

US EPA ARCHIVE DOCUMENT

DCN FLEP-00011

COMMENTER General Motors

SUBJECT UNWAS4

COMMENT Storage Limitation & Compliance Demonstration (page 38296) GM supports the proposal to give several choices to demonstrate compliance with performance standards (proposed ' 273.11 (b)(2) and ' 273.13(a)(2)), since marking each waste item is clearly impractical for most generators. The most logical options are designating specific areas for wastes that come into the system at a particular time, or an inventory system.

RESPONSE

The hazardous waste lamps final rulemaking adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

The hazardous waste lamps final rule requires that universal waste handlers of hazardous waste lamps comply with one of the following to demonstrate compliance with the accumulation time limit: mark the container holding the lamp, mark the individual lamp, maintain an inventory system, place the lamps in a specific storage area marked with the earliest date identified, or use any other method which demonstrates the length of time that the lamp has been accumulated from the date the lamp becomes a waste or is received.

DCN FLEP-00025

COMMENTER Environmental Energy Group/NAEP

SUBJECT UNWAS4

COMMENT DISCUSSION IN RESPONSE TO SPECIFIC AGENCY REQUESTS AND INFORMATION CONTAINED IN THE PREAMBLE

Storage and shipment of waste electric lamps.

While expressing our support for a

Universal Waste designation for electric lamps we are concerned about the length of the proposed generator storage period and the volume of wastes that may be stored by a generator under the agency proposal included in Option 2. We make a distinction in this portion of the comment on waste electric lamp storage issues between those of the typical generator and of a

consolidation point. The assumption is that consolidation point operations are likely to need additional flexibility and to have more waste management capabilities beyond those generally needed or held by individual generators of waste electric lamps. The typical generator (shipment size) may best be determined by information derived from the lamp recycling industry or state regulators in those states which currently regulate their disposal. The agency may take into consideration that a significant amount of this long term storage activity under Option 2 would be for waste electric lamps generated as a result of maintenance activity (spot relamping). Lighting retrofits or group relamping projects which generate larger than normal volumes over relatively short periods of time do not represent, in our view, the waste generating norm. Until such time as an initial building lighting retrofit or relamp has been carried out waste lamp generation should be expected to be relatively low and sporadic when compared to the proposed limit. We feel that storage periods and volumes should be limited to generator capability (capacity) given the substantial variables which exist within the generating universe.

RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. At the publication of the proposed hazardous waste lamp rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and the proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. In the final universal waste rule, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule.

In the hazardous waste lamps final rule, EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the

hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

Lighting retrofits or group relamping projects typically would generate a quantity of hazardous waste lamps that are larger than normal volumes. Handlers that accumulate more than 5,000 kilograms of total universal wastes at any one time are designated as a large quantity handler of universal waste and are subject to the notification requirements of 40 CFR 273.32. The notification requirement ensures that regulatory agencies are aware of the larger quantity handlers of universal waste. The notification requirement is a one-time notification and is applicable on a site-specific basis. Large quantity handlers must notify the EPA Regional Administrator of their universal waste management activities and obtain an EPA identification number only if they do not already have one. Small quantity handlers are not required to notify EPA of their universal waste management activities and need not obtain an EPA identification number. Generators of universal waste lamps that have never generated more than 100 kg of hazardous waste in a calendar month, but now accumulate more than 5,000 kg of universal waste lamps must notify the Agency of their universal hazardous waste management activities. A large quantity handler of universal waste retains this designation for the remainder of the calendar year in which more than 5,000 kilograms of universal waste was accumulated at any given time. A handler may re-evaluate the status of the facility as a LQHUW in the following calendar year.

DCN FLEP-00034

COMMENTS Leaseway Transportation Corp.

SUBJECT UNWAS4

COMMENT 3. The proposed rules would only permit fluorescent bulbs to be stored on-site for a relatively short period of time, i.e., one year after they become a waste. Small facilities may take years before they ever generate enough light bulbs to warrant their collection by a reclaimer at any kind of fee that is economically reasonable. To prohibit storage for a longer period will only increase the operating cost of that facility without an obvious environmental benefit.

