DCN FLEP-00016
COMMENTER Illinois Power Company
SUBJECT EXCL3
COMMENT Thus, IP supports a qualified exemption from Subtitle C regulation. Qualification for the exemption should require lighting wastes to be sent to bonafide recyclers or Subtitle D landfills. Appropriate documentation tracking the waste from generator to disposal/recycling site should be maintained by the generator to demonstrate compliance with the exemption.
RESPONSE
Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

Although EPA has determined that hazardous waste lamps can safely be subject to management requirements that are less stringent than those of full Subtitle C, the Agency does not believe that its proposed conditional exclusion approach would sufficiently protect human health and the environment. It is clear to the Agency that mercury poses an environmental threat and that man-made sources of mercury emissions should be reduced or, where inevitable, managed properly. EPA therefore gave considerable weight to actions that would minimize mercury emissions to the environment while encouraging the collection and environmentally-sound management of hazardous waste lamps. The Agency is convinced that the universal waste approach is the best way to further these goals. The Agency=s analysis predicts that uncontrolled mercury emissions under the conditional exclusion approach are likely to be somewhat greater than under the universal waste approach promulgated in today=s rule.

In today's rule, the Agency is adopting the universal waste tracking requirements in 40 CFR Part 273 for hazardous waste lamps. The universal waste rule includes a basic record keeping requirement to track waste shipments arriving at and leaving from handlers of large quantities of universal waste (i.e., those who accumulated greater than 5,000 kg total universal waste at one time). The required records make 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. Small quantity handlers are not required to keep records of shipments of universal waste lamps.

DCN FLEP-00018
COMMENTER Sony Electronics, Inc.
SUBJECT EXCL3
COMMENT In response to your request for comments, Sony Electronics, Inc. would like to support Option 1 which supports exclusion of mercury-containing lamps from regulation, provided such lamps

are disposed of in permitted municipal landfills or are managed in a permitted mercury reclamation facility.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

Although EPA has determined that hazardous waste lamps can safely be subject to management requirements that are less stringent than those of full Subtitle C, the Agency does not believe that its proposed conditional exclusion approach would sufficiently protect human health and the environment. It is clear to the Agency that mercury poses an environmental threat and that man-made sources of mercury emissions should be reduced or, where inevitable, managed properly. EPA therefore gave considerable weight to actions that would minimize mercury emissions to the environment while encouraging the collection and environmentally-sound management of hazardous waste lamps. The Agency is convinced that the universal waste approach is the best way to further these goals. The Agency=s analysis predicts that uncontrolled mercury emissions under the conditional exclusion approach are likely to be somewhat greater than under the universal waste approach promulgated in today=s rule.

DCN FLEP-00021

COMMENTER Indianapolis Power and Light Co.

SUBJECT EXCL3

COMMENT While Indianapolis Power & Light believes that the recycling of spent lamps is the preferred alternative in some cases, EPA must understand that recycling is not the solution for the management of all spent lamps. First, recyclers cannot accommodate the huge volumes of lamps that would be generated by full participation in relamping programs. Second, all recycling facilities are not as environmentally protective as the management of spent lamps in qualified MSWLFs, especially landfills operating under EPA's new MSWLF standards (which are equipped with liners and leachate collection systems). Indeed, in many cases the management of spent lamps in a qualified MSWLF is more protective of human health and the environment than sending the lamps to a recycling facility where it unclear (1) how much of the mercury is actually being recovered and by what means such recovery is conducted, and (2) how the treatment residuals (e.g., the glass and metal parts) are being reused.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e.,

the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions. The Agency did not limit the universal waste system to the recycling of the waste. Universal waste handlers have several options with regard to waste management. However, the ability to access large quantities of universal waste from central collection centers may encourage the development of safe and effective methods to recycle hazardous waste lamps.

The Agency published a Notice of Data Availability on July 11, 1997 (62 FR 37183). This notice presented data collected by the Agency and an assessment of potential mercury emissions from the management of spent mercury-containing lamps under several regulatory approaches. The Agency does not have extensive data characterizing the behavior of mercury released from spent lamps in a landfill environment over long periods of time. Although available data may support the conclusion that mercury may stay in a stable, non-mobile state in the shorter term and may not migrate from a landfill environment very quickly, studies also show that the greatest threat of mercury releases from the management of lamps is during storage and transport, due to breakage. The universal waste rule provides a format for controlling the management of hazardous waste lamps during storage and transport, while at the same time providing a more streamlined and less stringent set of standards than the Subtitle C management standards.

