Florida Department of

Environmental Protection

Hazardous Waste Inspection Report

FACILITY INFORMATION:

Facility Name: Veolia ES Technical Solutions LLC

On-Site Inspection Start Date: 03/16/2009 **On-Site Inspection End Date:** 03/16/2009

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)

INSPECTION TYPE:

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

Routine Inspection for Transporter facility

Routine Inspection for TSD Facility Unit Type(s)

Routine Inspection for Used Oil facility

INSPECTION PARTICIPANTS:

Principal Inspector:	Melissa D Woehle, Environmental Specialist
Other Participants:	Lonnie A. Jenkins II, USEPA Environmental Scientist; Anthony Tripp, Professional Engineer; John Johnson, Environmental Specialist; Linda Dunwoody, Operations Mgr; Randy Williams, Operations Supervisor; Phillip Ditter, EH&S 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.

Veolia operates a universal waste transfer facility (Veolia TF) at 4972 Woodville Highway, Tallahassee, for parking of transport vehicles prior to and after unloading at Veolia TSD. Veolia TF and Veolia TSD are located on non-contiguous property in the same industrial park. Veolia notified the Department of universal waste transfer facility activities for Veolia TF on January 9, 2006 and received EPA ID number FLR000124917 for that location.

The current operating permit for Veolia TSD, No 71455-HO-009, addresses mercury recovery, reclamation and storage and expires September 26, 2011. Permit Modification No 71455-HO-010

was issued on November 20, 2008. The modification increases the maximum storage volume for electronic waste from 36 pallets to 86 pallets and updates related closure cost estimates. During the last hazardous waste inspection of Veolia TSD, on August 28, 2008, one potential violation and two areas of concern were identified. These issues were addressed by Veolia TSD with written correspondence and no further action was required. Veolia TSD registered with the Department as a used oil transporter and transfer facility in 2008 and is registered through June 30, 2009.

Process Description:

The facility is designed to recycle mercury containing devices, including fluorescent lamps, HID lamps and mercury containing manufactured articles (MCMA). Fluorescent lamps are recycled using a 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 waste batteries and non-RCRA-regulated wastes such as computer equipment 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. At the north end of this paved area, there are two container trailers for storage of equipment, replacement parts and empty non-hazardous containers.

Attachments:

Glass Roll-offs

Equip. Storage & Empty Containers

B. HW Storage :

Mercury containing phosphor powder is collected in 55-gallon drums and staged in the northeast end of the building prior to processing in the facility's vacuum distiller. The area is permitted for storage of 15 pallets (60 drums) maximum; double stacked is OK. Inbound manifested hazardous waste, prior to processing, and outbound hazardous waste, is accumulated in the 90 Day storage area located in the northwest portion of the building. This area is permitted for a maximum storage capacity of 24 drums.

Attachments:

Drums of Phospor Powder

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 a 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 and dry separated into glass, aluminum and phosphor powder. Phosphor powder is collected by a bag tower and accumulated in 55 gallon drums.

Attachments:

Fluorescent Lamps

Conveyor Belt

New Potential Violations and Areas of Concern:

Checklist Independent Potential Violations and Areas of Concern

Type: Area Of Concern

Rule:	62-737.800(10)
Explanation:	Veolia TSD is considering modifications to "Processing Line Two" for the lamp processing room.
Corrective Action:	Veolia needs to ensure compliance with Rule 62-730.290, F.A.C.

Attachments:

Processing Line Two

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.

Attachments:

Loading/Unloading Dock

Post Retort Drums

E. Hg Retort Processing:

The mercury containing phosphor powder, crushed HID arc tubes, and MCMAs 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. MCMAs are manually disassembled to remove metals, glass, and plastics from the intact devices. Liquid Hg is drained from the MCMAs and accumulated for the refining/seller. The remaining components are placed in 55-gallon drums for retort.

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 permitted storage 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/reclamation.

Attachments:

Inbound UW Lamps

Inbound UW Lamps

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 an air emissions control system. Outer glass, metal bases and support wires are removed from the arc tubes and dropped into collection containers for recycling. Arc tubes are crushed and accumulated in 55-gallon drums for further processing in the retort room. The drums of crushed arc tubes are managed as satellite accumulation area containers and moved to the Hazardous Waste Storage Area at the north end of the building within three days.