RESPONSE

The hazardous waste lamps final rule puts in place a process that allows hazardous waste lamps to be accumulated for longer than one year under certain conditions. The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose). EPA believes that this approach combined with the universal waste management standards is protective of human health and the environment.

In addition, the hazardous waste lamps rule does not affect the regulatory status of conditionally exempt small quantity generators (CESQGs) (i.e., those generators that produce less than 100 kg of hazardous waste per month). CESQGs continue to be conditionally exempt from full Subtitle C regulation provided that the provisions under ' 261.5 are met.

DCN FLEP-00059

COMMENTS Connecticut Dept. of Env. Protection

SUBJECT UNWAS4

COMMENT a) Include a one year storage limitation for generators.

RESPONSE

The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for

proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in the hazardous waste lamps final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00090

COMMENTS The Boeing Company

SUBJECT UNWAS4

COMMENT One-year storage limit. We consider it appropriate to allow a one-year storage limit for lamps. This would promote efficient transportation of lamps off-site.

RESPONSE

The hazardous lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in the hazardous waste lamps final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00091

COMMENTS Sterling Environmental Services, Inc.

SUBJECT UNWAS4

COMMENT Working with industry both large and small it is my feeling that

waste streams, such as light bulbs and batteries, that are widely generated in low volumes should have less stringent storage options. These wastes should not be excluded from regulation as hazardous waste, but should have modified storage limitations (i.e. exempt from the 90 day storage clock). In essence I agree with the "Universal Waste" approach and feel light bulbs should be included in this approach.

RESPONSE

The Agency agrees that managing hazardous waste lamps under the universal waste approach is appropriate. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in the hazardous waste lamps final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00107

COMMENTS North Carolina Dept. of Env. Health

SUBJECT UNWAS4

COMMENT EPA is encouraged to consider limiting the time lamps are allowed in the consolidation phase to one year. Our review of the proposed regulation indicates that consolidation points can store the lamps for one year upon receipt. In essence a company can establish multiple consolidation points and move lamps from site to site indefinitely. NC DEHNR agrees that generators should have one year to accumulate enough lamps to make a shipment economically feasible, and transporters should follow the ten day transfer requirements. Consolidation points, however, should have a maximum of one year total based on the date received from the generator.

RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. When EPA proposed the hazardous waste lamps rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and the proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. When the final universal waste rule was published, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule.

EPA also has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (40 CFR 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose). Each separate location, generating location or collecting location, is considered a separate handler and is still subject to the general one year accumulation time limit. Transporters of universal waste remain subject to the 10-day storage limit at a transfer facility.

DCN FLEP-00126

COMMENTER Texas Natural Resource Cons. Comm.

SUBJECT UNWAS4

COMMENT Proposed requirements in 40 CFR 273.31(c) and 273.33(b) to assure

that generators and consolidation points do not store used lights for over one year should be retained. This type of control is necessary to assure that the waste keeps moving through the recycling system in a reasonably timely manner.

RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. At the publication of the proposed hazardous waste lamp rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and the proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. When the final universal waste rule was published, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule.

EPA also has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (40 CFR 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may under certain conditions accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00130

COMMENTS U.S. Department of Energy

SUBJECT UNWAS4

COMMENT 4. EPA requests comment on the proposed options for demonstrating that lamps are not stored for greater than one year (59 FR 38296). Proposed 40 CFR 273.31(c)(2) provides good options for identification of the dates that lamps have become waste. However, DOE believes that the proposed one-year storage limitation for universal waste is too restrictive because it may not facilitate proper recovery, treatment, or disposal. DOE recommends instead that any amount over the quantity necessary to make shipments feasible be prohibited from storage for more than one year (see DOE's April 12, 1993, comments).

RESPONSE

The Agency agrees with the commenter that the proposed one-year storage limitation for hazardous waste lamps is too restrictive and has added a provision that allows longer accumulation times when needed to facilitate proper recovery, treatment, or disposal. The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation requirements applicable to all universal wastes (40 CFR 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00143

COMMENTS A-TEC Energy Corporation

SUBJECT UNWAS4

COMMENT A-TEC Recycling, Inc. believes that 1 - 2 years of "on-site" storage of lamps by generators is reasonable.