The universal waste rule ensures that mercury emissions are minimized during all stages of lamp management. Storage and packaging standards for handlers of hazardous waste lamps are included in the universal waste rule to ensure the proper management of waste lamps and to prevent uncontrolled and unintentional breakage during storage and transport to the recycling or treatment and disposal facility. Under the universal waste rule, destination facilities (i.e., recycling facilities and treatment/disposal facilities) are subject to all hazardous waste management requirements applicable to permitted or interim status hazardous waste treatment, storage and disposal facilities; facilities that recycle universal waste lamps without accumulating the lamps before they are recycled are subject to the recycling requirements of 40 CFR '261.6(c)(2). EPA believes that with adequate state oversight, hazardous waste lamps can be safely recycled and the mercury reclaimed. In addition, the Agency believes that recycling facilities will guard against excessive mercury emissions since it is in the recycling facility's best economical interest to limit mercury releases in order to maximize the amount of mercury recovered. Furthermore, the agency notes that today=s rule does not exempt lamp recycling facilities from any applicable OSHA workplace standards or Clean Air Act emission standards. Residuals from recovery operations also must be managed in accordance with all applicable solid and hazardous waste management requirements. If residuals exhibit a characteristic of hazardous waste, they must be managed as hazardous waste.

In addition, today=s final rule does not affect the status of household hazardous waste or conditionally exempt small quantity generator (CESQG) waste, both of which can continue to be disposed of in municipal solid waste landfills.

DCN FLEP-00068
COMMENTER H.B. Fuller Company
SUBJECT EXCL3
COMMENT A majority of our facilities would be exempted from the proposed regulation because of the amount of lamps discarded; however, H.B. Fuller would favor the Conditional Exclusion management option for mercury-containing lamps, especially if mercury reclamation was emphasized as the primary disposal method. We believe this option allows EPA to meet their protection of environment and human health objectives. We view the mercury reclamation method as the most feasible disposal option currently available. We see the recycling/reclamation emphases as the viable alternative for long-term protection.
RESPONSE
Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

Although EPA has determined that hazardous waste lamps can safely be subject to management requirements that are less stringent than those of full Subtitle C, the Agency does not believe that its proposed conditional exclusion approach would sufficiently protect human health and the environment. It is clear to the Agency that mercury poses an environmental threat and that man-made sources of mercury emissions should be reduced or, where inevitable, managed properly. EPA therefore gave considerable weight to actions that would minimize mercury emissions to the environment while encouraging the collection and environmentally-sound management of hazardous waste lamps. The Agency is convinced that the universal waste approach is the best way to further these goals. The Agency=s analysis predicts that uncontrolled mercury emissions under the conditional exclusion approach are likely to be somewhat greater than under the universal waste approach promulgated in today=s rule.

The Agency did not limit the universal waste system to the recycling of the waste. Universal waste handlers have several options with regard to waste management. However, the ability to access large quantities of universal waste from central collection centers may encourage the development of safe and effective methods to recycle hazardous waste lamps.

DCN FLEP-00115
COMMENTER American Textile Manufacturers Institute
SUBJECT EXCL3
COMMENT ATMI agrees with EPA that an exemption should be provided for spent tubes that are disposed of in state-permitted municipal landfills or managed in mercury reclamation facilities that are

permitted, licensed or registered by the state.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

Although EPA has determined that hazardous waste lamps can safely be subject to management requirements that are less stringent than those of full Subtitle C, the Agency does not believe that its proposed conditional exclusion approach would sufficiently protect human health and the environment. It is clear to the Agency that mercury poses an environmental threat and that man-made sources of mercury emissions should be reduced or, where inevitable, managed properly. EPA therefore gave considerable weight to actions that would minimize mercury emissions to the environment while encouraging the collection and environmentally-sound management of hazardous waste lamps. The Agency is convinced that the universal waste approach is the best way to further these goals. 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 Agency=s analysis predicts that uncontrolled mercury emissions under the conditional exclusion approach are likely to be somewhat greater than under the universal waste approach promulgated in today=s rule.

