

US EPA ARCHIVE DOCUMENT

DCN FLEP-00011

COMMENTER General Motors

SUBJECT UNWAS3

COMMENT However, if Option Two were to be adopted, GM's comments are as follows: Quantity Limitation (page 38296) GM agrees that 35,000 lamps (approximately one truckload) is a reasonable quantity above which generators and consolidation points would have to notify the Agency of their storage activities. The Agency is correct in assuming that industry quantifies inventories by the number of lamps rather than by weight.

#### RESPONSE

The final rule for hazardous waste lamps does not contain separate categories for generators and consolidation points. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Therefore, the 5,000 kilogram accumulation threshold for the notification of all universal wastes will continue to apply to all universal waste handlers (e.g., handlers of batteries, pesticides, mercury thermostats, and hazardous waste lamps). EPA is including hazardous waste lamps within the scope of the universal waste rule, 40 CFR Part 273. At the publication of the proposed 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 subsequently 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 generator and consolidation point categories were merged to create two new categories of regulated persons: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). The Agency decided that the hazardous waste lamps rule should be consistent with the existing universal waste regulations.

As explained in the preamble to the final universal waste rule, the Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram limit is appropriate for facilities handling hazardous waste lamps and still enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments while ensuring that regulatory agencies are aware of large quantity handlers.

DCN FLEP-00025

COMMENTS Environmental Energy Group/NAEP

SUBJECT UNWAS3

COMMENT We suggest storage period

limitations not to exceed 180 days or a combined equivalent of 25,000 four foot fluorescent lamps for electric lamp wastes be used as a time/volume limitation in a final rule should Option 2 be selected. This considers that for other than general office lamp wastes there will be a mix of sizes and types of lamp wastes generated from routine activity. If 35,000 is a contemporary numerical estimate for truck load quantity of four foot fluorescent lamps, in many cases packaging will reduce this number to less than 30,000 and more safely to the 25,000 limit suggested. We are unsure whether these storage limitations should be primarily structured on the basis of transporter van capacities or on facility space availability and on-site management expertise; the latter seems to be more appropriate provided economy of scale is not diminished. A differential between the proposed limit of 35,000 and the suggested 25,000 figure does not necessarily impose greater costs. A volume storage limitation mechanism (other than a specific number of electric lamps) which may prove to be easier to implement could be to designate a dimensional storage space limitation (X amount of cubic or square feet). This might better address the variances in generator storage capacity, electric lamp size and waste stream activity. While recycling services are provided on a numerical (lamp count) basis, the dimensional space aspects of storage by numerical count is more varied. The best (or worst case) illustration would be to consider the differences between storing the same numerical volumes of four foot lamps in comparison to eight foot models. We assume that in shipping equal numbers of the two sizes that the transport need is doubled for the longer versions. The storage parameters proposed are either/or limits and should consider SQG needs as well as those for LQG and lighting retrofit efforts. For generators of exceptional size and for the retrofit or relamp project expected to exceed the established limits, storage limit exemptions should be granted liberally to exceed a lower general limit. Implementation reporting data collected under the agency's Green Lights program should also give high, low, and norm sizes for waste lamp generation under lighting retrofit efforts. Large retrofits do occur but we suspect that most of these efforts are

LTL rather than truck load sized. Normally under such efforts expected volumes (fixture counts) are known well before hand and may be planned for. We assume that lamp types other than those typically identified by the general public as a waste lamp (four foot fluorescent tube) will pose some practical packaging and storage problems. Storage will require individual building(s) solutions, packaging may best be left to innovation within rudimentary guidelines either suggested or established under the rule to minimize breakage during handling, storage, and shipment. Storage limitations are suggested here without specific knowledge on the part of the submitter with respect to IAQ impacts of waste electric lamp contaminants during the storage of intact lamps or potential increases in other hazards (a long term consolidation of flammable cardboard lamp storage boxes). Certain TCLP test results are suggestive that waste intact lamps may contain less mercury than new, unused products of the same generation. All TCLP variances may not be explainable on the basis of the use of different laboratory testing protocols. Comparative study of new lamp warehousing and/or distribution center conditions or techniques may not necessarily be of interpretative value in regard to waste lamp storage conditions.