RESPONSE

The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste

regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00156

COMMENTS National Electrical Manufacturers Assn.

SUBJECT UNWAS4

COMMENT 4. Universal Waste encourages long term storage of a fragile product by failing to establish overall limits on storage time. Since the spent lamp has almost no inherent value and since storage is cheaper than Subtitle C management, the so-called "tire pile" scenario is very likely. NEMA is already aware of at least one case of total abandonment of an entire warehouse of spent lamps by Marathon Co. of Wisconsin. 5. The Universal Waste system maximizes the length of time between generation of the waste and its ultimate destination. The environment is better served by speedy, efficient, and protective waste management scheme.

RESPONSE

The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for

proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

Hazardous waste lamp recycling facilities that store universal waste lamps prior to recycling them are required to apply for and obtain a storage permit for all storage activities. Universal waste destination facilities are subject to all applicable full Subtitle C management standards governing the treatment, storage, and disposal of hazardous wastes.

In the case of the facility mentioned by the commenter as abandoning a significant quantity of mercury-containing lamps, under the current full Subtitle C management requirements for hazardous wastes, generators of hazardous wastes may only accumulate hazardous wastes on site for a period of 90 days or less and treatment, storage and disposal facilities must apply for and receive a permit for on-site storage activities. If the spent lamps at the facility mentioned by the commenter truly have been abandoned or discarded, the facility owner or operator may be out of compliance with either the full Subtitle C generator standards or in violation of the facility's permit. However, in an authorized state, the state agency has the authority to permit hazardous waste management facilities and implement and enforce the conditions of any state-issued permits. Without knowing the exact circumstances of the facility mentioned and without knowledge of any applicable permit conditions, the Agency cannot render a judgment as to the regulatory or compliance status of the facility.

Today's rulemaking also includes provisions that require that lamps be packed to minimize breakage and packaging materials be designed to contain potential releases due to breakage during transport. Hazardous waste lamps must be stored in containers and/or packaging that remain closed, are structurally sound, adequate to prevent breakage, compatible with contents of lamps, and lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. Handlers also must contain any universal waste lamps that show evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous waste to the environment. Prior to shipment off-site, handlers must store spent lamps in a manner that minimizes breakage and prevents releases of hazardous constituents to the environment in the case of unavoidable breakage. EPA believes these provisions will be protective of human health and the environment.

DCN FLEP-00157
COMMENTER American Trucking Association, Inc.

SUBJECT UNWAS4

COMMENT In addition, the proposed management standards would only permit fluorescent bulbs to be stored on-site for a relatively short period of time, i.e., one year after they become a waste. Small facilities may take years before they ever generate enough light bulbs to warrant their collection by a reclaimer at any kind of fee that is economically reasonable. To prohibit storage for a longer period will only increase the operating cost of that facility without an obvious environmental benefit.

RESPONSE

The Agency agrees with the commenter that the proposed one-year storage limitation for hazardous waste lamps is too restrictive and has added a provision that allows longer accumulation times under certain conditions. The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation provisions applicable to all universal wastes (' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00166

COMMENTER American Electric Power Service Corp.

SUBJECT UNWAS4

COMMENT Additionally, the one-year storage limitation for generators may actually be detrimental in those states where recycling of lighting waste is not viewed as regulated activity (i.e., not seen as generation or disposal of a hazardous waste). This Universal Waste option could thus be viewed as imposing additional constraints on accumulation of lamps. The same is true for CESQGs in those states which presently regulate disposal of

CESQG hazardous waste more stringently than EPA under ' 261.5 but which do not limit storage times.

RESPONSE

The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation provisions applicable to all universal wastes (' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

In addition, the hazardous waste lamps rule does not affect the regulatory status of conditionally exempt small quantity generators (CESQGs) (i.e., those generators that produce less than 100 kg of hazardous waste per month). CESQGs continue to be conditionally exempt from full Subtitle C regulation provided that the provisions under ' 261.5 are met.