The Agency did not limit the universal waste system to the recycling of the waste. Universal waste handlers have several options with regard to waste management. However, the ability to access large quantities of universal waste from central collection centers may encourage the development of safe and effective methods to recycle hazardous waste lamps.

DCN FLEP-00130

COMMENTER U.S. Department of Energy

SUBJECT EXCL3

COMMENT Also, the proposed condition requiring mercury-containing lamps be sent to a "State permitted, licensed, or registered mercury reclamation facility" is too vague. For example, DOE is unsure whether a mercury reclamation facility with a State air or National Pollution Discharge Elimination System (NPDES) permit would meet this condition. Similarly, DOE is unsure whether a recycling facility with a permit that is not specific to mercury would meet this condition. Assuming that EPA is referring to a State permit, license, or registration specific to mercury recycling, this condition seems to impose stricter regulatory requirements on mercury recyclers than is currently contained in the Federal hazardous waste regulations. Hazardous waste

recycling processes are currently exempt from hazardous waste regulation under 40 CFR 264 and 265, except for subparts AA (Air Emission Standards for Process Vents) and BB (Air Emission Standards for Equipment Leaks) (40 CFR 261.6(c)(1)). (Facilities that store recyclable materials are, however, regulated under all applicable portions of 40 CFR 264 and 265.) DOE is concerned that a vague requirement or a requirement that is perceived to be stricter than current regulatory requirements may discourage mercury recycling. Therefore, DOE urges EPA to improve the proposed regulatory language regarding mercury recycling facilities to clarify EPA's intent In addition, DOE reminds EPA that requirements that are more stringent than current requirements for mercury recyclers can have the effect of discouraging mercury recycling.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

The universal waste rule ensures that mercury emissions are minimized during all stages of lamp management. The existing requirements for universal waste destination facilities (i.e., hazardous waste treatment, storage, and disposal (TSD) facilities, or recycling facilities) are found in Subpart E of 40 CFR Part 273. Under the universal waste rule, destination facilities are subject to all hazardous waste management requirements applicable to permitted or interim status hazardous waste treatment, storage and disposal facilities under 40 CFR Parts 264 and 265, as well as applicable standards in Parts 268 and 270. Facilities that recycle universal waste lamps without accumulating the lamps before they are recycled are subject to the recycling requirements of '261.6(c)(2). EPA believes the universal waste system is the best way to minimize mercury emissions while encouraging the collection and environmentally sound management of hazardous waste lamps.

DCN FLEP-00156

COMMENTER National Electrical Manufacturers Assn.

SUBJECT EXCL3

COMMENT 2. EPA proposes that management in a State-permitted, -licensed, or -registered mercury reclamation facility would also qualify for the exclusion. NEMA believes that these conditions are less stringent than those applied to landfilling and are overly lax. While "State-permitted" facilities may be acceptable, a mercury reclamation facility that is "State-licensed" or "State-registered" may not be receiving sufficient state

oversight on waste issues. A state permit is such a general requirement that it could include a siting or zoning permit or simply an air permit. State permits also are unlikely to address the issue of mercury contamination of the end products of recycling. Oversight of recycling operations is necessary to avoid situations that NEMA is aware of where there are clear environmental and worker exposure issues involving mercury, glass, and phosphor powder. NEMA is also aware of aluminum endcaps being used in food industry products and mercury-contaminated residuals being used in heat applications and in fertilizer. NEMA suggests that our BMPs as described in Section III be incorporated into the conditions for the recycling exclusion.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

