



**Florida Department of
Environmental Protection
Hazardous Waste Inspection Report**

FACILITY INFORMATION:

Facility Name: Veolia ES Technical Solutions LLC

On-Site Inspection Start Date: 08/28/2008

On-Site Inspection End Date: 08/28/2008

ME ID#: 6716

EPA ID#: FL0000207449

Facility Street Address: 342 Marpan Ln, Tallahassee, Florida 32305-0904

Contact Mailing Address: 342 Marpan Ln, Tallahassee, Florida 32305-0904

County Name: Leon

Contact Phone: (850) 877-8299

NOTIFIED AS:

LQG (>1000 kg/month)

Transporter

TSD Facility Unit Type(s)

CURRENT STATUS:

LQG (>1000 kg/month)

TSD Facility Unit Type(s)

Transporter

INSPECTION TYPE:

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

Routine Inspection for Transporter facility

Routine Inspection for TSD Facility Unit Type(s)

INSPECTION PARTICIPANTS:

Principal Inspector: James Byer, Inspector

Other Participants: Aaron Mitchell, Inspector; Randy Williams, Operations Supervisor; Linda Dunwoody, Operations Manager

LATITUDE / LONGITUDE: Lat 30° 21' 51.8486" / Long 84° 16' 8.358"

SIC CODE: 3399 - Manufacturing - primary metal products, nec

TYPE OF OWNERSHIP: Private

Introduction:

Veolia Environmental Services Technical Solutions LLC (Veolia TSD), formerly Recyclights, Superior Support Services, Inc., Onyx Special Services, Inc., and Onyx Environmental Services LLC, located at 342 Marpan Lane, Tallahassee, Leon County, Florida, has been in operation at this location since 1995. Veolia TSD employs approximately 16 people in the transport and processing of mercury containing lamps and devices, mercury contaminated debris, electronic waste, batteries, scrap metal, and PCB waste. Waste for recycle is picked up in NC, SC, GA, FL, TN, LA, MS, AR and AL and transported to Veolia TSD for processing. Veolia TSD is a large quantity generator of hazardous waste and a permitted TSD. Veolia's facility located at 1 Eden Lane, Flanders, NJ (NJD080631369) is registered in Florida as a transporter of hazardous waste. The current operating permit at the time of this inspection, No 71455-HO-009, addresses mercury recovery, reclamation and storage and expires September 26, 2011. A permit modification application was submitted on May 15, 2008 and is under review. A Notice of Intent to Issue a draft Permit Modification No 71455-HO-010 was issued on September 3, 2008. The modification request submitted is to expand the storage area used for the collection and sorting of electronic waste destined for recycling, increase the maximum volume of electronic waste materials stored and update related closure cost estimates. No violations were cited during the hazardous waste inspection of Veolia TSD on July 18, 2006.

Process Description:

The facility is designed to recycle mercury containing devices, including fluorescent lamps, HID lamps and mercury containing articles (MCMA). Fluorescent lamps are recycled using a

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combination of manual and automated dry separation processes to separate the primary components of the lamps: glass, aluminum and the phosphor powder. Glass and aluminum are shipped off-site for further reuse. The phosphor powder derived from the fluorescent lamps is accumulated on-site and the mercury contained in the powder is reclaimed using a retort oven. In the recycling process small amounts of other scrap metals and plastics are also generated. HID lamps are recycled using a combination of manual and automated separation processes to separate the outer lamp glass, brass or aluminum bases and the mercury containing arc tube. The arc tubes are crushed and loaded into containers for retort processing to recover the mercury. MCMA is recycled through a combination of manual separation followed by retort processing or the articles may be placed directly in the retort oven for processing.

All fluorescent lamp processing equipment, with the exception of the feed belt, is contained within a separate room that is equipped with special air handling systems. The air handling systems maintain a negative air pressure within this room. The initial separation step in the HID process is currently conducted in a segregated area of the warehouse and within processing equipment designed to maintain a negative pressure enclosure. The retorting of mercury containing materials, including phosphor powder, crushed arc tubes and MCMA, occurs in a separate room with its own air handling systems. The systems impart a negative pressure to the room to control mercury vapors. Elemental mercury is recovered from the retort operation and shipped to a mercury refiner/seller.

The facility also operates as a handler of other universal wastes and non-RCRA-regulated wastes such as computer equipment, batteries and lamp ballasts. The facility also conducts hazardous and non-hazardous waste transport and transfer activities.