States may place more stringent requirements on the management of CESQG waste and/or hazardous waste lamps. However, the hazardous waste lamps rule becomes effective immediately only in states that are not authorized for the Federal full Subtitle C hazardous waste program. In authorized states, the hazardous waste lamps rule will not become effective unless and until the states seek authorization to adopt a universal waste rule for spent lamps. Some states have added hazardous waste lamps to their universal waste programs by the authorized petition program. EPA strongly encourages states to adopt today's final rulemaking that adds hazardous waste lamps to the Federal universal waste program so as to achieve the most benefits from the universal waste program but also to reduce the complexity of interstate transport of these universal wastes.

DCN FLEP-00171

COMMENTS Monsanto Company

SUBJECT UNWAS4

COMMENT Another environmental concern may arise from the fact that very

significant quantities of Hg lamps will be accumulated at be collection points defined by the rule. Unless properly managed, such collections also could constitute environmental threat.

RESPONSE

The hazardous waste lamps final rule adds hazardous waste lamps to the universal waste regulations under 40 Part 273. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation provisions applicable to all universal wastes (40 CFR 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

The universal waste rule provides a reduced, or streamlined set of requirements for handlers of universal wastes, but does not reduce the requirements applicable to treaters of universal wastes. The universal waste rule continues to ensure that lamps are recycled or treated in a manner protective of human health and the environment at full Subtitle C facilities.

The Agency is convinced that the requirements of the universal waste program can be highly effective in mitigating risks posed by spent lamps during storage and transport. The hazardous waste lamps rule amends the universal waste rule to include provisions that require that lamps be packed to minimize breakage and packaging materials be designed to contain potential releases due to breakage during transport. Hazardous waste lamps must be stored in containers and/or packaging that remain closed, are structurally sound, adequate to prevent breakage, compatible with contents of lamps, and lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. Handlers also must contain any universal waste lamps that show evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous waste to the environment. Prior to shipment off-site, handlers must store spent lamps in a manner that minimizes breakage and prevents releases of mercury to the environment in the case of unavoidable breakage. In addition, universal waste transporters remain subject to applicable DOT requirements for the transport of hazardous waste lamps. EPA believes these provisions will be protective of human health and the environment.

DCN FLEP-00174

COMMENTER Illuminating Engineering Soc. of N. Am.

SUBJECT UNWAS4

COMMENT Position on Universal Waste. The proposed Universal Waste approach would not solve the current problems associated with lamp disposal. In fact it may well increase risks by encouraging the accumulation of large quantities of intact lamps, thereby increasing the opportunities for and magnitude of environmental problems. It would also continue to keep the cost of lamp replacement high. The Universal Waste approach was not designed for fragile wastes, but rather for relatively sturdy wastes that could withstand the rigors of large scale accumulation and transport (Lamps are fragile waste.) There also seems to be a lack of regulatory requirements for Consolidation Points and this may well limit participation on the part of many manufacturers of spent lamps.

RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. At the publication of the proposed hazardous waste lamp rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and the proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. When the final universal waste rule was published, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule.

The Agency is convinced that the requirements of the universal waste program can be highly effective in mitigating risks posed by spent lamps during storage and transport. The universal waste requirements for proper packaging and handling of the lamps to avoid breakage during accumulation and transport can prevent releases of the hazardous constituents to the environment before recycling or other management options. The universal waste rule establishes both storage and packaging standards designed to prevent potential emissions during storage and transport. In addition, universal waste transporters remain subject to applicable DOT requirements for the transport of hazardous waste lamps. EPA believes these provisions will be protective of human

health and the environment.

Hazardous waste lamps conform to a number of factors that were used to determine whether regulating a particular hazardous waste under the streamlined standards of the universal waste program would improve the overall management of the waste. The factors, which are codified at 40 CFR 273.81, include: a) the waste must be a hazardous waste generated by a wide variety of generators; b) the waste, or category of waste, should not be exclusive to a particular industry but must be generated by a wide variety of establishments; c) the waste should be generated frequently, but in relatively small quantities; d) systems to be used for collecting the waste should ensure close stewardship of the waste; e) the risks posed by the waste during accumulation and transport should be relatively low compared to the risks posed by other hazardous waste and specific management standards would be protective of human health and the environment during accumulation and transport; f) regulation of the waste under the universal waste rule should result in the diversion of the waste from management with non-hazardous wastestreams; and g) regulation of the waste as a universal waste should improve implementation of and compliance with the hazardous waste regulatory program.

