



Florida Department of
Environmental Protection
Hazardous Waste Inspection Report

FACILITY INFORMATION:

Facility Name: Aerc Com Inc

On-Site Inspection Start Date: 09/11/2008

On-Site Inspection End Date: 09/11/2008

ME ID#: 43329

EPA ID#: FLD984262782

Facility Street Address: 4317 Fortune Pl Ste J, West Melbourne, Florida 32904-1509

Contact Mailing Address: 4317-J Fortune Pl, W Melbourne, Florida 32904-1509

County Name: Brevard

Contact Phone: (321) 952-1516

NOTIFIED AS:

LQG (>1000 kg/month)

Transporter

Transfer Facility

TSD Facility Unit Type(s)

INSPECTION TYPE:

Routine Inspection for TSD Facility Unit Type(s)

Routine Inspection for Transfer Facility

Routine Inspection for Transporter facility

Routine Inspection for LQG (>1000 kg/month) facility

INSPECTION PARTICIPANTS:

Principal Inspector: Danielle M Bentzen, Environmental Specialist

Other Participants: Janine Kraemer, Environmental Specialist; Tracy DePaola, District Branch Manager

LATITUDE / LONGITUDE: Lat 28° 5' 39.5694" / Long 80° 41' 51.624"

SIC CODE: 7389 - Services - business services, nec

TYPE OF OWNERSHIP: Private

Introduction:

On September 11, 2008, Danielle Bentzen and Janine Kraemer, Florida Department of Environmental Protection (FDEP), accompanied by Tracy DePaola, AERC, conducted an inspection of AERC Recycling Solutions (AERC), for compliance with state and federal hazardous waste standards. AERC was inspected as a generator, transporter, universal waste generator/handler, and hazardous waste storage facility.

The facility has operated at this location since November 1993 and employs approximately 18 people who work Monday through Friday from 7:00AM to 11:00PM. City of West Melbourne provides potable water and sewer. The facility owns three trucks and leases two trucks for transportation of universal waste.

The facility was originally named Mercury Technologies International (MTI) but changed its name to Advanced Environmental Recycling Company (AERC) in 2001. The initial RCRA mercury recycling permit, HO05-275169, was issued December 30, 1996.

INSPECTION HISTORY:

On September 24, 1999, MTI was inspected by the Department and was in compliance at the time of the inspection.

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On July 28, 2000, MTI was inspected by the Department and was not in compliance at the time of the inspection. The facility was cited for failure to label universal waste containers and failure to have adequate aisle space for containers. The case was resolved by a Short Form Consent Order and a civil penalty of \$1,300.00.

On March 15, 2001, Mercury Technologies International changed their name to AERC and re-notified as a TSD, LQG and Universal Waste Handler. AERC was issued a permit on December 3, 2001. Additionally, the facility was inspected by the Department and was in compliance at the time of the inspection.

On August 26, 2002, AERC notified as a TSD, LQG, Universal Waste Handler and Hazardous Waste Transporter. The facility was inspected by the Department and was in compliance at the time of the inspection.

On September 4, 2003, AERC was inspected and was not in compliance at the time of the inspection. The facility was cited for: storage of waste over 90 days; failure to label two corrosive waste drums with accumulation start date; failure to provide adequate aisle space; failure to provide annual training to staff; incomplete contingency plan; failure to date universal waste containers; failure to keep mercury containers closed; and failure to file a manifest discrepancy report within the required time frame. The case was resolved by a Short Form Consent order, which included a Supplemental Environmental Project and a civil penalty of \$4,200.00.

On September 30, 2004, AERC was inspected and found to be in compliance.

On January 10, 2005, AERC was inspected and found to be in compliance.

On May 16, 2006, AERC was inspected and found to be in compliance.

On May 24, 2007, AERC was inspected and was not in compliance at the time of the inspection. The facility was cited for: failure to obtain original manifests; failure to document daily container count log; failure to provide annual training to staff; failure to provide adequate aisle space; failure to update contingency plan; failure to process crushed bulbs within the one year time frame as per permit. The case was resolved by a Long Form Consent order, which included a Supplemental Environmental Project and a civil penalty of \$750.00. The Supplemental Environmental Project is still on-going.