#### RESPONSE

In the hazardous waste lamps final rule, hazardous waste lamps have been added to the universal waste regulations under 40 CFR Part 273. The universal waste management program establishes both weight limits for notification and time limits for accumulation.

Regarding time limits for accumulation, 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 1984 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 quantity handlers of hazardous waste lamps may accumulate lamps for up to one year as proposed, and an additional provision has been added to allow 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. 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 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.

The Agency notes that the universal waste regulations do not impose a quantity limit for accumulation at both small and large quantity handler sites, but imposes a 5,000 kilogram limit for notification purposes. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Handlers that accumulate greater than 5,000 kilograms of total universal waste (batteries, pesticides, thermostats, and hazardous waste lamps) or more are required to notify the Agency of universal waste activities and obtain an EPA identification number if they do not have one.

As explained in the preamble to the final universal waste rule, the Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk, than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram accumulation threshold limit for the notification of all universal wastes is appropriate for facilities handling hazardous waste lamps. This limit enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments while ensuring that regulatory agencies are aware of the larger quantity handlers.

The hazardous waste lamps management program includes provisions that require that lamps be packed to minimize breakage, and that 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.

The Agency believes that all hazardous waste lamps should be included in the universal waste program. The Agency is including all waste lamps that exhibit a toxicity characteristic in the universal waste management program.

DCN FLEP- 00041

COMMENTS John A. Williams

SUBJECT UNWAS3

COMMENT Section 273.31(d) - Notification. (1) A generator who stores more than 35,000 hazardous waste lamps at any time must have before exceeding the 35,000 lamp quantity limit, sent written notification of hazardous waste lamp storage to the Regional Administrator and received an EPA Identification Number. (2) This notification must include: (I) The generator's name and mailing address; (ii) The name and business telephone number of the person at the generator's site who should be contacted regarding the lamp storage activity; (iii) The address or physical location of the lamp storage activity; (iv) A statement indicating that the generator stores more than 35,000 hazardous waste lamps. "The generator is already being regulated by dates on the containers, so why do we want to know the volume stored on site? This notification form will be another RCRIS list to maintain. To eliminate the extra paperwork, I suggest that notifications for generators be eliminated. Furthermore, the present notification for generators of hazardous waste will cover the small quantity and large quantity generators."

RESPONSE

The Agency agrees with the commenter that the present notification requirements for hazardous waste generators is sufficient to comply with this provision. Therefore, large quantity generators of hazardous waste who have already received an EPA identification number are not required to re-notify under 40 CFR ' 273.32.

Hazardous waste lamps are being added to the universal waste regulations under Part 273. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Under the universal waste rule, large quantity handlers of universal waste are subject to the notification requirement under certain conditions. Handlers that accumulate more than 5,000 kg total of 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.

DCN FLEP-00090

COMMENTS The Boeing Company

SUBJECT UNWAS3

COMMENT Universal Waste Option Notification requirement The agency proposes that a generator who stores more than 35,000 hazardous waste lamps at any time must send written notification to the Regional Administrator and receive an EPA identification number. This appears unnecessary, as EPA is probably correct in assuming that any generators who generate 350 lamps are large quantity generators due to lamps alone. Therefore, these generators should already possess an EPA/State identification number. To require an additional identification number would be redundant. In addition, a large quantity generator would already have established hazardous waste management practices in place which are similar to the proposed management requirement. Therefore, the proposed notification to report how generators manage these lamps appears to be unnecessary.

#### RESPONSE

The Agency agrees with the commenter that the present notification requirements for hazardous waste generators is sufficient to comply with the notification provision. Hazardous waste lamps are being added to the universal waste regulations under Part 273. Therefore, large quantity generators of hazardous waste who have already received an EPA identification number are not required to re-notify under 40 CFR ' 273.32. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Under the universal waste rule, large quantity handlers of universal waste are subject to the notification requirement under certain conditions.