Finally, the Agency performed calculations on the impact of disposal costs on a lighting upgrade's internal rate of return (IRR). At a \$0.50/lamp transportation and recycling cost, the IRR for a typical project over ten years is 51 percent. At a \$1.00/lamp transportation and recycling cost the IRR was 50 percent which is only a slight decrease in IRR, despite a 100 percent increase in waste management costs. This result suggests that the cost associated with lamp replacement programs is largely independent of the regulatory options chosen by EPA.

DCN FLEP-00185

COMMENTS British Things, Inc.

SUBJECT UNWAS4

COMMENT The Universal Waste approach was designed to address the problems associated with applying Subtitle C to batteries and certain recalled pesticides. While it might serve that purpose well, it in fact makes it more difficult to safely manage lamp wastes. The Universal Waste approach encourages inexpensive, long-term storage of wastes at generator sites and at consolidated storage facilities. For the materials the Universal Waste system was originally designed for (e.g., spent batteries and certain recalled pesticides) such long-term storage makes sense as a way of encouraging collection and safe disposal. For lamps, however, it does not make sense. Uncontrolled product breakage is one of the chief means of mercury exposure from spent lamps. The longer lamps stay unbroken, the greater the chance is they will break in an uncontrolled manner either during storage, during

transportation, or during disposal. The way to reduce emissions from breakage is to encourage controlled breakage at the earliest possible time. The Universal Waste proposal, by prohibiting on-site controlled crushing, eliminates the most effect and efficient means of doing this. Again, such a prohibition may make sense for batteries and pesticides where the concern is not air emissions from uncontrolled breakage, but it is ill-suited for mercury-containing lamps.

RESPONSE

Today's final rulemaking adds hazardous waste lamps to the universal waste regulations under Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than full Subtitle C management standards), while still protecting human health and the environment. Fewer hazardous waste lamps will be managed in the municipal solid waste stream, therefore reducing the number of lamps going to municipal combustors and decreasing the potential for lamps to be crushed and/or broken in uncontrolled environments during storage and transport (e.g., dumpsters and garbage trucks).

The hazardous waste lamps rule includes provisions that require that lamps be packed to minimize breakage and packaging materials be designed to contain potential releases due to breakage during transport. Hazardous waste lamps must be stored in containers and/or packaging that remain closed, are structurally sound, adequate to prevent breakage, compatible with contents of lamps, and lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. Handlers also must contain any universal waste lamps that show evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous waste to the environment. Prior to shipment off-site, handlers must store spent lamps in a manner that minimizes breakage and prevents releases of mercury to the environment in the case of unavoidable breakage.

The current universal waste rule prohibits universal waste handlers from treating universal wastes (40 CFR ' 273.11 and 273.31). The final rule for hazardous waste lamps retains the treatment prohibition for universal waste handlers and applies the prohibition to handlers of hazardous waste lamps. The definition of treatment under RCRA includes "any method, technique, or process...designed to change the physical, chemical, or biological character or composition of any hazardous waste, so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume." The crushing of hazardous waste lamps clearly falls within the definition of treatment under RCRA (40 CFR 260.10).

EPA understands that some state programs governing the management (including crushing or treatment) of universal waste lamps may include sufficient standards for controlling emissions from hazardous waste lamps during crushing activities so as to render the provisions of the state

program *equivalent*, per RCRA ' 3006, to the Federal prohibition on treatment. For example, some states may have regulations that control potential releases of mercury during crushing or treatment, including controls to mitigate potential air emissions during crushing processes. Such regulations may be effective in dealing with the environmental concerns addressed by the Federal prohibition on treatment of universal wastes by handlers. Therefore, such state regulations may be considered equivalent to the Federal prohibition. EPA believes that this approach ensures protection of human health and the environment.

DCN FLEP-00186

COMMENTER Building Owners or Managers Assn. Int.

