

Florida Department of Environmental Protection Hazardous Waste Inspection Report

# FACILITY INFORMATION:

Facility Name: Veolia ES Teo	chnical Solutions LLC	)			
<b>On-Site Inspection Start Date:</b>	01/07/2014	On-Site Inspecti	on End Date:	01/08/2014	
<b>ME ID#:</b> 6716		EPA ID#: FLOO	00207449		
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) 877-82	299	

# **NOTIFIED AS:**

LQG (>1000 kg/month) Transporter Transfer Facility TSD Facility Unit Type(s) Used Oil

# **INSPECTION TYPE:**

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

Routine Inspection for Transporter facility

Routine Inspection for Transfer Facility

Routine Inspection for TSD Facility Unit Type(s)

# **INSPECTION PARTICIPANTS:**

Principal Inspector: Aaron Mitchell, InspectorOther Participants: Randy Williams, Facility 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), 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 employs approximately 20 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 for processing. Veolia is a large quantity generator of hazardous waste and a RCRA permitted facility. Veolia's facility located at 1 Eden Lane, Flanders, NJ (NJD080631369) is registered in Florida as a transporter of hazardous waste. The facility located at 342 Marpan Lane registered with the Department as a Hazardous Waste Transfer Facility on July 11, 2007. Veolia is also registered with the Department as a used oil transporter through January 01, 2015.

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Veolia operates a universal waste transfer facility at 4972 Woodville Highway, Tallahassee, for the parking of transport vehicles prior to and after unloading at the permitted facility.

The transfer yard and permitted facility are located on non-contiguous property in the same industrial park. Veolia notified the Department of universal waste transfer facility activities at the transfer yard on January 9, 2006 and received EPA ID number FLR000124917 for that location.

The current operating permit for Veolia, No 71455-HO-011, addresses mercury recovery, reclamation and storage and expires September 26, 2016.

#### **Process Description:**

Veolia is designed to recycle mercury containing lamps, devices and materials. Veolia uses the term mercury containing manufactured articles (MCMA) to refer to mercury containing devices and mercury contaminated materials.

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 recovery process, small amounts of other scrap metals and plastics are also generated.

HID lamps are processed 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 reclaim the mercury. MCMA are recycled through a combination of manual separation followed by retort processing or the articles may be placed directly in the retort oven for processing.

# A. Outside North Storage Area:

Four 20-yard roll-offs for collection of processed glass are staged in this area on a concrete pad. An adjacent asphalt paved area is used for collection of paper-products, wood pallet recycling and various empty container storage. At the north end of this paved area are two container trailers for storage of equipment, replacement parts and empty non-hazardous containers. This area is also used for overnight holding of transport trucks in the event of an arrival after business hours. The trucks are immediately unloaded during the next business day.

# B. Container Storage Areas:

Veolia has two storage areas designated as "Container Storage Areas One and Two" (CSAs). The CSAs are permitted for up to 27 pallets (108 55-gallon drums) of MCMA; dental amalgam and traps; pre-retort phosphor powder; HID arc tubes; and site-generated hazardous waste (prep room debris and PPE, condensate water, and spent carbon). At the time of this inspection, hazardous waste stored in CSA One included 25 55-gallon drums and two gaylord boxes of belting from the HID processing unit. CSA Two contained four containers of aluminum end caps and four 55-gallon drums of mop water that were being accumulated. The oldest date observed in the storage areas was November 07, 2013. Due to the retort oven being inoperable for a majority of the time starting in June of 2013, Veolia has not been able to process materials (retort) regularly at the facility. There were many drums of Pre-Retort materials being stored in these areas prior to being shipped to Veolia's Port Washington facility located in Wisconsin for processing. The materials were being loaded onto a transport trailer at the time of the inspection. No violations were observed at the time of this inspection.

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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 a conveyor belt. The Fluorescent Lamp Processing 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. Veolia has a second processing line that is used when there is a need to process a larger volume of materials. Due to the retort oven being inoperable all materials are being shipped to Port Washington, Wisconsin facility until retort oven is repaired. No violations were observed at the time of the inspection.

#### D. Loading Dock and Processed Powder Storage:

The loading and unloading area consists of two trailer docking areas for forklift transfer of materials to/from transport vehicles. A new concrete pad has been added to allow for the unloading of all FEDEX deliveries. Post-retort phosphor powder in 55-gallon drums is accumulated in this area along the east wall prior to off-site shipment for disposal in a Subtitle D landfill. The permit requires that post-retort phosphor powder be sampled to ensure effective retort processing prior to off-site shipment. During the inspection of the facility, approximately 48 drums total of post-retort phosphor powder and three 55-gallon drums of non-PCB containing ballasts being stored in this area. No violations were observed.

