal Waste.

The wastes listed in this section are exempt from regulation under parts 262 through 270 of this chapter except as specified in part 273 of this chapter and, therefore are not fully regulated as hazardous waste. The wastes listed in this section are subject to regulation under 40 CFR part 273:

(a) Batteries as described in 40 CFR 273.2;

(b) Pesticides as described in 40 CFR 273.3; and

(c) Thermostats as described in 40 CFR 273.4.

PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

9. The authority citation for part 262 continues to read as follows:

Authority: 42 U.S.C. 6906, 6912(a), 6922, 6923, 6924, 6925, 6937 and 6938.

Subpart A—General

10. Section 262.10 is amended by redesignating existing paragraphs (b) through (f) as (c) through (g).

11. Section 262.10 is amended by adding a new paragraph (b) to read as follows:

§ 262.10 Purpose, scope and applicability.

* * * * *

(b) 40 CFR 261.5(c) and (d) must be used to determine the applicability of provisions of this part that are dependent on calculations of the quantity of hazardous waste generated per month.

* * * * *

12. Section 262.11 is amended by revising paragraph (d) to read as follows:

§ 262.11 Hazardous waste determination.

* * * * *

(d) If the waste is determined to be hazardous, the generator must refer to parts 261, 264, 265, 266, 268, and 273 of this chapter for possible exclusions or restrictions pertaining to management of the specific waste.

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

13. The authority citation for part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925.

Subpart A—General

14. Section 264.1 is amended by adding a new paragraph (g)(11) as follows:

§ 264.1 Purpose, scope and applicability.

* * * * *

(g) * * *

(11) Universal waste handlers and universal waste transporters (as defined in 40 CFR 260.10) handling the wastes listed below. These handlers are subject to regulation under 40 CFR part 273, when handling the below listed universal wastes.

(i) Batteries as described in 40 CFR 273.2;

(ii) Pesticides as described in 40 CFR 273.3; and

(iii) Thermostats as described in 40 CFR 273.4.

* * * * *

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES

15. The authority citation for part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, 6925, 6935 and 6936.

Subpart A—General

16. Section 265.1 is amended by adding a new paragraph (c)(14) to read as follows:

§ 265.1 Purpose, scope and applicability.

* * * * *

(c) * * *

(14) Universal waste handlers and universal waste transporters (as defined in 40 CFR 260.10) handling the wastes listed below. These handlers are subject to regulation under 40 CFR part 273, when handling the below listed universal wastes.

(i) Batteries as described in 40 CFR 273.2;

(ii) Pesticides as described in 40 CFR 273.3; and

(iii) Thermostats as described in 40 CFR 273.4.

* * * * *

PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

17. The authority citation for part 266 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3004, and 3014 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, and 6934.

Subpart G—Spent Lead Acid Batteries Being Reclaimed

18. Section 266.80 is amended by revising paragraphs (a) and (b) to read as follows:

§ 266.80 Applicability and requirements.

(a) The regulations of this subpart apply to persons who reclaim (including regeneration) spent lead-acid batteries that are recyclable materials ("spent batteries"). Persons who generate, transport, or collect spent batteries, who regenerate spent batteries, or who store spent batteries but do not reclaim them (other than spent batteries that are to be regenerated) are not subject to regulation under parts 262 through 266 or part 270 or 124 of this chapter, and also are not subject to the requirements of section 3010 of RCRA.

(b) Owners or operators of facilities that store spent lead acid batteries before reclaiming (other than spent batteries that are to be regenerated) them are subject to the following requirements.

* * * * *

PART 268—LAND DISPOSAL RESTRICTIONS

19. The authority citation for part 268 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, and 6924.

Subpart A—General

20. Section 268.1 is amended by adding paragraph (f) to read as follows:

§ 268.1 Purpose, scope and applicability.

* * * * *

(f) Universal waste handlers and universal waste transporters (as defined in 40 CFR 260.10) are exempt from 40 CFR 268.7 and 268.50 for the hazardous wastes listed below. These handlers are subject to regulation under 40 CFR part 273.

