



Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando FL 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

September 20, 2007

ELECTRONICALLY MAILED
tdepaola@aercrecycling.com

Ms. Tracy DePaola
AERC Recycling Solutions
4317-J Fortune Place
West Melbourne, FL 32904

WARNING LETTER
OWL-HW-E-07-027

Brevard County - HW
AERC Recycling Solutions - FLD984262782
Warning Letter

Dear Ms. DePaola:

The purpose of this letter is to advise you of possible violations of law for which you may be responsible, and to seek your cooperation in resolving the matter. A hazardous waste compliance inspection was conducted at your facility on May 24, 2007. The inspection was conducted under the authority of Section 403.091, Florida Statutes, and Chapter 403, Part IV, Florida Statutes in order to determine the compliance status of your facility with 40 CFR 260-268, adopted in Florida Administrative Code Chapter 62-730 and 40 CFR 279, adopted in Florida Administrative Code Chapter 62-710.

During the inspection, possible violations of Florida Statutes and Rules regarding hazardous waste and used oil management were noted. These violations are set forth in "Summary of Potential Noncompliance Items and Corrective Actions" of the attached inspection reports.

The activities observed during the Department's field inspection and any activity at your facility that may be contributing to violations of the above described statutes and rules should be ceased immediately.

Please contact Danielle Bentzen, Hazardous Waste Section, by telephone at (407) 893-3323 or by e-mail at Danielle.Bentzen@dep.state.fl.us within 10 days of receipt of this letter to schedule an informal conference concerning resolution of this matter. The Department is interested in reviewing any facts you may have that will assist in determining whether any violations have occurred and whether any penalties are appropriate. You may bring anyone with you to the meeting that you feel could help resolve this matter.

This Warning Letter is part of an agency investigation preliminary to agency action in accordance with Section 120.57(4), Florida Statutes. The Department looks forward to your cooperation in completing the investigation and resolution of this matter.

Sincerely,



Vivian F. Garfein
Director, Central District

Date September 20, 2007

VFG/jk

Enclosures:
RCRA Inspection Report
Penalty Computation Worksheet

cc: Mike Redig, FDEP, Tallahassee, michael.redig@floridadep.net
Alan Annicella, EPA Region 4, annicella.alan@epa.gov
Debby Valin, FDEP, Central District, debby.valin@floridadep.net



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HAZARDOUS WASTE INSPECTION REPORT

1. **INSPECTION TYPE:** Routine Complaint Follow-Up Permitting Pre-Arranged

FACILITY NAME AERC Recycling Solutions EPA ID # FLD984262782

STREET ADDRESS 4317-J Fortune Place, West Melbourne, FL 32904

E-MAIL ADDRESS tdepaola@aercrecycling.com

COUNTY Brevard PHONE 321-952-1516 DATE 5/24/07 TIME 10:40

NOTIFIED AS: N/A

CURRENT STATUS:

- Non Handler
- CESQG (<100 kg/mo.)
- SQG (100-1000 kg/mo.)
- Generator (>1000 kg/mo.)
- Transporter
- TSD Facility

Unit Type (s): Storage and Treatment

Used Oil:

- Non Handler
- CESQG (<100 kg/mo.)
- SQG (100-1000 kg/mo.)
- Generator (>1000 kg/mo.)
- Transporter
- TSD Facility

Unit Type (s): Storage and Treatment

Used Oil:

2. **APPLICABLE REGULATIONS:**

- | | | | |
|---------------------------------------|------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> 40 CFR 261.5 | <input checked="" type="checkbox"/> 40 CFR 262 | <input checked="" type="checkbox"/> 40 CFR 263 | <input checked="" type="checkbox"/> 40 CFR 264 |
| <input type="checkbox"/> 40 CFR 265 | <input type="checkbox"/> 40 CFR 266 | <input checked="" type="checkbox"/> 40 CFR 268 | <input checked="" type="checkbox"/> 40 CFR 273 |
| <input type="checkbox"/> 40 CFR 279 | <input type="checkbox"/> 62-710, FAC | <input checked="" type="checkbox"/> 62-730, FAC | <input checked="" type="checkbox"/> 62-737, FAC |