Handlers that accumulate more than 5,000 kg total of 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.

DCN FLEP-00107

COMMENTS North Carolina Dept. of Env. Health

SUBJECT UNWAS3

COMMENT Under the universal waste management system, NC DEHNR agrees with the requirements that generators and consolidation points storing more than 35,000 lamps should notify the agency, maintain documentation on the shipment of lamps, minimize lamp breakage, educate their employees on proper and safe handling methods, and manifest the shipment from the generator or consolidation point to the designated facility. NC DEHNR also agrees with the act of generation being - the removal of the lamp from service or the decision to discard an unused lamp.

#### 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 scope of the universal waste rule. At the publication of the proposed 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 subsequently 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). 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.

Hazardous waste lamps are being added to the universal waste regulations under 40 CFR Part 273. There are two sets of requirements; one set for small quantity handlers (those who accumulate 5,000 kilograms or less of total universal waste at any one time) and those for large quantity handlers (those who accumulate greater than 5,000 kilograms of total universal waste at any time).

Large quantity handlers must notify EPA of their universal waste activities and obtain an EPA identification number (if they don't already have one). Small quantity handlers are not required to



notify EPA and are not required to obtain an EPA identification number. Both small and large quantity handlers must follow specified requirements when handling hazardous waste lamps. These requirements specify packaging standards and require that hazardous waste lamps be managed in a way that prevents releases to the environment. Handlers must properly label or mark containers of hazardous waste lamps. Handlers may accumulate hazardous waste lamps for one year. If the lamps are stored for greater than one year, the handler must be able to demonstrate that such accumulation is solely for accumulating such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. Small quantity handlers must distribute basic handling and emergency information to employees handling spent lamps, and large quantity handlers must ensure that employees are familiar with spent lamp handling and emergency procedures as appropriate based on their responsibilities. Large quantity handlers must track spent lamps shipments by maintaining basic records documenting shipments received at and sent from the facility (manifests are not required). Small quantity handlers are not subject to any tracking or recordkeeping requirements. All handlers must immediately contain any releases of hazardous waste lamps and handle the residues appropriately. Handlers are required to send hazardous waste lamps only to persons within the universal waste system.

The Agency notes that the universal waste standards apply only to spent lamps that are hazardous wastes. For a waste to be a hazardous waste, it must first be a solid waste. Section 273.4(c) describes when hazardous waste lamps become wastes. A used hazardous waste lamp becomes a waste on the date that it is discarded. In addition, an unused hazardous waste lamp becomes a waste on the date a handler decides to discard it.

DCN FLEP-00130

COMMENTER U.S. Department of Energy

SUBJECT UNWAS3

COMMENT 3. EPA requests comment on a notification requirement for generators and consolidation points storing more than 35,000 spent mercury-containing lamps and on appropriate quantity limits for notification for other hazardous waste lamps types (p. 38296). DOE believes that a numerical cutoff is easier for the regulated community to track than a weight cutoff, in most cases. It is difficult, if not impossible, however, for a consolidation facility receiving crushed lamps to track a numerical limit. For these of facilities, a weight or volume requirement is more sensible. Consequently, DOE believes that EPA should develop a flexible notification requirement that recognizes the diversity of the regulated community. Based on information EPA receives in response to the proposed rule, a notification requirement may have to contain numerical, weight, and volume cutoffs.

RESPONSE

Hazardous waste lamps are being added to the universal waste regulations under Part 273. Therefore, large quantity generators of hazardous waste who have already received an EPA identification number are not required to re-notify under 40 CFR ' 273.32. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Under the universal waste rule, large quantity handlers of universal waste are subject to the notification requirement under certain conditions.

Handlers that accumulate more than 5,000 kg total of 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.

As explained in the preamble to the final universal waste rule, the Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk, than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram limit is appropriate for facilities handling hazardous waste lamps and still enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments while ensuring that regulatory agencies are aware of the large quantity handlers.

DCN FLEP-00143

COMMENTER A-TEC Energy Corporation

SUBJECT UNWAS3

COMMENT A-TEC Recycling, Inc. believes that 30,000 - 35,000 lamps is a reasonable number for generator notification purposes.