(1) Batteries as described in 40 CFR 273.2;

(2) Pesticides as described in 40 CFR 273.3; and

(3) Thermostats as described in 40 CFR 273.4.

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

21. The authority citation for part 270 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912, 6924, 6925, 6927, 6939, and 6974.

Subpart A—General Information

22. Section 270.1 is amended by adding a new paragraph (c)(2)(viii) to read as follows:

§ 270.1 Purpose and scope of these regulations.

* * * * *

(c) * * *

(2) * * *

(viii) Universal waste handlers and universal waste transporters (as defined in 40 CFR 260.10) managing the wastes listed below. These handlers are subject to regulation under 40 part CFR 273.

(A) Batteries as described in 40 CFR 273.2;

(B) Pesticides as described in 40 CFR 273.3; and

(C) Thermostats as described in 40 CFR 273.4.

* * * * *

23. Title 40 of the Code of Federal Regulations is amended by adding part 273 to read as follows:

PART 273—STANDARDS FOR UNIVERSAL WASTE MANAGEMENT

Subpart A—General

273.1 Scope.
273.2 Applicability—batteries.
273.3 Applicability—pesticides.
273.4 Applicability—thermostats.
273.5 Applicability—household and conditionally exempt small quantity generator waste.
273.6 Definitions.

Subpart B—Standards for Small Quantity Handlers of Universal Waste

273.10 Applicability.
273.11 Prohibitions.
273.12 Notification.
273.13 Waste management.
273.14 Labeling/marking.
273.15 Accumulation time limits.
273.16 Employee training.
273.17 Response to releases.
273.18 Off-site shipments.
273.19 Tracking universal waste shipments.
273.20 Exports.

Subpart C—Standards for Large Quantity Handlers of Universal Waste

273.30 Applicability.
273.31 Prohibitions.
273.32 Notification.
273.33 Waste management.
273.34 Labeling/marking.
273.35 Accumulation time limits.
273.36 Employee training.
273.37 Response to releases.
273.38 Off-site shipments.
273.39 Tracking universal waste shipments.
273.40 Exports.

Subpart D—Standards for Universal Waste Transporters

273.50 Applicability.
273.51 Prohibitions.
273.52 Waste management.
273.53 Accumulation time limits.

273.54 Response to releases.
273.55 Off-site shipments.
273.56 Exports.

Subpart E—Standards for Destination facilities

273.60 Applicability.
273.61 Off-site shipments.
273.62 Tracking universal waste shipments.

Subpart F—Import requirements

273.70 Imports.

Subpart G—Petitions to Include Other Wastes Under 40 CFR Part 273

273.80 General.
273.81 Factors for Petitions to Include Other Wastes under 40 CFR Part 273.

Authority: 42 U.S.C. 6922, 6923, 6924, 6925, 6930, and 6937.

Subpart A—General

§ 273.1 Scope.

(a) This part establishes requirements for managing the following:

(1) Batteries as described in 40 CFR 273.2;

(2) Pesticides as described in 40 CFR 273.3; and

(3) Thermostats as described in 40 CFR 273.4.

(b) This part provides an alternative set of management standards in lieu of regulation under 40 CFR parts 260 through 272.

§ 273.2 Applicability—batteries.

(a) *Batteries covered under 40 CFR part 273.* (1) The requirements of this part apply to persons managing batteries, as described in § 273.6, except those listed in paragraph (b) of this section.

(2) Spent lead-acid batteries which are not managed under 40 CFR part 266, subpart G, are subject to management under this part.

(b) *Batteries not covered under 40 CFR part 273.* The requirements of this part do not apply to persons managing the following batteries:

(1) Spent lead-acid batteries that are managed under 40 CFR part 266, subpart G.

(2) Batteries, as described in § 273.6, that are not yet wastes under part 261 of this chapter, including those that do not meet the criteria for waste generation in paragraph (c) of this section.

(3) Batteries, as described in § 273.6, that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in 40 CFR part 261, subpart C.

(c) *Generation of waste batteries.* (1) A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).