3. **RESPONSIBLE OFFICIAL(s):**

Tracy DePaola, District Branch Manager, AERC
Recycling Solutions

4. **INSPECTION PARTICIPANTS:**

Danielle Bentzen, FDEP
Lu Burson, FDEP
John Kroske, USEPA

Tracy DePaola, District Branch Manager,
AERC Recycling Solutions

5. **LATITUDE/LONGITUDE:** 28°5'39"N/80°41'47"W

6. **SIC Code:** 4214-Local Trucking with Storage

7. **TYPE OF OWNERSHIP:** Private Federal State County Municipal

8. **PERMIT #:** 0072959-003-HO **ISSUE DATE:** June 27, 2007 **EXP. DATE:** December 20, 2011

9. INTRODUCTION:

On May 24, 2007, Danielle Bentzen and Lu Burson, Florida Department of Environmental Protection (FDEP), accompanied by John Kroske, United States Environmental Protection Agency (EPA), and 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.

10. HISTORY:

On September 30, 1998, MTI was inspected by the Department and was in compliance at the time of the inspection.

On September 24, 1999, MTI 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 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.

11. 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 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.

12. INSPECTION:

Production Area

LSS-1 (Figures 1-5) was not operation at the time of the inspection. The LSS-1 had been down for approximately one week prior to the inspection and AERC had just received the necessary parts. AERC was in the process of replacing the parts at the time of the inspection. Eight 55-gallon drums of phosphor powder, the oldest drum dated 4/17/07, were waiting to be shipped for disposal (Figure 6).

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 (Figure 9), 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 bank of Pre-Filters have been tested and determined to be non-hazardous. The HEPA-filters and carbon filters are disposed of as hazardous waste.

Warehouse

Bulb Storage Area

At the time of the inspection two rows of containers storing crushed bulbs were waiting to be processed. There were a total of sixty-four 55-gallon drums waiting to be processed. All of the containers were labeled properly, however there were four drums that were over the 1-year processing limit [40 CFR 268.50 (b)]. The dates on these drums were 3/9/06, 4/13/06 (2), 5/9/06.

There were seven rows of various lamps waiting to be processed (Figure 11). All containers were properly labeled and within the appropriate time limit.

90-Day Storage Area

This area was for containers of mercury containing devices that are sent to the Pennsylvania facility for final disposal (Figures 7-8). Inspection of this area was difficult to conduct due to lack of aisle space [40 CFR 265.35].

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 (Figure 10). All drums were closed and properly labeled.

Loading Dock

This area contained non-PCB ballasts (Figure 12). At the time of the inspection, there were fourteen 55-gallon drums waiting to be sorted.

Record Review

Records were reviewed for 2006 and 2007. 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 Excide for recycling. All other batteries are shipped to Metal Conversions in Georgia. Forklift batteries are shipped back to the supplier for repair.

Daily inspection logs, 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.

The daily container count log had not been completed since 2/15/07 [40 CFR 264.15].

The contingency plan needs to be updated to remove Heath Clark as an Emergency Contact and to update the phone numbers for the Central District and after hours number [40 CFR 265.54(d)].

Incoming manifests for AERC were in compliance. Originals from three manifests of AERC's waste shipments to the Pennsylvania facility were missing [40 CFR 262.40(a)]. The manifest numbers for the missing originals were 452559, 452565, and 452547.

Training records indicate that Hazardous Waste management training had not been conducted on an annual basis. LQG's are required to conduct training annually [40 CFR 265.16(c)].

13. SUMMARY OF NONCOMPLIANCE ITEMS AND CORRECTIVE ACTIONS:

a) Regulation: 40 CFR 262.40(a) - Recordkeeping

"A generator must keep a copy of each manifest signed in accordance with 262.23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter." Specifically, AERC failed obtain the original manifests for manifest numbers 452559, 452565, 452547.

Corrective Action: AERC must immediately contact the final destination facility and obtain these originals.

b) Regulation: 40 CFR 264.15 – General Inspections

The facility must comply with the inspection plan of current permit, Part II – Operating Conditions 20 (f). Specifically, AERC failed to document daily container count log since February 15, 2007.

