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Kevin McSweany,  
Associate Director for Waste Policy  
US EPA Region 1, mail code CAA  
JFK Federal Building  
Boston, MA 02203

Handwritten notes: "Go", "Hazardous", "No Action - Ye"

RE: Mercury Containing Lamp Recycling Operations

Mr. McSweany:

Per a conversation with Lisa Papeti, Region I of the United States Environmental Protection Agency (USEPA), and Bill Sirull, of the Massachusetts Department of Environmental Protection (DEP), regarding a mercury containing lamp recycling operation, it was suggested that you be notified of Alta Resource Management Services, Inc.'s (ALTA) intention to perform full scale lamp recycling services.

The DEP has indicated that ALTA is operating consistent with the Code of Massachusetts Regulations (CMR). ALTA has been advised by the DEP that the USEPA may have different or additional requirements for the management of used intact mercury containing lamps going for recycling. ALTA's goal is to comply with all regulatory authorities.

For background purposes, the USA Lights Fluorescent Lamp Processing System purchased by ALTA, will be used to separate mercury containing hazardous components from non-hazardous components contained in fluorescent and HID lamps. ALTA has made several operating modifications to the equipment to enhance the mechanical operations of the equipment at a significant cost to ALTA.

The system, which operates under a negative pressure, breaks the lamps and crushes the components. The components are then separated into the aluminum, ferrous and non-ferrous metals, glass, and phosphor powder. The equipment has the capability to process 2500 lamps per hour.

Random samples for each of the components are taken and TCLP tested. The phosphor powder is sent to a fully permitted mercury recycling facility for reclamation.

Mercury vapor and phosphor dust released from the lamps during crushing and material separation is captured by the system's continuous duty carbon dust/vapor collection system. The environment and venting are monitored twice per operating shift utilizing a Jerome mercury monitoring analyzer.

Mercury emissions to the atmosphere are designed to be  $< .1 \text{ mg/m}^3$  (99.995% mercury removal efficiency). This result is based on a particulate and mercury emission engineering test on the glass processor filter system at the USA Lights facility in St. Paul, Minnesota, on August 23, 1994, as conducted by Pace Incorporated. Data is on file at ALTA for USEPA review. Interior air is re-circulated through a closed system consisting of five filtered inlets and ten carbon filters before being exhausted back into the room. This allows any escaped mercury vapor and



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phosphor powder to be filtered out of the processing area. All used filters and carbon filters are sent off site for retort.

★ ALTA was founded on the premise that in order to differentiate ourselves within the marketplace we would not only comply with, rather, implement mechanisms to exceed the regulations. ALTA finds itself in a difficult position in regards to our goal. The regulations seem to vary across the different regulatory authorities. While ALTA has constructed its facility and procedures to exceed the most stringent regulations, we would like to seek guidance on how the Region views the regulations that ALTA is required to comply with now and in the future.

★ For instance, should ALTA allocate the resources and spend the significant amount of time and money applying, and getting approval for a Massachusetts Class A or C recycling permit now? Will that be required in the future? ALTA's resources are limited and we obviously want to show prudence in our allocation of these resources.

★ ALTA understands that the Northeast Waste Management Officials' Association has been created to foster an environment where the six New England states, New York, and New Jersey can work together in developing a complimentary approach for state implementation of the EPA universal waste rule. Further, that the USEPA is aware that each State's regulations within Region I are currently different in relation as to how the used intact mercury containing lamps are handled, and therefore, ALTA respectfully requests that Region I defer the issues of the handling of the mercury containing lamps to the State level.

★ It would be optimal for these issues to be resolved with the MADEP's involvement so both regulating parties and ALTA will know exactly how to proceed. We are prepared to meet with the Region (perhaps jointly with the MADEP) to discuss these issues further.

Please do not hesitate to contact me for any additional information.

★ Thank You

  
David J. Leishman  
President

cc: John DeVillars  
Commissioner Struhs