(2) An unused battery becomes a waste on the date the handler decides to discard it.

§ 273.3 Applicability—pesticides.

(a) *Pesticides covered under 40 CFR part 273.* The requirements of this part apply to persons managing pesticides, as described in § 273.6, meeting the following conditions, except those listed in paragraph (b) of this section:

(1) Recalled pesticides that are:

(i) Stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under FIFRA Section 19(b), including, but not limited to those owned by the registrant responsible for conducting the recall; or

(ii) Stocks of a suspended or cancelled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.

(2) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.

(b) *Pesticides not covered under 40 CFR part 273.* The requirements of this part do not apply to persons managing the following pesticides:

(1) Recalled pesticides described in paragraph (a)(1) of this section, and unused pesticide products described in paragraph (a)(2) of this section, that are managed by farmers in compliance with 40 CFR 262.70. (40 CFR 262.70 addresses pesticides disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label, providing the container is triple rinsed in accordance with 40 CFR 261.7(b)(3));

(2) Pesticides not meeting the conditions set forth in paragraph (a) of this section. These pesticides must be managed in compliance with the hazardous waste regulations in 40 CFR parts 260 through 272;

(3) Pesticides that are not wastes under part 261 of this chapter, including those that do not meet the criteria for waste generation in paragraph (c) of this section or those that are not wastes as described in paragraph (d) of this section; and

(4) Pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is listed in 40 CFR part 261, subpart D or if it exhibits one or more of the characteristics identified in 40 CFR part 261, subpart C.

(c) *When a pesticide becomes a waste.* (1) A recalled pesticide described in paragraph (a)(1) of this section becomes a waste on the first date on which both of the following conditions apply:

(i) The generator of the recalled pesticide agrees to participate in the recall; and

(ii) The person conducting the recall decides to discard (e.g., burn the pesticide for energy recovery).

(2) An unused pesticide product described in paragraph (a)(2) of this section becomes a waste on the date the generator decides to discard it.

(d) *Pesticides that are not wastes.* The following pesticides are not wastes:

(1) Recalled pesticides described in paragraph (a)(1) of this section, provided that the person conducting the recall:

(i) Has not made a decision to discard (e.g., burn for energy recovery) the pesticide. Until such a decision is made, the pesticide does not meet the definition of "solid waste" under 40 CFR 261.2; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including this part 273. This pesticide remains subject to the requirements of FIFRA; or

(ii) Has made a decision to use a management option that, under 40 CFR 261.2, does not cause the pesticide to be a solid waste (i.e., the selected option is use (other than use constituting disposal) or reuse (other than burning for energy recovery), or reclamation). Such a pesticide is not a solid waste and therefore is not a hazardous waste, and is not subject to the hazardous waste requirements including this part 273. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.

(2) Unused pesticide products described in paragraph (a)(2) of this section, if the generator of the unused pesticide product has not decided to discard (e.g., burn for energy recovery) them. These pesticides remain subject to the requirements of FIFRA.

§ 273.4 Applicability—mercury thermostats.

(a) *Thermostats covered under 40 CFR part 273.* The requirements of this part apply to persons managing thermostats, as described in § 273.6, except those listed in paragraph (b) of this section.

(b) *Thermostats not covered under 40 CFR part 273.* The requirements of this part do not apply to persons managing the following thermostats:

(1) Thermostats that are not yet wastes under part 261 of this chapter. Paragraph (c) of this section describes when thermostats become wastes.

(2) Thermostats that are not hazardous waste. A thermostat is a hazardous waste if it exhibits one or more of the characteristics identified in 40 CFR part 261, subpart C.

(c) *Generation of waste thermostats.* (1) A used thermostat becomes a waste

on the date it is discarded (e.g., sent for reclamation).

(2) An unused thermostat becomes a waste on the date the handler decides to discard it.

§ 273.5 Applicability—household and conditionally exempt small quantity generator waste.