A. Outside North Storage:

An outside, asphalt paved area is used for collection and storage of processed glass in two 20 yard roll offs, paper-product and wood pallet recycling, UW Transporter bulk delivery drop off (FEDEX) and various empty container storage. Immediately north of this paved area is parking for two container trailers, for equipment and replacement parts storage and empty non-hazardous container storage.

Pre-existing Potential Violations and Areas of Concern:

TSD Containers Checklist

Type:	Violation
Rule:	265.173, 264.173(b), 265.173(b)
Question Number:	12.6
Explanation:	At the extreme northern end of this storage area, it appeared that an open, circular container holding broken glass and possibly Hg containing wastes had been turned upside down in the grass covered area. See picture below.
Corrective Action:	Perform a contamination assessment of the area in which the possible release of Hg containing material occurred.

Attachments:

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Grass area with circular pattern



20 YD Glass Rolloffs



B. HW Storage :

The mercury containing phosphor powder is collected in 55-gallon drums and staged in the northeast end of the building awaiting processing in the facility's vacuum distiller. The area is storage for up to 15 pallets (60 drums) maximum, double stacked is OK. Inbound manifested hazardous waste, awaiting processing or outbound shipments to another facility, is accumulated in the 90 Day storage area in the northwest portion of the building. The area's maximum storage capacity is 24 drums.

Pre-existing Potential Violations and Areas of Concern:

Permit Specific Violations

Type:	Area Of Concern
Rule:	264.1(b), 62-730.240
Question Number:	24.3
Explanation:	At the time of this inspection, Veolia had combined the storage of HW containers from both its permitted 90-Day Accumulation Area and its TSD (phosphor powder and MCD materials to be processed in the facility's retort) HW Storage Area. Both types of HW containers were being stored on the east side of the facility.
Corrective Action:	Maintain two separate storage areas in accordance with operating permit for the 90-Day Accumulation Area and the HW Storage Area.

Attachments:

HW Storage Area



90 Day Accumulation Containers



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C. Fluorescent Lamp Processing :

Fluorescent lamps are staged immediately adjacent to the lamp processing feed belts. Fluorescent lamps are hand fed into the lamp processing room via an infeed conveyor belt. This room located in the northwest corner of the facility is designed to process approximately 200,000 feet of lamp equivalents per 8 hour shift. Lamps are crushed with a drum crusher, dry separated into glass, aluminum and phosphor powder. Phosphor powder is collected by a bag tower and accumulated in 55 gallon drums.

D. Loading Dock, Processed Powder Storage, Maintenance:

The loading and unloading area consists of two trailer dock areas for forklift transfer of materials to/from transport vehicles. Retort process residues in 55 gallon drums are accumulated in this area along the east wall prior to shipment off-site for disposal in a Class D landfill. Retorted process residuals in this area are/have been sampled to ensure effective retort processing. The Facility maintenance area is also located in this area.

Pre-existing Potential Violations and Areas of Concern:

Permit Specific Violations

Type:	Area Of Concern
Rule:	264.32
Question Number:	24.45
Explanation:	Veolia had two fire extinguishers in the facilities maintenance area that were not fully changed/operable.
Corrective Action:	Ensure that all safety equipment is inspected on a weekly basis and any inoperable equipment is immediately replaced or repaired to meet the requirements of the operating permit.

Attachments:

Processed Powder Drums



Unload-load Dock



E. Hg Retort Processing:

The mercury containing phosphor powder, HID arc tubes, and MCMA's are prepared for the retort process in an enclosed negative pressure room located on the middle west side of the building adjacent to the retort room. MCMA's are manually disassembled to remove metals, glass, and plastics from the intact devices. Liquid Hg is drained from the HID arc tubes/MCMA's and accumulated for the refining/seller. The disassembled components are placed in 55-gallon drums for retort.

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F. Retort :

The retort operation is comprised of an oven which is used to heat the Hg containing waste, liberating the Hg vapors which are drawn off the oven with a vacuum pump. The vapors are drawn through a series of heat exchangers in order to condense the vapors back into a liquid Hg state. The liquid Hg is decanted into accumulation containers for follow on refiner/seller.

G. Inbound Universal Waste Storage:

This area located on the west side in the southern portion of the building is the lamp storage area. The overall dimensions are 64.5 feet long, 20 feet deep and 8 feet high for a maximum of 6,400 cubic feet of mixed fluorescent and HID lamps. This area is used for temporary storage of universal waste lamps that cannot be immediately processed. These lamps normally consist of HID lamps, U-shaped lamps and other specialty lamps that require manual processing prior to recycling.