Process Description:

The facility receives spent mercury containing bulbs and devices for the purpose of crushing or dismantling and separating the lamps or devices in a manner as to produce separated individual recyclable components such as glass, scrap metal and mercury containing powder (phosphor powder). A lamp recycler (LSS-1) separates the end caps, glass, shatter shields, and filaments from the phosphor powder. The metal and phosphor powder is sent to a sister company in Pennsylvania for thermal retort. At times when the LSS-1 is not working properly, the glass is put through the machine twice and then sent off to the Brevard County landfill. Samples are taken daily of the glass and end caps. Those samples are then composited and sent for testing.

The facility cannot process lamps or devices containing liquid mercury. Lamps or devices containing liquid mercury are consolidated and sent to the Pennsylvania facility.

High Intensity Discharge (HID) lamps are dismantled in order to remove mercury containing ampoules from the bases. The consolidated ampoules are sent to the Pennsylvania facility.

The facility is also a universal waste handler. All types of batteries are brought to the facility then sorted and consolidated into 55-gallon drums or onto pallets. The batteries are shipped off-site for reclamation.

AERC accepts PCB and non-PCB lighting ballasts for sorting and shipment to other recycling facilities, as well as electronic scrap for demanufacturing or remanufacturing. Most electronics are

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managed at AERC's facility located at 4301 Woodland Park Drive, Suite 105, West Melbourne, Florida.

AERC also operates a 10-day transfer facility for hazardous waste destined for the AERC Pennsylvania TSD facility.

90-Day Storage Area:

This area is for containers of mercury containing devices that are sent to the Pennsylvania facility for final disposal. Inspection of this area was difficult to conduct due to lack of aisle space [40 CFR 265.35]. There was one drum of phosphorous mercury dated May 23, 2008 past the 90-day limit [40 CFR 262.34(b)].

New Potential Violations and Areas of Concern:

Checklist Independent Potential Violations and Areas of Concern

Type: Violation
Rule: 265.35
Explanation: Specifically, AERC did not provide proper aisle space for containers of hazardous waste.
Corrective Action: AERC shall allow sufficient aisle space to allow access for regulatory personnel to inspect all containers and for the unrestricted movement of emergency fire personnel spill control equipment, and decontamination equipment in the event of an emergency.

*** This violation was cited previously, during inspections in 2000, 2003, and 2007

Type: Violation
Rule: 262.34(b)
Explanation: Specifically, AERC failed to dispose of a 55-gallon drum of phosphorous mercury within 90-days.
Corrective Action: Within 30 days of receipt of this Warning Letter, AERC shall provide documentation that any waste exceeding the 90-day time limit has been properly disposed and submit to the Department written notification that all employees involved with hazardous waste management and/or practices have been informed that all containers of hazardous waste shall be disposed of within the 90-day accumulation date.

NOTE: On September 15, 2008, AERC removed the waste exceeding the 90-day time limit from the facility on manifest #000452846FLE.

Battery Storage Area:

At the time of the inspection approximately one third of the warehouse was being used for waste batteries managed as universal waste. Batteries are sorted and consolidated by type. There were three 55-gallon drums used for satellite accumulation of oils, sodium hydroxide, and sulfuric acid. All drums were closed and properly labeled.

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Bulb Storage Area:

At the time of the inspection two rows of containers storing crushed bulbs were waiting to be processed. All of the containers were labeled properly, however there were numerous drums that did not have an accumulation start date [40 CFR 268.50(a)(2)(i)]. Without accumulation start dates, it was difficult for the inspectors to determine if the drums were with the 1-year time frame for storage.

There were seven rows of various lamps waiting to be processed. All containers were properly labeled and within the appropriate time limit.

New Potential Violations and Areas of Concern:**Checklist Independent Potential Violations and Areas of Concern**

| | |
|--------------------|--|
| Type: | Violation |
| Rule: | 268.50(a)(2)(i) |
| Explanation: | Specifically, AERC had numerous drums that did not have an accumulation start date as per Part I - General and Standard Conditions 32. |
| Corrective Action: | Within 30 days of receipt of this Warning Letter, AERC shall submit to the Department written notification that all employees involved with hazardous waste management and/or practices have been properly trained on dating drums with the accumulation start date. |

Production Area:

LSS-1 was not operational at the time of the inspection. The LSS-1 had jammed while processing crushed bulbs the night before the inspection.