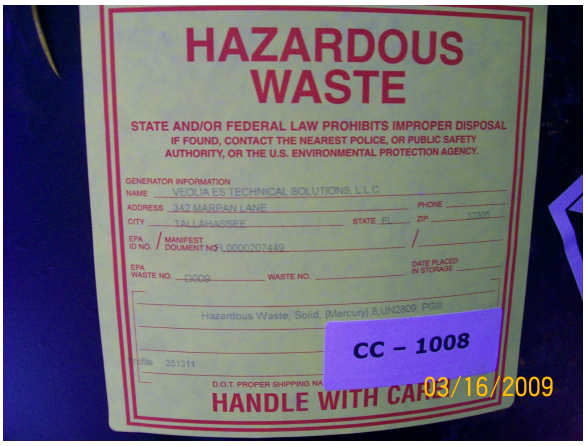
Attachments:

HID Automated Process

HID Arc Tubes Being Crushed

Drums of Crushed Arc Tubes

Crushed Arc Tube Label



I. Main Building Battery and Electronic Waste Storage :

This area is in 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).

New Potential Violations and Areas of Concern:

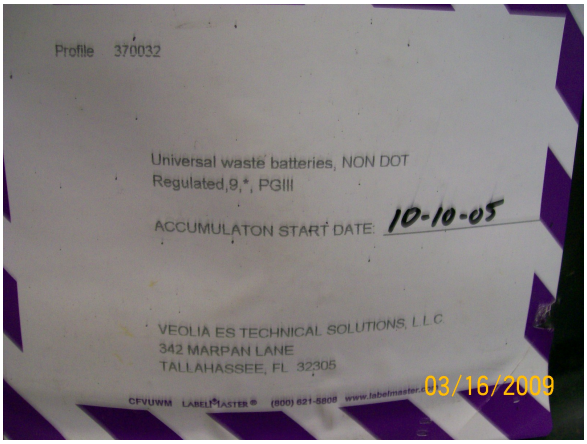
Universal Waste General

Type:	Area Of Concern
Rule:	273.35(a)
Question Number:	30.50
Question:	Are universal wastes stored for less than one year?
Explanation:	There was one 55-gallon drum in this area labeled Universal Waste Batteries with a start accumulation date of 10-10-05.
Corrective Action:	Veolia TSD reviewed receiving records and discovered that the date was an error. The actual received date was 2008. In response to this issue, Veolia implemented a new HOUSE inspection that requires the inspector to document the oldest date in the storage areas of the plant and cannot be done by the same person two consecutive days.

Attachments:

Batteries Dated 2005

Close-Up of Battery Label



J. South Building Container and Electronic Waste Storage:

This building 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).

Attachments:

South Bldg / Empty Containers

South Bldg / E-Waste

K. 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

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 with no discrepancies noted. Permit required training documentation was verified for four randomly selected employees. The Weekly HW Storage Inspections were reviewed for CY 2008 and 2009 and found to be complete with the exception of the time of inspection and inspector's name for four inspections in 2009. Facility personnel insured the inspectors that this oversight would be corrected in future inspections. The records were well organized and easily accessible to inspection.

New Potential Violations and Areas of Concern:

Use and Management of Containers

Type:	Area Of Concern
Rule:	62-730.160(6)
Question Number:	8.70
Question:	Are records kept including:
Explanation:	The Weekly HW Storage Inspections were reviewed for CY 2008 and 2009 and found to be complete with the exception of the time of inspection and inspector's name for four inspections in 2009.
Corrective Action:	Facility personnel insured the inspectors that this oversight would be corrected in future inspections.

Summary of Potential Violations and Areas of Concern:

Potential Violations

No Violations

Areas of Concern

Rule Number	Area	Date Cited	Explanation
Universal Waste General			
273.35(a)	I. Main Building Battery and Electronic Waste Storage	03/16/2009	There was one 55-gallon drum in this area labeled Universal Waste Batteries with a start accumulation date of 10-10-05.
Use and Management of Containers			
62-730.160(6)	K. Records	03/16/2009	The Weekly HW Storage Inspections were reviewed for CY 2008 and 2009 and found to be complete with the exception of the time of inspection and inspector's name for four inspections in 2009.
Checklist Independent Areas of Concern			
62-737.800(10)	C. Fluorescent Lamp Processing	03/16/2009	Veolia TSD is considering modifications to "Processing Line Two" for the lamp processing room.

Conclusion:

The facility needs to correct the areas of concern identified above.

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.

Melissa D Woehle	Environmental Specialist
PRINCIPAL INSPECTOR NAME	**PRINCIPAL INSPECTOR TITLE**
Melissa Woehle	FDEP	3/27/2009
PRINCIPAL INSPECTOR SIGNATURE	**ORGANIZATION**	**DATE**

Lonnie A. Jenkins II	USEPA Environmental Scientist
INSPECTOR NAME	**INSPECTOR TITLE**
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INSPECTOR SIGNATURE	**ORGANIZATION**

Anthony Tripp	Professional Engineer
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John Johnson	Environmental Specialist
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Linda Dunwoody	Operations Mgr
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Randy Williams	Operations Supervisor
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Phillip Ditter	EH&S Manager
REPRESENTATIVE NAME	**REPRESENTATIVE TITLE**
NO SIGNATURE	Veolia
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.