#### E. Retort Prep Area:

The retort room, located immediately south of the fluorescent lamp conveyor belts, is an enclosed negative pressure room. The prep area is separated from the retort oven by a roll-up door. The phosphor powder, crushed HID arc tubes, and MCMA's are prepared for the retort oven in the prep area. Drums of crushed HID arc tubes and phosphor powder from the lamp recycling operation have their lids removed in the prep area and are then placed in the retort oven. MCMA are manually disassembled and the liquid mercury is drained and accumulated for sale in the prep area. MCMA components are placed in the retort oven or segregated for off-site recycle/disposal. The manual processing of compact fluorescent lamps is conducted here due to the negative pressure environment that aids in reducing the amount of exposure to workers. No violations observed at the time of the inspection. At the time of the inspection this area was not in use.

#### F. Retort:

The retort operation is comprised of an oven which is used to heat the mercury containing waste, liberating the mercury 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 mercury state. The liquid mercury is decanted into accumulation containers for sale. This process varies depending on the materials that are going through the retort process. Lamps are on a 24-hr retorting time frame in which the oven bakes the lamp materials at high temperatures (1120 degrees F max) then cools down. This process is repeated several times during the 24-hour time period. At the time of the inspection the retort oven was inoperable and all materials were being sent to Port Washington, Wisconsin to another Veolia processing facility.

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#### 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 area has a permitted maximum storage capacity of 7,424 cubic feet of mixed fluorescent and HID lamps. The 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. The area is also used for temporary storage of universal waste batteries and non-RCRA hazardous materials. All the inbound material was labeled, closed and in good condition. All containers were within their permitted areas and no broken or exposed universal waste was observed. The area appeared to be in compliance at the time of the inspection.

#### H. HID Processing, Maintenance:

HID lamps are processed manually or through a custom built HID machine in the southern end of the building. The HID lamp machine is comprised of conveyor belts, crushers, magnets and air pollution control equipment. It is enclosed and under negative pressure. It uses an automated process to dry-separate outer glass, metal bases and support wires from the arc tubes. The arc tubes are crushed and dropped into 55-gallon drums for further processing in the retort room. The remaining components are dropped into collection containers for recycle/disposal. The drums of crushed arc tubes are managed as satellite accumulation area containers and moved to the CSA area at the north end of the building within three days. In the manual process, individuals carry out the separation and sorting procedures by hand. The separated arc tubes are fed into the HID machine for crushing prior to retort. The automatic feeder/conveyor allows for in the processing of HID lamps to 37,000 lamps per 8-hour shift. The facility maintenance area is located adjacent to the HID processing area. The maintenance area is enclosed by a cage that keeps all maintenance materials seperated from processing equipment.

# I. South Building Battery, Container and E-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 storage of e-waste and battery storage. The space is permitted to store up to 72 pallets. At the time of the inspection, all pallets were properly labeled and protected from the environment. A new battery sorting table has been added to help in sorting of the various battery types received by the facility. No violations were observed at the time of the inspections.

#### K. Records:

Veolia maintains records including: Inbound/outbound HW manifests or shipping documentation, Monthly Hg Reclamation Rate Samples, Weekly HW Storage Inspections, Weekly Process Operation Inspections, Personnel Training Records, Weekly Composite Samples, Weekly Safety Inspections, and the Contingency Plan. The records were randomly reviewed for CY2012 and CY2013 and found to have no violations at the time of the inspection. Due to the Retort Oven working intermittently the facility records for reclamation rate samples were not as numerous as usually observed.

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# **PHOTO ATTACHMENTS:**

# Outside North Storage Area



# Container Storage Area #1



Container Storage Area # 2



# Universal Waste Storage

**Battery Sorting Table** 



Pre-Retort Powder staged for transport



# **Conclusion:**

The facility appeared to be in compliance at the conclusion of the inspection.

# **Veolia ES Technical Solutions LLC Inspection Report**

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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.

PRINCIPAL INSPECTOR SIGNATURE	ORGANIZATION	DATE
Saron mithed	FDEP	3/19/2014
PRINCIPAL INSPECTOR NAME	PRINCIPAL INSPECTOR TITLE	
Aaron Mitchell	Inspector	

# Supervisor: James Byer

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.