RESPONSE

EPA is including hazardous waste lamps within the scope of the universal waste rule. The Agency has decided that the final notification standards for hazardous waste lamps should remain

consistent with the provisions established in the universal waste rule. Therefore, the 5,000 kilogram limit for the accumulation of all universal wastes will continue to apply to all universal waste handlers (e.g., handlers of batteries, pesticides, mercury thermostats, and hazardous waste lamps).

As explained in the preamble to the final universal waste rule, the Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk, than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram limit is appropriate for facilities handling hazardous waste lamps and still enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments while ensuring that regulatory agencies are aware of the larger quantity handlers.

DCN FLEP-00186

COMMENTER Building Owners or Managers Assn. Int.

SUBJECT UNWAS3

COMMENT Notification Requirements BOMA believes EPA's proposal to require generators and consolidation points storing more than 35,000 spent mercury-containing lamps to notify the Agency of storage activities is reasonable. As the 35,000 lamp threshold would only impact large commercial facilities, this is a reasonable requirement.

RESPONSE

EPA is including hazardous waste lamps within the scope of the universal waste rule, 40 CFR Part 273. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Therefore, the 5,000 kilogram limit for the accumulation of all universal wastes will continue to apply to all universal waste handlers (e.g., handlers of batteries, pesticides, mercury thermostats, and hazardous waste lamps).

As explained in the preamble to the final universal waste rule, the Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk, than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is

equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram limit is appropriate for facilities handling hazardous waste lamps and still enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments while ensuring that regulatory agencies are aware of the large quantity handlers.

Handlers that accumulate more than 5,000 kg total of 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.

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. At the publication of the proposed 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 subsequently 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). 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.

DCN FLEP-00223

COMMENTS Owens-Corning Fiberglass Corporation

SUBJECT UNWAS3

COMMENT 4. Owens Corning feels that the relaxed storage quantity limitations included in the Universal Waste Proposed Rule will make managing waste light bulbs much more practical. Currently, satellite storage is impractical. Also, we feel that changing the 90 day time storage limit to a quantity storage limit increases the cost effectiveness of shipping the bulbs to a

reclaimer.

#### RESPONSE

The Agency agrees that changing the 90 day time storage limit for managing hazardous waste lamps is appropriate. EPA is including hazardous waste lamps within the scope of 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). These provisions for accumulation implement a statutory prohibition that is part of the 1984 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 quantity handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and an additional provision has been added to allow 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. 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 Agency notes that the universal waste regulations do not impose a quantity limit for accumulation at both small and large quantity handler sites, but imposes a 5,000 kilogram limit for notification purposes on large quantity handlers. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established universal waste rule. Handlers that accumulate greater than 5,000 kilograms of total universal waste (batteries, pesticides, thermostats, and hazardous waste lamps) or more are required to notify the Agency of universal waste activities and obtain an EPA identification number if they don't already have one.

DCN FLEP-00234

COMMENTS Minnesota Mining and Manufacturing (3M)

SUBJECT UNWAS3

COMMENT Storage/Notification requirements: 3M suggests a practical approach to the storage of spent lamps. Generators of lamps should be able to "store" spent lamps for an unspecified period of time. However, quantities should be limited to less than full truck-load quantities (35,000 lamps). Consolidation points should be defined as facilities that store quantities greater than a full truck-load (35,000 lamps) for up to 12 months.

Destination or recycling facilities should not be allowed to store more than what can be processed over a certain period of time. It is recommended that storage requirements for such facilities be limited to 30 days or less. Notification requirements should pertain to all consolidation points and destination facilities.

#### RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. At the publication of the proposed 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 subsequently 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). A destination facility is a facility that treats, disposes of, or recycles universal waste lamps. Destination facilities are subject to all hazardous waste management requirements applicable to permitted or interim status hazardous waste treatment, storage and disposal facilities under Parts 264 or 265. Facilities that recycle hazardous waste lamps without accumulating the lamps before they are recycled are subject to the recycling requirements of ' 261.6(c)(2).