Lamps coated in a plastic shatter shield are sorted and stored separately from regular lamps because of the plastic. The shatter shield is manually removed from the lamps prior to crushing.

HID lamps contain liquid mercury; therefore, the lamps cannot be processed at this facility and must be shipped to the Pennsylvania facility. HID lamps are sorted, mercury ampoules removed, and stored separately from regular lamps until transported. At the time of the inspection, there was one 55-gallon drum of mercury ampoules, which was labeled and dated properly.

Outside next to the loading dock is the area for the roll off containers used to store glass from the mercury lamp processing operation. At the time of the inspection, these roll offs were being emptied.

This area also contained the air filtering unit for the LSS-1. Three sets of air filters are used, pre-filters, HEPA-filters, and carbon filters. The filters are monitored on a regular basis and when the levels of Mercury reach a certain level, the filters are changed. The Pre-Filters have been tested and determined to be non-hazardous. The HEPA-filters and carbon filters are disposed of as hazardous waste.

Records Review:

Records were reviewed for 2007 and 2008. The records included daily inspection logs, daily container count logs, contingency plan, position descriptions, training records, land disposal restriction notifications, twelve week rolling average of mercury levels of end caps and glass, biennial report, and manifests.

The facility is using Cintas to launder shop towels. The facility is sending all of the mercury containing material, including batteries, to their Allentown, Pennsylvania facility for further processing. Alkaline Batteries are shipped to Exide for recycling. All other batteries are shipped to

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Toxoc in Ohio. Forklift batteries are shipped back to the supplier for repair.

Daily inspection logs, daily container log, contingency plan, training records, manifests, position descriptions, land disposal restriction notifications, twelve week rolling average of mercury levels of end caps and glass, and the biennial report were in compliance.

Summary of Potential Violations and Areas of Concern:Potential Violations

| Rule Number | Area | Date Cited | Explanation |
|----------------------------------|---------------------|-------------------|--|
| Checklist Independent Violations | | | |
| 265.35 | 90-Day Storage Area | 09/11/2008 | Specifically, AERC did not provide proper aisle space for containers of hazardous waste. |
| 262.34(b) | 90-Day Storage Area | 09/11/2008 | Specifically, AERC failed to dispose of a 55-gallon drum of phosphorous mercury within 90-days. |
| 268.50(a)(2)(i) | Bulb Storage Area | 09/11/2008 | Specifically, AERC had numerous drums that did not have an accumulation start date as per Part I - General and Standard Conditions 32. |

Areas of Concern

No Areas of Concern

Conclusion:

AERC was inspected as a permitted storage/mercury recovery facility, LQG of hazardous waste, and an LQH of universal waste, and was not in compliance at the time of the inspection.

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Signed:

A hazardous waste compliance inspection was conducted on this date, to determine your facility's compliance with applicable portions of Chapters 403 & 376, F.S., and Chapters 62-710, 62-730, 62-737, & 62-740 Florida Administrative Code (F.A.C.). Portions of the United States Environmental Protection Agency's Title 40 Code of Federal Regulations (C.F.R.) 260 - 279 have been adopted by reference in the state rules under Chapters 62-730 and 62-710, F.A.C. The above noted potential items of non-compliance were identified by the inspector(s).

This is not a formal enforcement action and may not be a complete listing of all items of non-compliance discovered during the inspection.

Danielle M Bentzen

PRINCIPAL INSPECTOR NAME

Environmental Specialist

PRINCIPAL INSPECTOR TITLE

NO SIGNATURE

PRINCIPAL INSPECTOR SIGNATURE

FDEP

ORGANIZATION

Janine Kraemer

INSPECTOR NAME

Environmental Specialist

INSPECTOR TITLE

NO SIGNATURE

INSPECTOR SIGNATURE

FDEP

ORGANIZATION

Tracy DePaola

REPRESENTATIVE NAME

District Branch Manager

REPRESENTATIVE TITLE

NO SIGNATURE

REPRESENTATIVE SIGNATURE

AERC Recycling Solutions

ORGANIZATION

NOTE: By signing this document, the Site Representative only acknowledges receipt of this Inspection Report and is not admitting to the accuracy of any of the items identified by the Department as "Potential Violations" or areas of concern.