The universal waste rule ensures that mercury emissions are minimized during all stages of lamp management. The existing requirements for universal waste destination facilities (i.e., hazardous waste treatment, storage, and disposal (TSD) facilities, or recycling facilities) are found in Subpart E of 40 CFR Part 273. Under the universal waste rule, destination facilities are subject to all hazardous waste management requirements applicable to permitted or interim status hazardous waste treatment, storage and disposal facilities under 40 CFR Parts 264 and 265, as well as applicable standards in Parts 268 and 270. Facilities that recycle universal waste lamps without accumulating the lamps before they are recycled are subject to the recycling requirements of '261.6(c)(2). EPA believes that with adequate state oversight, hazardous waste lamps can be safely recycled and the mercury reclaimed. In addition, the Agency believes that recycling facilities will guard against excessive mercury emissions since it is in the recycling facility's best economical interest to limit mercury releases in order to maximize the amount of mercury recovered. Furthermore, the Agency notes that today=s rule does not exempt lamp recycling facilities from any applicable OSHA workplace standards or Clean Air Act emission standards. Residuals from recovery operations also must be managed in accordance with all applicable solid and hazardous waste management requirements. If residuals exhibit a characteristic of hazardous waste, they must be managed as hazardous waste.

DCN FLEP-00160
COMMENTER Central and South West Services, Inc.
SUBJECT EXCL3
COMMENT V. RECYCLING IS A LAUDABLE MANAGEMENT OPTION, BUT DISPOSAL IN QUALIFIED MSWLFs MUST REMAIN

A VIABLE OPTION FOR LAMPS While the proposal does not distinguish between disposal versus recycling as a condition for qualifying for either management option (i.e., the conditional exclusion or the universal waste rule), certain commentors may be taking the position that any alternative management program for mercury-containing lamps must be conditioned on recycling. While CSW fully supports the recycling of mercury-containing lamps and recognizes that, in appropriate circumstances and with implementation of adequate controls, recycling is a viable management option, recycling cannot be the only management option for lamps under either scenario.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

The Agency did not limit the universal waste system to the recycling of the waste. Universal waste handlers have several options with regard to waste management. However, the ability to access large quantities of universal waste from central collection centers may encourage the development of safe and effective methods to recycle hazardous waste lamps.

Although EPA has determined that hazardous waste lamps can safely be subject to management requirements that are less stringent than those of full Subtitle C, the Agency does not believe that its proposed conditional exclusion approach would sufficiently protect human health and the environment. It is clear to the Agency that mercury poses an environmental threat and that man-made sources of mercury emissions should be reduced or, where inevitable, managed properly. EPA therefore gave considerable weight to actions that would minimize mercury emissions to the environment while encouraging the collection and environmentally-sound management (recycling or disposal in a Subtitle C facility) of hazardous waste lamps. The Agency is convinced that the universal waste approach is the best way to further these goals. The Agency=s analysis predicts that uncontrolled mercury emissions under the conditional exclusion approach are likely to be somewhat greater than under the universal waste approach promulgated in today=s rule.

In addition, today=s final rule does not affect the status of household hazardous waste or conditionally exempt small quantity generator (CESQG) waste, both of which can continue to be disposed of in municipal solid waste landfills.

DCN FLEP-00228
COMMENTER STAPPA/ALAPCO
SUBJECT EXCL3

COMMENT If the U.S. Environmental Protection Agency (EPA) continues to consider exempting these lamps from RCRA Subtitle C, then only the recycling portion, with strong documentation requirements, should be considered.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions. The universal waste rule represents a significant cost reduction over Subtitle C management requirements for generators, collectors, and transporters, yet ensures that lamps are managed in an environmentally protective manner and are properly recycled or treated at Subtitle C facilities prior to disposal.

Although EPA has determined that hazardous waste lamps can safely be subject to management requirements that are less stringent than those of full Subtitle C, the Agency does not believe that its proposed conditional exclusion approach would sufficiently protect human health and the environment. It is clear to the Agency that mercury poses an environmental threat and that man-made sources of mercury emissions should be reduced or, where inevitable, managed properly. EPA therefore gave considerable weight to actions that would minimize mercury emissions to the environment while encouraging the collection and environmentally-sound management of hazardous waste lamps. The Agency is convinced that the universal waste approach is the best way to further these goals. The Agency=s analysis predicts that uncontrolled mercury emissions under the conditional exclusion approach are likely to be somewhat greater than under the universal waste approach promulgated in today=s rule.