(a) Persons managing the wastes listed below may, at their option, manage them under the requirements of this part:

(1) Household wastes that are exempt under 40 CFR 261.4(b)(1) and are also of the same type as the universal wastes defined at 40 CFR 273.6; and/or

(2) Conditionally exempt small quantity generator wastes that are exempt under 40 CFR 261.5 and are also of the same type as the universal wastes defined at 40 CFR 273.6.

(b) Persons who commingle the wastes described in paragraphs (a)(1) and (a)(2) of this section together with universal waste regulated under this part must manage the commingled waste under the requirements of this part.

§ 273.6 Definitions.

Battery means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

Destination facility means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in § 273.13 (a) and (c) and § 273.33 (a) and (c). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

FIFRA means the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136–136y).

Generator means any person, by site, whose act or process produces hazardous waste identified or listed in part 261 of this chapter or whose act first causes a hazardous waste to become subject to regulation.

Large Quantity Handler of Universal Waste means a universal waste handler (as defined in this section) who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, or thermostats, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated.

On-site means the same or geographically contiguous property which may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, are also considered on-site property.

Pesticide means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

(a) Is a new animal drug under FFDCA section 201(w), or

(b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(c) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (a) or (b) of this section.

Small Quantity Handler of Universal Waste means a universal waste handler (as defined in this section) who does not accumulate more than 5,000 kilograms total of universal waste (batteries, pesticides, or thermostats, calculated collectively) at any time.

Thermostat means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of 40 CFR 273.13(c)(2) or 273.33(c)(2).

Universal Waste means any of the following hazardous wastes that are subject to the universal waste requirements of 40 CFR part 273:

(a) Batteries as described in 40 CFR 273.2;

(b) Pesticides as described in 40 CFR 273.3; and

(c) Thermostats as described in 40 CFR 273.4.

Universal Waste Handler:

(a) Means:

(1) A generator (as defined in this section) of universal waste; or

(2) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(b) Does not mean:

(1) A person who treats (except under the provisions of 40 CFR 273.13 (a) or (c), or 273.33 (a) or (c)), disposes of, or recycles universal waste; or

(2) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

Universal Waste Transfer Facility means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

Universal Waste Transporter means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

Subpart B—Standards for Small Quantity Handlers of Universal Waste

§ 273.10 Applicability.

This subpart applies to small quantity handlers of universal waste (as defined in 40 CFR 273.6).

§ 273.11 Prohibitions.

A small quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 40 CFR 273.17; or by managing specific wastes as provided in 40 CFR 273.13.

§ 273.12 Notification.

A small quantity handler of universal waste is not required to notify EPA of universal waste handling activities.

§ 273.13 Waste management.

(a) *Universal waste batteries.* A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

(i) Sorting batteries by type;

(ii) Mixing battery types in one container;

(iii) Discharging batteries so as to remove the electric charge;

(iv) Regenerating used batteries;

(v) Disassembling batteries or battery packs into individual batteries or cells;

(vi) Removing batteries from consumer products; or

(vii) Removing electrolyte from batteries.

(3) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in 40 CFR part 261, subpart C.

(i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 40 CFR part 262.

(ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) *Universal waste pesticides.* A small quantity handler of universal waste must manage universal waste pesticides in a way that prevent releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of paragraph (b)(1) of this Section, provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (b)(1) of this Section; or

(3) A tank that meets the requirements of 40 CFR part 265 subpart J, except for 40 CFR 265.197(c), 265.200, and 265.201; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(c) *Universal waste thermostats.* A small quantity handler of universal waste must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste must contain any universal waste thermostat that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the thermostat, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats provided the handler:

(i) Removes the ampules in a manner designed to prevent breakage of the ampules;

(ii) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);

(iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of 40 CFR 262.34;

(iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of 40 CFR 262.34;

(v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(vii) Stores removed ampules in closed, non-leaking containers that are in good condition;

(viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and

(3)(i) A small quantity handler of universal waste who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic of hazardous waste identified in 40 CFR part 261, subpart C:

(A) Mercury or clean-up residues resulting from spills or leaks; and/or

(B) Other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).

