Florida Department of

Environmental Protection

Hazardous Waste Inspection Report

FACILITY INFORMATION:

Facility Name: Aerc Com Inc

On-Site Inspection Start Date: 12/16/2009 **On-Site Inspection End Date:** 12/16/2009

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 Transporter facility

Routine Inspection for Transfer Facility

Routine Inspection for TSD Facility Unit Type(s)

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, Regional Mgr

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

SIC CODE: 4212 - Trans. & utilities - local trucking, without storage

TYPE OF OWNERSHIP: Private

Introduction:

On December 16, 2009, 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, 10-day transfer facility and universal 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. The current permit, 72959-003 HO expires December 30, 2011.

INSPECTION HISTORY
On September 11, 2008, AERC was inspected and was not in compliance at the time of the inspection. The facility was cited for: failure to provide adequate aisle space; failure to dispose of

waste within 90-days; failure to have accumulation start date on containers per permit. The case was resolved by amending the Long Form Consent order from 2007 inspection. The amendment increased the amount for the Supplemental Environmental Project and a civil penalty of $7,736.00.

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.

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

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

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

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

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 accepts mercury containing debris, salts, process lamps and devices containing liquid mercury. These items are consolidated in the 90-day area 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 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.

INSPECTION

90-Day Storage Area and 10-day Transfer Area:

This area is for containers of mercury containing devices (ie. glassware, elemental mercury, soil, amalgam, etc) that only have the D009 waste code (Figures 4-5). These wastes are consolidated and sent to the Pennsylvania facility for final disposal. Inspectors noted that dates were not consistently placed on drums when they entered the facility. Ms. DePaola explained that if a container was picked up by AERC, an AERC label was placed on the container, along with the date it entered the facility. If a container was shipped directly to AERC by another transporter, the date from facility is used and the container does not receive a date when the container enters AERC. Inspectors suggested the date when any container enters the facility be placed on the container to prevent any confusion.

Inspectors questioned the process of consolidating mercury containing devices through the 90-day area. After discussions with Hazardous Waste Permitting in Tallahassee (Tallahassee), this process is allowed under the current permit. However, Tallahassee will be contacting AERC at a later date to discuss this process.

The 10-day transfer area contains wastes received with the D009 code plus additional waste codes (Figure 6). These wastes are transfered to the Pennsylvania facility within 10-days of receipt.

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.

Bulb Storage Area:

At the time of the inspection two rows of containers storing crushed bulbs and seven rows of various lamps waiting to be processed. All containers were properly labeled and within the appropriate time limit.

Production Area:

LSS-1 was operating at the time of the inspection (Figures 1-2). 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, waste was being placed in the roll offs (Figure 3).

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 2009. 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 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

No Violations

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 in compliance with their current permit at this time.

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	Environmental Specialist
PRINCIPAL INSPECTOR NAME	**PRINCIPAL INSPECTOR TITLE**
Danielle Bentzen	FDEP	3/3/2010
PRINCIPAL INSPECTOR SIGNATURE	**ORGANIZATION**	**DATE**

Janine Kraemer	Environmental Specialist
INSPECTOR NAME	**INSPECTOR TITLE**
NO SIGNATURE	FDEP
INSPECTOR SIGNATURE	**ORGANIZATION**

Tracy DePaola	Regional Mgr
REPRESENTATIVE NAME	**REPRESENTATIVE TITLE**
NO SIGNATURE	AERC
REPRESENTATIVE SIGNATURE	**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.