SUBJECT UNWAS4

COMMENT Storage Requirements BOMA members believe that EPA's proposed requirement to allow for storage of lamps for up to one year is reasonable. Most companies only store bulbs in order to accumulate enough to make shipping more cost-effective, and one year is adequate.

RESPONSE

The Agency agrees with the commenter that storage of lamps for up to one year, with provisions made for longer accumulation times, is reasonable. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate spent lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP-00188

COMMENTER Westinghouse Electric Corporation

SUBJECT UNWAS4

COMMENT Consolidation Points: Clarification is needed on the definition of a "consolidation point." It is unclear whether the consolidation point is an onsite or off-site location. It is

also unclear whether another notification and EPA ID number are necessary if the facility currently has an EPA ID number. Also, can a large facility store lamps in various locations for one year then send them to a consolidation point on the same site for storage for another year? This flexibility could be beneficial. This is not addressed in the proposed rule. Storage Prior to Subtitle C Disposal (page 38296): According to the proposed rule, bulbs which can not be recycled must be disposed of in a Subtitle C landfill. It is not clear whether these bulbs can be stored in an unpermitted storage area for one year, prior to disposal. Provisions to Allow Storage Period Extensions (page 38302) The proposed rule does not allow a generator to petition for additional storage time. These provisions would be important for circumstances beyond the generator's control, such as when a recycling facility or landfill is temporarily unable to receive the waste. This issue should be addressed in the final rulemaking.

RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. At the publication of the proposed hazardous waste lamp rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and the proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. When the final universal waste rule was published, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule.

Handlers that accumulate more than 5,000 kilograms of total universal wastes at any one time are designated as a large quantity handler of universal waste and are subject to the notification requirements of 40 CFR 273.32. The notification requirement ensures that regulatory agencies are aware of the large quantity handlers of universal waste. The notification requirement is a one-time notification and is applicable on a site-specific basis. Large quantity handlers must notify the EPA Regional Administrator of their universal waste management activities and obtain an EPA identification number only if they do not already have one. Small quantity handlers are not

required to notify EPA of their universal waste management activities and need not obtain an EPA identification number. Generators of universal waste lamps that have never generated more than 100 kg of hazardous waste in a calendar month, but now accumulate more than 5,000 kg of universal waste lamps must notify the Agency of their universal hazardous waste management activities.

In the hazardous waste lamps final rule, small and large handlers of hazardous waste lamps may accumulate universal waste lamps for up to one year with an additional provision that allows for accumulation for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal (it is assumed that any accumulation up to one year is for this purpose). Each separate location, (e.g., generating location or collecting location) is considered a separate handler and subject to the one year accumulation time limitation. EPA believes that this approach is protective of human health and the environment while being less resource-intensive than requiring a petition process.

DCN FLEP-00191

COMMENTS Utility Solid Waste Activities Group

SUBJECT UNWAS4

COMMENT Another flaw in the universal waste option is that it contains a one year storage limitation. 59 Fed. Reg. at 38296. This limitation would be wholly unworkable in many rural areas and with small generators where additional time is required to accumulate enough bulbs to make recycling or disposal economically viable.

RESPONSE

The Agency agrees with the commenter that storage of lamps for more than one year is sometimes necessary. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate spent lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose). This process should allow small generators the additional time needed to accumulate enough bulbs to make recycling or disposal viable.

DCN FLEP-00196

COMMENTS American Lighting Association

SUBJECT UNWAS4

COMMENT The Proposed Universal Waste approach would not solve the current problems associated with lamp disposal. The ALA does not believe that Universal Waste will remove the stigma associated with the hazardous waste designation and also believes it may actually work to increase risks by encouraging the accumulation of very large quantities of intact lamps, increasing the opportunities for and magnitude of environmental problems. It also continues to keep cost of lamp replacement very high. The Universal Waste approach was not designed for fragile wastes whose risks derive from air emissions due to breakage. Rather, it was designed for relatively sturdy waste that could withstand the rigors of large scale accumulation and transport. Our members are particularly concerned about the lack of regulatory requirements for consolidation points and are unlikely to send their spent lamps to them due to liability concerns.