(ii) If the mercury, residues, and/or other solid waste exhibit a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it is subject to 40 CFR part 262.

(iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

§ 273.14 Labeling/marking.

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (i.e., each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste—Battery(ies), or "Waste Battery(ies)," or "Used Battery(ies);"

(b) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 40 CFR 273.3(a)(1) are contained must be labeled or marked clearly with:

(1) The label that was on or accompanied the product as sold or distributed; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s);"

(c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 40 CFR 273.3(a)(2) are contained must be labeled or marked clearly with:

(1)(i) The label that was on the product when purchased, if still legible;

(ii) If using the labels described in paragraph (c)(1)(i) of this section is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;

(iii) If using the labels described in paragraphs (c)(1) (i) and (ii) of this section is not feasible, another label prescribed or designated by the waste

pesticide collection program administered or recognized by a state; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."

(d) Universal waste thermostats (i.e., each thermostat), or a container in which the thermostats are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste—Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)".

§ 273.15 Accumulation time limits.

(a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of paragraph (b) of this section are met.

(b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(2) Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;

(3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;

(4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

§ 273.16 Employee training.

A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

§ 273.17 Response to releases.

(a) A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A small quantity handler of universal waste must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with 40 CFR part 262.

§ 273.18 Off-site shipments.

(a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subpart D of this part while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR parts 171 through 180, a small quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR parts 172 through 180;

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(1) Receive the waste back when notified that the shipment has been rejected, or

(2) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(1) Send the shipment back to the originating handler, or

(2) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the appropriate regional EPA office of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The EPA regional office will provide instructions for managing the hazardous waste.

(h) If a small quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

§ 273.19 Tracking universal waste shipments.

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

§ 273.20 Exports.

A small quantity handler of universal waste who sends universal waste to a foreign destination must:

(a) Comply with the requirements applicable to a primary exporter in 40 CFR 262.53, 262.56(a) (1) through (4), (6), and (b) and 262.57;

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in subpart E of part 262 of this chapter; and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR parts 172 through 180;

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a large quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(1) Receive the waste back when notified that the shipment has been rejected, or

(2) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(1) Send the shipment back to the originating handler, or

(2) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a large quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the appropriate regional EPA office of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The EPA regional office will provide instructions for managing the hazardous waste.

(h) If a large quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

§ 273.39 Tracking universal waste shipments.

(a) *Receipt of shipments.* A large quantity handler of universal waste must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(1) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;

(2) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats);

(3) The date of receipt of the shipment of universal waste.

(b) *Shipments off-site.* A large quantity handler of universal waste must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading or other shipping document. The record for each shipment of universal waste sent must include the following information:

(1) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;

(2) The quantity of each type of universal waste sent (e.g., batteries, pesticides, thermostats);

(3) The date the shipment of universal waste left the facility.

(c) *Record retention.* (1) A large quantity handler of universal waste must retain the records described in paragraph (a) of this section for at least three years from the date of receipt of a shipment of universal waste.

(2) A large quantity handler of universal waste must retain the records described in paragraph (b) of this section for at least three years from the date a shipment of universal waste left the facility.

§ 273.40 Exports.

A large quantity handler of universal waste who sends universal waste to a foreign destination must:

(a) Comply with the requirements applicable to a primary exporter in 40 CFR 262.53, 262.56(a)(1) through (4), (6), and (b) and 262.57;

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in subpart E of part 262 of this chapter; and

(c) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.

Subpart D—Standards for Universal Waste Transporters

§ 273.50 Applicability.

This subpart applies to universal waste transporters (as defined in 40 CFR 273.6).

§ 273.51 Prohibitions.

A universal waste transporter is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 40 CFR 273.54.

§ 273.52 Waste management.

(a) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 CFR part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR part 262. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.

(b) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. As universal waste shipments do not require a manifest under 40 CFR 262, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".

§ 273.53 Storage time limits.

(a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.

(b) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements of subparts B or C of this part while storing the universal waste.

§ 273.54 Response to releases.