Corrective Action: Within 30 days of receipt of this Warning Letter, AERC shall submit to the Department written notification that all employees involved with daily inspections have been properly trained.

c) Regulation: 40 CFR 264.16(c)/265.16(c) - Personnel training

Facility personnel must take part in an annual review of their initial training. Specifically, AERC had not provided training in hazardous waste management procedures for facility personnel as specified in Part II – Operating Conditions 2.

Corrective Action: AERC shall develop a personnel training plan and schedule training in hazardous waste management for the appropriate facility employees. In addition, within 30 days of receipt of this Warning Letter, AERC shall provide written documentation to the Department that all employees managing hazardous waste have been properly trained.

*****This violation was cited previously during the 2003 inspection.**

d) Regulation: 40 CFR 264.35/265.35 – Container Aisle Space

Large quantity generators shall maintain adequate aisle space between containers of hazardous waste to allow for inspection of the condition and labels of the individual containers. 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 and 2003.**

e) **Regulation: 40 CFR 265.54(d) – Amendment of contingency plan**

“The contingency plan must be reviewed and immediately amended whenever the list of emergency coordinators changes.” Specifically, AERC failed to amend the contingency plan when Heath Clark was no longer with the company.

Corrective Action: AERC shall amend the facility contingency plan. In addition, within 30 days of receipt of Warning Letter, AERC shall submit to the Department a copy of the amended contingency plan developed. The completed plan shall be provided to the Department within 90 days of receipt of the Warning Letter.

f) **Regulation: 40 CFR 268.50(b) – Prohibition on storage of restricted wastes**

“An owner/operator of a treatment, storage or disposal facility may store such wastes for up to one year...” Specifically, AERC failed to process four drums of crushed bulbs, dated 3/9/06, 4/13/06 (2), and 5/9/06, within the one year time frame 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.

14. **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.

Report Prepared By: 
Danielle Bentzen, Environmental Specialist

Date: 9/12/07

Report Reviewed By: 
Lu Burson, Environmental Manager

Date: 9/12/07

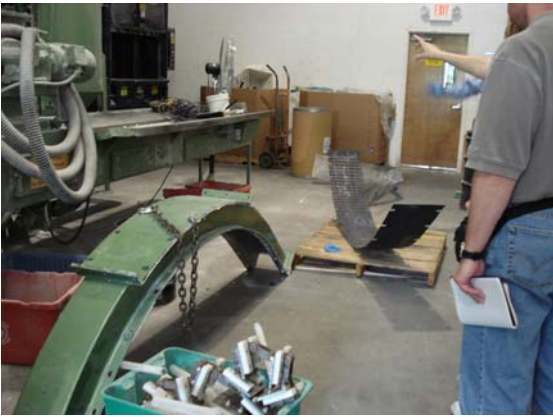


Figure 1: LSS-1 lamp recycler



Figure 2: Drums of phosphor powder



Figure 3: LSS-1 recycler



Figure 4: End caps separated by machine



Figure 5: Glass separated by machine



Figure 6: Phosphor powder hazardous waste drums



Figure 7: 90-day storage area



Figure 8: 90-day storage area



Figure 9: Hazardous waste drum for HID ampoules



Figure 10: Satellite area for batteries

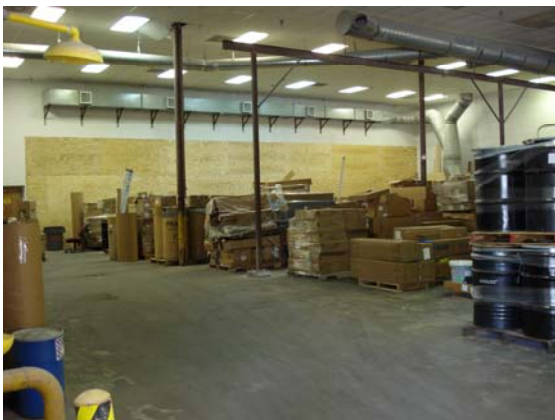


Figure 11: Lamp processing area



Figure 12: non-PCB ballast area

PENALTY COMPUTATION WORKSHEET

Violator's Name: AERC Recycling Solutions

Identify Violator's Facility: 4317-J Fortune Place, West Melbourne, FL 32904

Name of Staff Responsible for the Penalty Computations: Danielle Bentzen Date: 5/24/07

