



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

June 3, 1997

Stephen E. Pozner, Senior Vice President
Global Recycling Technologies, Inc.
387 Page Street
Stoughton, MA 02072

Re: Regulation of ^{Fluorescent lamps} mercury bearing lamps

Dear Mr. Pozner:

This is in response to your letter of February 4, 1997, in which you request a written response from EPA, Region I on two particular questions. The following constitutes Region I's response to those questions.

Your first question states: "Can mercury bearing lamps, that fail the TCLP analytical test for mercury, be shipped from the site of generation to an off-site facility that does not meet the definition of 'designated facility' (40 CFR 260.10)?"

The answer to your question is no, hazardous wastes shipped from the site of generation must be manifested to a designated facility. However, the designated facility may be a recycling facility, not just a treatment, storage or disposal facility.

Hazardous waste determinations are the responsibility of the person who generates solid waste following the procedures outlined in 40 CFR § 262.11. The regulations at 40 CFR Part 262, Subpart B state that generators of hazardous waste shipping waste off-site must prepare a manifest which indicates the final destination of the waste (the designated facility). A designated facility is defined at 40 CFR § 260.10 as

".... hazardous waste treatment, storage, or disposal facility which (1) has received a permit (or interim status) in accordance with the requirements of parts 270 and 124 of 40 CFR, (2) has received a permit (or interim status) from a State authorized in accordance with Part 271 of 40 CFR, or (3) is regulated under section 261.6(c)(2) or Subpart F of part 266 of 40 CFR, and (4) that has been designated on the manifest by the generator pursuant to section 260.20[sic (262.20)]. If a waste is destined to a facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving State to accept such waste".



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Your second question is as follows: "Does the U.S. EPA consider 'crushing' mercury bearing lamps (that fail TCLP test for mercury) at an off-site facility, who then ships the crushed mercury contaminated powder/glass to a third party for distillation, a 'recycler' as defined in 40 CFR § 261.6(c)?"

The answer to your question is yes, if the crushing operation is part of a legitimate recycling process where no storage or disposal occurs and the mercury contaminated powder/glass is shipped to a third party for distillation. However, an off-site facility which crushes mercury bearing lamps and then manifests the hazardous waste to a permitted treatment, storage or disposal (TSD) facility would be considered a treatment facility treating hazardous waste and therefore would be subject to regulation under 40 CFR § 264.

Hazardous wastes that are recycled are defined by EPA as recyclable materials and are subject to the requirements for generators, transporters, and storage facilities. EPA considers mercury-bearing lamps which are recycled to be recyclable materials. A material is recycled if it is used, reused or reclaimed (see 40 CFR §261.1(c)(7)). Legitimate recycling processes are not subject to RCRA Subtitle C regulation under 40 CFR § 261.6 (c) except as noted in 40 CFR § 261.6(d). (See letter dated 7/28/93 from Jeffery D. Denit, Acting Director, OSW to Mr. D.B. Redington, Monsanto Company).

Of course, the sole act of crushing lamps would not be considered full recycling, the material would then need to be used, reused or reclaimed. In order for a facility doing crushing to maintain a claim that they are a recycler of recyclable materials, it must document what materials are being recycled and that its process is a legitimate step towards recycling. The facility must maintain the records that are necessary to substantiate that full recycling of the material ultimately is occurring, as specified at 40 CFR §261.2(f).

Generators and transporters of recyclable materials are subject to the applicable requirements of 40 CFR part 262 and 263 and the notification requirements of section 3010 of RCRA. Owners and operators of facilities that recycle recyclable materials without storing them before they are recycled are also subject to the notification requirements of section 3010 of RCRA. They are also subject to the requirements of 40 CFR §§ 265.71 and 265.72, which deal with the use of a manifest and manifest discrepancies, and the requirements of 40 CFR § 261.6(d), which states that facilities otherwise subject to the permitting requirements of RCRA that have hazardous waste management units that recycle hazardous wastes are subject to the requirements of subparts AA and BB of 40 CFR part 264 or part 265.

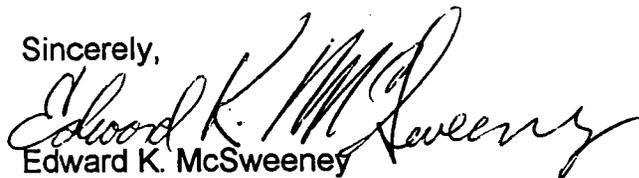
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On May 11, 1995 (60 FR 25492), the Agency promulgated the Universal Waste Rule (UWR). The rule creates a framework for, among other things, the collection of several categories of hazardous waste for recycling. The streamlined regulatory requirements apply to hazardous waste batteries, certain pesticides, and mercury-containing thermostats. The UWR also creates a procedure for states to add additional wastes, such as mercury-containing lamps, to the previously listed hazardous wastes.