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 1984 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 the hazardous waste lamps final rule, small and large quantity handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and an additional provision has been added to allow 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. 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 regulations do not impose a quantity limit for accumulation at both small and large quantity handler sites, but imposes a 5,000 kilogram limit for notification purposes. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established universal waste rule. Handlers that accumulate greater than 5,000 kilograms of total universal waste (batteries, pesticides, thermostats, and hazardous waste lamps) or more are required to notify the Agency of universal waste activities and obtain an EPA identification number if they do not already have one. Small quantity handlers are not subject to notification requirements. 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.

DCN FLEP-00256

COMMENTS Ford Motor Company

SUBJECT UNWAS3

COMMENT Generator Notification Requirements [ ' 273.31(d)] The proposed storage limit of 35,000 lamps does not consider the large number of lamps potentially generated during a large industrial or commercial relamping or demolition project[s]. The proposed 35,000 lamp limit, which is based on the capacity of one tractor-trailer, would complicate lamp management during such projects, when generating an additional pallet of lamps (approx. 400-560 lamps) beyond a full truck load would trigger the notification requirements. A storage limit of 80,000 lamps is recommended.

RESPONSE

EPA is including hazardous waste lamps within the scope of the universal waste rule. The universal waste regulations do not impose a quantity limit for accumulation at both small and large quantity handler sites, but imposes a 5,000 kilogram limit for notification purposes only. The Agency has decided that the final notification standards for hazardous waste lamps should be consistent with the provisions established in the universal waste rule. Therefore, the 5,000 kilogram accumulation threshold for the notification of all universal wastes will continue to apply to all universal waste handlers (e.g., handlers of batteries, pesticides, mercury thermostats, and hazardous waste lamps). In addition, the universal waste rule includes accumulation time limits in ' ' 273.15 and 273.35. Handlers of hazardous waste lamps will need to stay within these time limits.

As explained in the preamble to the final Universal Waste Rule, the Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk,

than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram limit is appropriate for facilities handling hazardous waste lamps and still enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments while ensuring that regulatory agencies are aware of the large quantity handlers.

Large quantity handlers must notify EPA (or the authorized state) of their universal waste activities and they must obtain an EPA identification number 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. Large quantity handlers 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. Both small and large quantity handlers are required to follow packaging standards under 40 CFR 273.13 and 273.33, respectively.

DCN FLEP-00296

COMMENTS State of Ohio EPA

SUBJECT UNWAS3

COMMENT Notification requirement - The rationale for selecting 35,000 lamps as a standard for requiring notification is questionable. The U.S. EPA is basing this determination on an estimate that 35,000 lamps are equivalent to a full truckload of packaged fluorescent lamps. This figure neglects to consider the potential hazards of having between 1,225,000 and 2,626,000 mg of mercury (based on 35 mg and 75 mg of mercury per 4-foot and 8-foot fluorescent lamps, respectively) centrally located and unregulated. Setting a numeric limit on fluorescent lamps is a good approach, however, the limit really should be based on the potential for exposure to mercury, not shipping quantities. Establishing a limit for other lamps is likewise reasonable but once again, the criteria should be based on the potential for hazards.

RESPONSE

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 1984 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 the hazardous waste lamps final rule, small and large quantity handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and an additional provision has been added to allow 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. 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 regulations do not impose a quantity limit for accumulation at both small and large quantity handler sites, but imposes a 5,000 kilogram limit for notification purposes. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Handlers that accumulate greater than 5,000 kilograms of total universal waste (batteries, pesticides, thermostats, and hazardous waste lamps) or more are required to notify the Agency of universal waste activities and obtain an EPA identification number if they do not already have one. Small quantity handlers are not subject to notification requirements. 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.

As explained in the preamble to the final universal waste rule, the Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk, than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram limit is appropriate for facilities handling hazardous waste lamps and still enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, as opposed to numerous small shipments while ensuring that regulatory agencies are aware of the large quantity handlers.