In today's rule, the Agency is adopting the universal waste tracking requirements in 40 CFR Part 273 for hazardous waste lamps. The universal waste rule includes a basic record keeping requirement to track waste shipments arriving at and leaving from handlers of large quantities of universal waste (i.e., those who accumulated greater than 5,000 kg total universal waste at one time). The required records make 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. Small quantity handlers are not required to keep records of shipments of universal waste lamps.

DCN SCSP-L0009

COMMENTER National Electric Manufacturers Assn.

SUBJECT EXCL3

COMMENT NEMA also believes that disposal of lamps containing mercury by properly licensed and regulated recyclers/reclaimers is another viable option.

2) recycling/reclamation be considered an acceptable alternative

to disposal when allowed to compete in the marketplace with other environmentally sound alternatives.

RESPONSE

Today's final rule adds mercury-containing lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions. The universal waste rule represents a significant cost reduction over Subtitle C management requirements for generators, collectors, and transporters, yet ensures that lamps are managed in an environmentally protective manner and are properly recycled or treated at Subtitle C facilities prior to disposal.

The Agency agrees with the commenter that recycling by properly licensed and regulated recyclers/reclaimers is an acceptable alternative to treatment and disposal of hazardous waste lamps. Today's final rule will greatly facilitate the environmentally-sound collection and increase the proper recycling or treatment of hazardous waste lamps. The ability to access large quantities of universal waste from central collection centers may encourage the development and use of safe and effective ways to recycle universal waste.

The universal waste rule ensures that mercury emissions are minimized during all stages of lamp management. Under the universal waste rule, destination facilities (those facilities that treat, dispose, or recycle universal wastes) are subject to all hazardous waste management requirements applicable to permitted or interim status hazardous waste treatment, storage and disposal facilities under 40 CFR Parts 264 and 265, as well as applicable standards in Parts 268 and 270. Facilities that recycle universal waste lamps without accumulating the lamps before they are recycled are subject to the recycling requirements of '261.6(c)(2).

COMMENTER Power Savers, Inc.

SUBJECT EXCL3

COMMENT CONDITIONS OF EXCLUSION We also support recycling of mercury if it is conducted safety and if reuse is safe. This should be conducted in compliance with OSHA mercury standards.

RESPONSE

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., the universal waste rule is less stringent than Subtitle C management standards), but also allows the Agency to set specific management standards to control potential emissions.

The universal waste rule ensures that mercury emissions are minimized during all stages of lamp management. Storage and packaging standards for handlers of hazardous waste lamps are included in the universal waste rule to ensure the proper management of waste lamps and to

prevent uncontrolled and unintentional breakage during storage and transport to the recycling or treatment or disposal facility. Under the universal waste rule, destination facilities (i.e., recycling facilities and treatment/disposal facilities) are subject to all hazardous waste management requirements applicable to permitted or interim status hazardous waste treatment, storage, and disposal facilities; facilities that recycle universal waste lamps without accumulating the lamps before they are recycled are subject to the recycling requirements of 40 CFR '261.6(c)(2). EPA believes that with adequate state oversight, hazardous waste lamps can be safely recycled and the mercury reclaimed. In addition, the Agency believes that recycling facilities will guard against excessive mercury emissions since it is in the recycling facility's best economical interest to strive to limit mercury releases since mercury is essentially the product of the recovery process. Furthermore, the Agency notes that today=s rule does not exempt lamp recycling facilities from any applicable OSHA workplace standards or Clean Air Act emission standards. Residuals from recovery operations must be managed in accordance with all applicable solid and hazardous waste management requirements. If residuals exhibit a characteristic of hazardous waste, they must be managed as hazardous waste.

Source reduction, which is the reduction or elimination of the toxicity and/or volume of a waste product, is at the top of EPA's hierarchy of solid waste management methods. Second in the hierarchy is recycling. Today's final rule will greatly facilitate the environmentally-sound collection and the proper recycling or treatment of hazardous waste lamps. Based on the belief that less complex and less costly regulations will increase the collection of universal wastes, the Agency did not limit the universal waste system to the recycling of waste. Universal waste handlers have several options with regard to waste management. However, the ability to access large quantities of universal waste from central collection centers may encourage the development of safe and effective methods to recycle universal waste including lamps.