Attachments:

Inbound UW Storage



Inbound UW



H. HID Processing:

HID can be processed either by manual or automated process located at the southwestern end of the building. The automated process uses a custom built, dry separation, enclosed negative pressure process. The system is comprised of conveyor belts, crushers, dry separation and air emissions control systems. Glass, metal base and support wires are transferred to collection containers for recycling. Arc tubes are accumulated in 55-gallon drums for further processing in the retort rooms.

I. Main Building Battery and Electronic Waste Storage :

This area is the southeast corner of the main building which is used for storage and sorting of batteries and electronic recycling wastes. The maximum quantity of battery storage is 36 pallets and the maximum quantity of electronic recycling waste is 86 pallets (in combination with South Building Storage).

Attachments:

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Main Bldg Electronic Recycling



South Bldg Electronic Recycling

**J. South Building Container and Electronic Waste Storage:**

This area is immediately south of the main building and is divided into two large storage areas. The Container Storage Area is used to hold empty fiber drums and cardboard boxes. No universal or hazardous wastes are stored in this area. The second room in this building is used for additional storage of electronic recycling wastes up to a maximum of 86 Pallets (in combination with storage within the main building storage).

Z. Records:

Veolia maintains records consisting of:

Inbound/outbound HW manifests or shipping documentation
 Monthly Hg Reclamation Rate Samples
 Weekly Process Operations Inspections
 Waste Analysis Plan to include Weekly Composite Samples
 Air Monitoring Log
 Contingency Plan

10 Day Transfer Facility Log
 Weekly HW Storage Inspections
 Personnel Training Records
 Annual TCLP Samples
 Weekly Safety Inspections

The facility's Inbound HW manifests and 10 Day transfer log was compared with actual van/trailer inventory at the Transfer Area and/or unloading dock with no discrepancies noted. Operating logs and inspections for Monthly Hg Reclamation Rate Samples, Weekly Composite Samples, Weekly Safety Inspections, Air Monitoring Logs, and Preventive Maintenance Logs were reviewed. A spot check of personnel training records was conducted with no discrepancies noted.

Summary of Potential Violations and Areas of Concern:Potential Violations

Rule Number	Area	Date Cited	Explanation
TSD Containers Checklist			
265.173, 264.173(b), 265.173(b)	A. Outside North Storage	08/28/2008	At the extreme northern end of this storage area, it appeared that an open, circular container holding broken glass and possibly Hg containing wastes had been turned upside down in the grass covered area. See picture below.

Areas of Concern

Rule Number	Area	Date Cited	Explanation
Permit Specific Violations			
264.1(b), 62-730.240	B. HW Storage	08/28/2008	At the time of this inspection, Veolia had combined the storage of HW containers

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Rule Number	Area	Date Cited	Explanation
			from both its permitted 90-Day Accumulation Area and its TSD (phosphor powder and MCD materials to be processed in the facility's retort) HW Storage Area. Both types of HW containers were being stored on the east side of the facility.
264.32	D. Loading Dock, Processed Powder Storage, Maintenance	08/28/2008	Veolia had two fire extinguishers in the facilities maintenance area that were not fully changed/operable.

COMMENTS:

10/17/2008

At the time of this inspection, Veolia had recieved new/additional equipment for processing of HID lamps. The equipment had not yet been installed or utilized, but was available for possible integration into their processes. Notification should be made to the Department PRIOR to any planned process changes or process modifications.

Conclusion:

Veolia needs to implement corrective actions provided for all Potential Violations or Areas of Concern identified in the Areas and Summary above.

Veolia needs to ensure the Department is properly notified in accordance with Permit Condition 21 of Part I - General and Standard Conditions, of any operational process modifications or changes prior to implementation.

History:

Activity Closed Date: 11/07/2008

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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.

James Byer

PRINCIPAL INSPECTOR NAME

Inspector

PRINCIPAL INSPECTOR TITLE**PRINCIPAL INSPECTOR SIGNATURE**Florida Dept of Environmental
Protection**ORGANIZATION**

10/17/2008

DATE

Aaron Mitchell

INSPECTOR NAME

Inspector

INSPECTOR TITLE**INSPECTOR SIGNATURE**Florida Dept of Environmental
Protection**ORGANIZATION**

10/17/2008

DATE

Randy Williams

INSPECTOR NAME

Operations Supervisor

INSPECTOR TITLE

NO SIGNATURE

INSPECTOR SIGNATURE

Veolia ES Technical Solutions

ORGANIZATION

Linda Dunwoody

REPRESENTATIVE NAME

Operations Manager

REPRESENTATIVE TITLE

NO SIGNATURE

REPRESENTATIVE SIGNATURE

Veolia ES Technical 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 "Not Ok" or areas of concern.