RESPONSE

By adding hazardous waste lamps to the universal waste program, the complexity of managing this type of waste is significantly decreased, because the universal waste rule provides a reduced set of requirements (i.e., universal waste rule is less stringent than full Subtitle C management standards). Handlers of universal wastes are subject to less stringent standards for recordkeeping, storing, and transporting universal wastes. These standards serve to encourage environmentally sound collection and proper management of the universal wastes.

In addition, hazardous waste lamps conform to a number of factors that were used to determine if a hazardous waste would fit into the universal waste program and if the streamlined standards of the universal waste program would improve the overall management of the waste. The factors, which are codified at 40 CFR 273.81, include: a) the waste must be a hazardous waste generated by a wide variety of generators; b) the waste, or category of waste, should not be exclusive to a particular industry but must be generated by a wide variety of establishments; c) the waste should be generated frequently, but in relatively small quantities; d) systems to be used for collecting the waste should ensure close stewardship of the waste; e) the risks posed by the waste during accumulation and transport should be relatively low compared to the risks posed by other hazardous waste and specific management standards would be protective of human health and the environment during accumulation and transport; f) regulation of the waste under the universal

waste rule should result in the diversion of the waste from management with non-hazardous wastestreams; and g) regulation of the waste as a universal waste should improve implementation of and compliance with the hazardous waste regulatory program.

The Agency believes that the risk involved in managing hazardous waste lamps is not increased by implementing the universal waste approach. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (40 CFR 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain circumstances. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate spent lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

The hazardous waste lamps final rule includes provisions that require that lamps be packed to minimize breakage and packaging materials be designed to contain potential releases due to breakage during transport. Hazardous waste lamps must be stored in containers and/or packaging that remain closed, are structurally sound, adequate to prevent breakage, compatible with contents of lamps, and lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. Handlers also must contain any universal waste lamps that show evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous waste to the environment. Prior to shipment off-site, handlers must store spent lamps in a manner that minimizes breakage and prevents releases of mercury to the environment in the case of unavoidable breakage.

EPA believes these provisions will be protective of human health and the environment. In terms of the cost of lamp replacement, the Agency performed calculations on the impact of disposal costs on a lighting upgrade's internal rate of return (IRR). At a \$0.50/lamp transportation and recycling cost, the IRR for a typical project over ten years is 51 percent. At a \$1.00/lamp transportation and recycling cost the IRR was 50 percent which is only a slight decrease in IRR, despite a 100 percent increase in waste management costs. This result suggests that the cost associated with lamp replacement programs is largely independent of the regulatory options chosen by EPA.

Finally, the final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. At the publication of the proposed hazardous waste lamp rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and the proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. When the final universal waste rule was published, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule. All four categories of participants must comply with regulatory requirements under the universal waste program.

DCN FLEP-00204

COMMENTER American Lamp Recycling, Ltd.

SUBJECT UNWAS4

COMMENT We also believe that one year is a very long time to maintain any waste material in storage unless no management option exist for the specific waste stream. If the Agency creates a facility called a consolidation point which is authorized to engage in the storage of hazardous waste lamps, we believe that authorization for storage without full Subtitle C regulation should be limited to 10 days, equivalent to that allowed for hazardous waste transfer facilities.

RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. At the publication of the proposed hazardous waste lamp rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and the proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. When the final universal waste rule was published, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged

to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule

EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). The Agency does not agree that one year is too long a time to maintain a universal waste in storage. These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate spent lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose). In addition, the handler must comply with the management standards while the lamps are in storage. EPA believes the management standards will ensure the storage is protective of human health and the environment.

DCN FLEP-00256

COMMENTS Ford Motor Company

SUBJECT UNWAS4

COMMENT Accumulation and Storage Requirements [' 273.31(a)].

The storage limitation of one year from the date accumulation begins is reasonable. However, any storage limitation should have a provision [similar to ' 262.34(b)] that allows for the authorized agency to grant an extension (for up to 30 days) on a case -by- case basis under certain unforeseen circumstances.