	Violation Type	Manual Guide	Potential for Harm	Extent of Deviation	Matrix Range	Other Adjustments	Penalty for Other Adjustments	Total
a.	262.40(a) Recordkeeping	HW 8.1	Minor	Minor	\$500-\$644 (\$644)	Multi-event 3 manifests x \$129	\$387	\$1,031
b.	264.15 General Inspections	HW 15.1	Minor	Minor	\$500-\$644 (\$644)			\$644
c.	264.16(c)/265.16(c) Personnel Training	HW 9.5	Moderate	Moderate	\$6,448-\$10,315 (\$10,315)	25% History of Non-Compliance plus Economic Benefit	\$2,579 \$2,730	\$15,624
d.	264.35/265.35 Aisle Space	HW 10.3	Moderate	Moderate	\$6,448-\$10,315 (\$10,315)	25% History of Non-Compliance	\$2,579	\$12,894
e.	265.54 (d) Amendment of Contingency Plan	HW 11.2	Minor	Moderate	\$645-\$1,933 (\$1,933)			\$1,933
f.	268.50(b) Prohibition on Storage of Restricted Waste	HW 16.5	Minor	Moderate	\$645-\$1,933 (\$1,933)	Multi-day event 173 days x \$129	\$22,317	\$24,250

TOTAL PENALTY AMOUNT FOR ALL VIOLATIONS: \$56,376

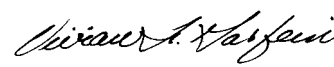
Multi-day penalties were not calculated for item **b** due to the fact that only a portion of the information required in the general Inspections was not completed. Multi-day penalties could not be calculated or were not appropriate for items **c**, **d**, and **e**.

Economic Benefit could not be calculated or was not applicable for items **a**, **b**, **d**, **e**, and **f**. Economic benefit calculations for item **c** are outlined in the following worksheet.

Prepared by:



Danielle Bentzen
 Environmental Specialist



Vivian Garfein
 Director, Central District

WORKSHEET
RANKING SYSTEM FOR POTENTIAL FOR HARM
**ONLY VIOLATIONS IN WHICH A "POTENTIAL FOR HARM" SCORE IS REQUIRED
 ARE LISTED ON THIS PAGE.**

FACILITY NAME: AERC Recycling Solutions Date: 5/24/07

	Violation	Description	Nature of Waste	Amount of Waste	Release	People	Total Points
c.	264.35/265.35	Aisle Space	4	8	1	1	14
f.	268.50(b)	Prohibition on Storage of Restricted Waste	4	2	1	1	8

SCORING SYSTEM

NATURE OF WASTE	AMOUNT OF WASTE	RECEPTORS	
		Releases	Affected Population
8 - High hazard wastes	8 - > 5,000 kg (25 drums)	4 - Release	4 - > 1,000
	5 - 1,000 to 5,000 kg	4 - High potential for release	3 - 100 - 1,000
4 - typical hazardous waste	2 - < 1,000 kg (5 drums)		2 - 10 - 100
		1 - No release	1 - <10

MAJOR POTENTIAL FOR HARM: 19-24
 MODERATE POTENTIAL FOR HARM: 13-18
 MINOR POTENTIAL FOR HARM: 8-12

ECONOMIC BENEFIT OF NON-COMPLIANCE FOR FAILURE TO CONDUCT TRAINING

Economic Benefit (EB) = (Avoided Costs)(1-C) + (Delayed Costs)(T)

C = Current Corporate Tax Rate = .38

T = IRS Interest Rate = 6% per year

AC = Avoided Costs = \$700

DC = Delayed Costs = \$700

Violation: Based on an estimate of \$700 for training of Tracy DePaola, and two employees and not training these individuals for an estimated 3 years.

EB (per employee) = (\$700)(1-.38)(2 previous years) + (\$700)(.06)(1 current year) =
\$434 (2 year) + \$42 (current year) = \$910.00.00
EB for 3 Employee = \$2,730

TOTAL Economic Benefit for Avoided and Delayed Cost of Training = \$2,730.00