(a) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A universal waste transporter must determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of 40 CFR parts 260 through 272. If the waste is determined to be a hazardous waste, the transporter is subject to 40 CFR part 262.

§ 273.55 Off-site shipments.

(a) A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.

(b) If the universal waste being shipped off-site meets the Department of Transportation's definition of hazardous materials under 49 CFR 171.8, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 CFR part 172.

§ 273.56 Exports.

A universal waste transporter transporting a shipment of universal waste to a foreign destination may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

(a) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and

(b) The shipment is delivered to the facility designated by the person initiating the shipment.

Subpart E—Standards for Destination Facilities

§ 273.60 Applicability.

(a) The owner or operator of a destination facility (as defined in 40 CFR 273.6) is subject to all applicable requirements of parts 264, 265, 266, 268, 270, and 124 of this chapter, and the notification requirement under section 3010 of RCRA:

(b) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with 40 CFR 261.6(c)(2).

§ 273.61 Off-site shipments.

(a) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or foreign destination.

(b) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, he must contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:

(1) Send the shipment back to the original shipper, or

(2) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.

(c) If the a owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the appropriate regional EPA office of the illegal shipment, and provide the name, address, and phone number of the shipper. The EPA regional office will provide instructions for managing the hazardous waste.

(d) If the owner or operator of a destination facility receives a shipment of non-hazardous, non-universal waste, the owner or operator may manage the waste in any way that is in compliance with applicable federal or state solid waste regulations.

§ 273.62 Tracking universal waste shipments.

(a) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(1) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;

(2) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats);

(3) The date of receipt of the shipment of universal waste.

(b) The owner or operator of a destination facility must retain the records described in paragraph (a) of this section for at least three years from the date of receipt of a shipment of universal waste.

Subpart F—Import Requirements

§ 273.70 Imports.

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of this part, immediately after the waste enters the United States, as indicated below:

(a) A universal waste transporter is subject to the universal waste transporter requirements of subpart D of this part.

(b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of subparts B or C, as applicable.

(c) An owner or operator of a destination facility is subject to the destination facility requirements of subpart E of this part.

Subpart G—Petitions to Include Other Wastes Under 40 CFR Part 273

§ 273.80 General.

(a) Any person seeking to add a hazardous waste or a category of hazardous waste to this part may petition for a regulatory amendment under this subpart and 40 CFR 260.20 and 260.23.

(b) To be successful, the petitioner must demonstrate to the satisfaction of the Administrator that regulation under the universal waste regulations of 40 CFR part 273 is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition must include the information required by 40 CFR 260.20(b). The petition should also address as many of the factors listed in 40 CFR 273.81 as are appropriate for the waste or waste category addressed in the petition.

(c) The Administrator will evaluate petitions using the factors listed in 40 CFR 273.81. The Administrator will grant or deny a petition using the factors listed in 40 CFR 273.81. The decision will be based on the weight of evidence showing that regulation under 40 CFR part 273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

§ 273.81 Factors for petitions to include other wastes under 40 CFR part 273.

(a) The waste or category of waste, as generated by a wide variety of generators, is listed in subpart D of part 261 of this chapter, or (if not listed) a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in subpart C of part 261 of this chapter. (When a characteristic waste is added to the universal waste regulations of 40 CFR part 273 by using a generic name to identify the waste category (e.g., batteries), the definition of universal waste in 40 CFR 260.10 and 273.6 will be amended to include only the hazardous waste portion of the waste category (e.g., hazardous waste batteries).) Thus, only the portion of the waste stream that does exhibit one or more characteristics (i.e., is hazardous waste) is subject to the universal waste regulations of 40 CFR part 273;

(b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly

generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as large industrial facilities);

(c) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;

(d) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;

(e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to 40 CFR 273.13, 273.33, and 273.52; and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;

(f) Regulation of the waste or category of waste under 40 CFR part 273 will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with Subtitle C of RCRA.

(g) Regulation of the waste or category of waste under 40 CFR part 273 will improve implementation of and compliance with the hazardous waste regulatory program; and/or

(h) Such other factors as may be appropriate.

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