DCN FLEP-00143  
COMMENTER A-TEC Energy Corporation

**SUBJECT UNWAS3**

**COMMENT** A-TEC Recycling, Inc. believes that a management system for lamp disposal notification should be clear and concise. Lamp recyclers could notify regulators of all lamp shipments received from a single generator in excess of 10,000 lamps. All generators accumulating and shipping over 30,000 lamps could notify regulators of shipments made to recyclers. This could then be verified by recyclers filing annual reports with regulators listing all single generator lamp shipments received over 10,000 lamps.

**RESPONSE**

The Agency agrees with the commenter that notification requirements should be clear and concise, as well as in keeping with the Agency's purpose of ensuring protection of human health and the environment. This requires a system that will ensure that regulatory agencies are aware of the management activities of large quantity handlers of hazardous waste lamps.

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). Therefore, in the hazardous waste lamps final rule, small and large quantity handlers of hazardous waste lamps may accumulate hazardous waste lamps for up to one year as proposed, and an additional provision has been added to allow 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. For any accumulation longer than one year, the handler must be able to prove that such accumulation is solely for the purpose of 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 regulations do not impose a quantity limit for accumulation at both small and large quantity handler sites, but imposes a 5,000 kilogram limit for notification purposes. The Agency has decided that the final notification standards for hazardous waste lamps should remain consistent with the provisions established in the universal waste rule. Handlers that accumulate greater than 5,000 kilograms of total universal waste (batteries, pesticides, thermostats, and hazardous waste lamps) or more are required to notify the Agency of universal waste activities and obtain an EPA identification number if they do not already have one. Small quantity handlers are not subject to notification requirements. 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.

The transporter and destination facility categories were retained essentially as proposed. A destination facility is a facility that treats, disposes of, or recycles universal waste lamps. Destination facilities are subject to all hazardous waste management requirements applicable to

permitted or interim status hazardous waste treatment, storage and disposal facilities under Parts 264, 265, 266, 268, 270 and 124. Facilities that recycle hazardous waste lamps without accumulating the lamps before they are recycled are subject to the recycling requirements of ' 261.6(c)(2) which requires that facilities recycling universal waste obtain an EPA identification number. If a recycling facility stores hazardous waste lamps before recycling or performs treatment other than recycling, the facility is subject to full RCRA subtitle C hazardous waste management regulations, including the RCRA permitting requirements.

DCN FLEP-00189

COMMENTS National Aeronautics and Space Admin.

SUBJECT UNWAS3

COMMENT The Agency also requested comments on certain aspects of the proposed rule. It is more appropriate to define the lamps with a numerical standard rather than a weight standard. The industry standard is quantity and records will be maintained by the generators for billing purposes.

#### RESPONSE

The Agency believes that the *total* amount of universal waste being managed at a handler's site is a better indicator of potential risk than the quantity of individual universal wastes being accumulated and handled at a given site. The universal waste rule is designed for wastes that present a relatively low risk during collection (compared to other hazardous waste). The cut off limit for notification is higher than the requirement under the full hazardous waste regulations (i.e., 100 kilograms for conditionally-exempt small quantity generators) but lower than the proposed 35,000 lamp limit, which is equivalent to approximately 10,000 kilograms. EPA has determined that the 5,000 kilogram limit is appropriate for facilities handling hazardous waste lamps and enables facilities to take advantage of the economies of scale available from making fewer large shipments of universal waste, (as opposed to numerous small shipments) while ensuring that regulatory agencies are aware of the large quantity handlers. In addition, other commenters pointed out that it is more practical to set the notification requirement on the basis of a quantity of waste accumulated rather than the total number of items generated. It is easier for a handler to weigh the amount of waste accumulated than it is to count the total number of individual items (e.g., individual light bulbs) accumulated.

The universal waste rule includes a basic recordkeeping requirement to track waste shipments arriving at and leaving from handlers of large quantities of universal waste (i.e., one who accumulated greater than 5,000 kg total universal waste at one time). 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. The Agency believes that standard business records that would normally be kept by any business will fulfill this requirement.