



Florida Department of
Environmental Protection
Hazardous Waste Inspection Report

FACILITY INFORMATION:

Facility Name: Aerc Com Inc

On-Site Inspection Start Date: 04/20/2011

On-Site Inspection End Date: 04/20/2011

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 LQG (>1000 kg/month) facility

Routine Inspection for TSD Facility Unit Type(s)

INSPECTION PARTICIPANTS:

Principal Inspector: Danielle M. Bentzen, Environmental Specialist

Other Participants: Michael Eckoff, Environmental Specialist; Parvez Mallick, Environmental Engineer; Tracy DePaola, Regional Manager

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 April 20, 2011 Danielle Bentzen and Michael Eckoff, Florida Department of Environmental Protection (FDEP), and Parvez Mallick, Environmental Protection Agency (EPA) Region 4, inspected AERC Recycling Solutions (AERC) for compliance with state and federal hazardous waste standards. Tracy DePaola accompanied inspectors around the facility. 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 20 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 December 16, 2009, AERC was inspected by the Department and found to be in compliance.

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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, OGC #07-2193, from the 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 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

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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.

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. These wastes are consolidated and sent to the Pennsylvania facility for final disposal. The date of the oldest container is placed on the drum after the contents are consolidated.

The 10-day transfer area contains wastes received with the D009 code plus additional waste codes. These wastes are transferred 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. Lamps coated in a plastic shatter shield are sorted and stored separately from regular lamps because of the plastic. At the time of the inspection, there were three open containers waiting for the shatter shield to be removed [62-737.400(5)(b)(1)] (Figure 1). The shatter shield is manually removed from the lamps prior to crushing. At the time of the inspection, there were two 55-gallon drums of crushed lamps in the area waiting to be processed.

HID lamps are sorted, mercury ampoules removed, and stored separately from regular lamps until transported to the Pennsylvania. 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, the roll off was covered.

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.

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Records Review:

Records were reviewed for 2010 and 2011. 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.

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.

Daily inspection logs and daily container log were missing information on a few dates [62-737.800(7)(d)].

On June 9, 2011, the Department received the annual report due March 1, 2011 from AERC. Please be aware that this report is due annually on or before March 1.

At the time of the inspection, inspectors were concerned with the crushed glass rolling average results that were averaging greater than one. AERC explained their concern was with the of the laboratory quality because of the fluctuation in the sample results. Ms. Bentzen suggested AERC composite their sample to be more homogeneous in the size of glass particles. Ms. DePaola accepted this suggestion and as per email on June 14, 2011, AERC samples have been more consistent.

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

Type:	Violation
Rule:	62-737.800(7)(d)
Explanation:	Keep records of inspections (logs) which shall include the date and time of the inspection, the name of the inspector, a notation of observations made, and the date and nature of any repairs made or other remedial actions taken. The logs or records must be kept for a minimum of three years from the date of the inspection. Specifically, AERC failed to have complete daily logs on 12/10/2010, 1/24-28/2011, and 4/1/2011.
Corrective Action:	This was corrected during the inspection. AERC shall ensure all employees are properly trained on completing daily log forms.

Type:	Violation
Rule:	273.33(d)(1), 62-737.400(5)(b)1.
Explanation:	A large quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions. Specifically, AERC failed to keep containers of universal waste lamps closed.
Corrective Action:	AERC corrected this during the inspection.

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Summary of Potential Violations and Areas of Concern:Potential Violations

Rule Number	Area	Date Cited	Explanation
Checklist Independent Violations 62-737.800(7)(d)		04/20/2011	Keep records of inspections (logs) which shall include the date and time of the inspection, the name of the inspector, a notation of observations made, and the date and nature of any repairs made or other remedial actions taken. The logs or records must be kept for a minimum of three years from the date of the inspection. Specifically, AERC failed to have complete daily logs on 12/10/2010, 1/24-28/2011, and 4/1/2011.
273.33(d)(1), 62-737.400(5)(b)1.		04/20/2011	A large quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions. Specifically, AERC failed to keep containers of universal waste lamps closed.

Areas of Concern

No Areas of Concern

ATTACHMENTS:

Figure 1: Open containers

**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 permit at the end of this 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

Michael Eckoff

INSPECTOR NAME

Environmental Specialist

INSPECTOR TITLE

NO SIGNATURE

INSPECTOR SIGNATURE

FDEP

ORGANIZATION

Parvez Mallick

INSPECTOR NAME

Environmental Engineer

INSPECTOR TITLE

NO SIGNATURE

INSPECTOR SIGNATURE

EPA

ORGANIZATION

Tracy DePaola

REPRESENTATIVE NAME

Regional Manager

REPRESENTATIVE TITLE

NO SIGNATURE

REPRESENTATIVE SIGNATURE

AERC

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.