RESPONSE

The Agency agrees with the commenter that storage of lamps for up to one year, with provisions made for longer accumulation times, is reasonable. EPA has determined that regulations applicable to accumulation of hazardous waste lamps should be consistent with the accumulation regulations applicable to all universal wastes (' ' 273.15 and 273.35). These provisions for accumulation implement a statutory prohibition that is part of the Hazardous and Solid Waste Amendments of 1984 that prohibit all listed or identified hazardous wastes from land disposal

unless the hazardous waste is specifically excluded from regulation in 40 CFR Parts 261 or 268. Further, under 40 CFR 268.50, the storage of hazardous wastes restricted from land disposal is prohibited unless the restricted wastes are being accumulated for the purpose of accumulating quantities necessary for proper recovery, treatment, or disposal. In the universal waste final rule (60 FR 25526, May 11, 1995), the Agency determined that accumulation of universal wastes for more than one year can be allowed under certain conditions. Therefore, in today's final rule, small and large handlers of hazardous waste lamps may accumulate spent lamps for up to one year as proposed, and for more than one year if such accumulation is solely for the purpose of accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. 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 (it is assumed that any accumulation up to one year is for this purpose).

DCN FLEP- 00041

COMMENTS John A. Williams

SUBJECT UNWAS4

COMMENT Section 273.31(c)(2)(I) -Placing the lamps in a container and marking or labeling the container with the earliest date that any date that the last lamp was added in to the container became a waste. (ii) Marking or labeling an individual lamp with the date that it became a waste; (iii) Maintaining an inventory system that identifies the date each lamp in storage became a waste; (iv) Maintaining an inventory system that identifies the earliest date that any lamp in a group of lamps became a waste: or (v) Placing the lamps in a specific storage area and identifying the earliest date that any container of lamps in the storage area became a waste. "The generator requirements for mercury-containing lamps should not be more strict than 40 CFR Part 262-Standards Applicable to Generators of Hazardous Waste."

Section 273.33(b) - Storage (1) The owner or operator of a consolidation point may store a hazardous waste container of lamps for no longer than one year from the date that the owner or operator receives it. "The consolidation point may only accept one lamp from a generator, but the lamp would be stored in a container with other lamps received. The accumulation start date should be when the last lamp is added and the container is full". Section 273.33(b)(2)(I) - Placing the lamps in a container and marking or labeling the container with the earliest date that any lamp in date that the last lamp was added to the container was received; (ii) Marking or labeling an

individual lamp with the date that it was received; (iii) Maintaining an inventory system that identifies the date each lamp in storage was received; (iv) Maintaining an inventory system that identifies the earliest date that any lamp in a group container of lamps was received; or (v) Placing the lamps in a specific storage area and identifying the earliest date that any container of lamps in the storage area was received.

"The consolidation point is going to have enough paperwork without having to mark and label each individual lamp. A container of lamps should be the smallest unit to inventory."

RESPONSE

The Agency agrees that the generator requirements for hazardous waste lamps should not be more strict than 40 CFR Part 262. Therefore, there are reduced notification requirements for handlers of universal hazardous waste, reduced labeling requirements while waste is in storage, reduced manifesting requirements, longer storage accumulation times and reduced paperwork requirements than those set forth in 40 CFR Part 262. In adding hazardous waste lamps to the universal waste program, EPA has determined that the regulations applicable to hazardous waste lamps should be consistent with the existing universal waste regulations set forth in 40 CFR Part 273.

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. At the publication of the proposed hazardous waste lamp rule, the universal waste rule was also in the proposal stage of the rulemaking process. As a result, the Agency chose to design the proposed regulations for hazardous waste lamps in a manner that was consistent with the proposed universal waste rule. The proposed universal waste rule and proposed hazardous waste lamps rule categorized regulated persons managing universal waste into four types: generators, consolidation points, transporters, and destination facilities. When the final universal waste rule was published, the Agency modified the four categories. The transporter and destination facility categories were retained essentially as proposed. However, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participants: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule.

The labeling requirements are intended to be flexible in that the handler can choose which method works best for his facility. The handler is not required to mark or label each lamp if he chooses to demonstrate compliance with the accumulation time limit in a different way.