The UWR is currently not effective in Massachusetts. However, our understanding is that the MADEP will apply to operate the UWR during 1997 and it is our hope that we will be able to promptly approve its application. We also anticipate that Massachusetts will simultaneously be applying for approval to administer the Toxicity Characteristic (TC) Rule, thus enabling them to treat fluorescent lamps as universal waste. Global Recycling Technologies should carefully review the Massachusetts requirements when they are adopted in order to determine the applicability of the requirements to Global's operations.

EPA-New England maintains the position that the continued establishment of environmentally sound recycling processes should be supported. We hope the above answers your questions. Should you have any additional questions please contact me at 617-565-3559 or Gary Gosbee at 617-565-3725.

Sincerely,



Edward K. McSweeney
Associate Director of Waste Policy

Enclosure

cc: Steven A. DeGabriele, Director, MADEP
Bill Sirull, MADEP
Gary Gosbee, EPA-OEP
Suzanne Parent, EPA-OES
Jeff Fowley, EPA-ORC
J. Duclos, Supervisor, Hazardous Waste Compliance Section, NHDES
D. Sattler, Supervisor, WEED, CTDEP
L. Hellested, Supervising Engineer, RIDEM
S. Ladner, Supervisor, Bureau of Remediation & Waste Management, MEDEP
S. Simoes, Waste Management Division, VTDEC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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JUL 28 1993

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. D. B. Redington
Monsanto Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63167

Dear Mr. Redington:

Thank you for your letter of March 30, 1993, in which you urged the agency to provide an exemption from the Resource Conservation and Recovery Act (RCRA) hazardous waste regulations for fluorescent lamps. You also requested that the agency clarify the regulatory status of crushing fluorescent lamps to recover mercury values. In your letter, you discuss "the need to crush bulbs as the first step toward shipment of the materials to a recycler." You expressed concern that crushing of fluorescent lamps might constitute treatment.

With regard to exempting fluorescent lamps from EPA's hazardous waste regulations, the Agency is currently considering various options for regulating the management of spent lamps. We expect to complete this analysis soon and then publish the selected approach in the Federal Register for public comment. We would very much welcome your comments on that proposal. In the meantime, the following provides guidance on the current regulatory status of crushing of fluorescent lamps.

Generally, recycling of hazardous wastes would be defined as treatment under 40 CFR 260.10. Legitimate recycling processes, however, are not subject to RCRA Subtitle C regulation under 40 CFR 261.6(c) except as noted in 40 CFR 261.6(d). If crushing fluorescent lamps that fail the toxicity characteristic is a necessary part of a legitimate recycling process, it would not be subject to RCRA Subtitle C regulatory requirements except as specified in 40 CFR 261.6(d). The crushing activities may occur at the generator's facility, or at the recycler's facility and remain exempt under 40 CFR 261.6(c). You should be aware that any storage of crushed lamps that fail the toxicity characteristic still would be subject to RCRA Subtitle C regulation (e.g., 40 CFR 262.14 for generator accumulation or 40 CFR Part 264 for other storage).

Also note that spent fluorescent lamps contain a small amount of elemental mercury as well as mercury that is bound to the phosphor powder found inside the bulb. The Agency has little data on the potential hazard of mercury releases from bulb leakage or crushing but we are concerned that crushing may

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present a hazard to worker safety. In our proposal regarding the management of spent fluorescent lamps (described above), the Agency will be requesting data on the potential hazard of breaking or crushing mercury-containing lamps.

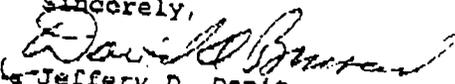
The Occupational Safety and Health Administration (OSHA) sets standards for maximum exposure limits for mercury in the workplace. These standards are found at 29 CFR Part 1910; there may also be applicable State worker safety requirements. You should ensure that the crushing operations comply with applicable occupational and health standards.

Under Section 3006 of RCRA, individual states can be authorized to administer and enforce their own hazardous waste programs in lieu of the Federal program. When a State is not authorized to administer its own program, the appropriate EPA Region administers the program and is the appropriate contact for any case-specific determinations. Please also note that under section 3009 of RCRA, States retain authority to promulgate regulatory requirements that are more stringent than Federal regulatory requirements.

If you have questions about how the recycling and storage requirements apply to your specific activities, you should contact the State agency (or EPA regional office in a State not authorized to administer the RCRA program) for a site-specific determination.

If you have further questions about RCRA Subtitle C regulatory requirements, please contact Charlotte Mooney or Ann Codrington of my staff at (202)260-8551. If you have questions about the proposal regarding the management of spent fluorescent lamps, contact Valerie Wilson at (202)260-4770. Thank you for your interest in the safe recycling of hazardous waste.

Sincerely,


Acting ~~to~~ Jeffery D. Denit
Acting Director,
Office of Solid Waste