



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

---

**FACILITY INFORMATION:**

**Facility Name:** Veolia ES Technical Solutions LLC

**On-Site Inspection Start Date:** 12/17/2015

**On-Site Inspection End Date:** 12/17/2015

**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

Transfer Facility

TSD Facility Unit Type(s)

Used Oil

**INSPECTION TYPE:**

Routine Inspection for TSD Facility Unit Type(s)

Routine Inspection for Transporter facility

Routine Inspection for Transfer Facility

Routine Inspection for Used Oil facility

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

**INSPECTION PARTICIPANTS:**

**Principal Inspector:** Aaron Mitchell, Inspector

**Other Participants:** Heather Perkins, Inspector; Jill Scarborough, Environmental Consultant; Raj Aiyar, Investigator; Randy Williams, Supervisor; Matthew Melott, 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 June 30, 2015.

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.

Inspection Date: 12/17/2015

Veolia has a new Operating Manager Mr. Matthew Melott. 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.

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. Veolia has removed its two storage containers and empty containers are stored on the paved area. The hazardous waste transfer area is also located here 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. There were no violations observed in this area.

#### **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 four lab packs. There were approximately 44 drums of pre-retort, four gaylord boxes of post retort aluminum end caps, seven 5-gallon containers of dental amalgam, a 55-gallon drum of non-hazardous PPE. CSA Two contained approximately 13 55-gallon drums of non hazardous post retort powder and aluminum end caps, one drum of mop water, Gaylord box of crushed aluminum end caps and pallet of various preprocess mercury containing articles (Dental amalgam, traps and mercury contaminated materials). The oldest date observed was October 20, 2015. The facility had most of the pre-retort drums labeled as hazardous waste. Inspectors that the containers were in process and should not be labeled as hazardous waste. Inspectors also informed the facility that the facility had placed some pallets outside the permitted area and needed to ensure that all pallets were kept within the permitted areas.

#### **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

Inspection Date: 12/17/2015

crusher and dry-separated into glass, aluminum and phosphor powder. Phosphor powder is collected by a bag tower and accumulated in 55-gallon drums. There are two processing lines that are used to facilitate this operation. The second processing line is used when there is a need to process a larger volume of materials. During the previous compliance inspection the facility has purchased a new 22.5 foot auger for the second processing line which had not been installed. Veolia has installed the new auger and has both processing lines in operation at the time of the inspection. There were four 55-gallon drums of pre-retort arc tubes

#### 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. 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 eight drums total of post-retort phosphor powder and non-PCB containing ballasts being stored in this area along with approximately 21 55-gallon drums of in process pre-retort phosphor powder.

During the inspection a private facility delivered a large quantity of universal waste lamps to the facility. Veolia explained the the facility takes the lamps but before taking them they properly containerize the lamps before adding them to the processing lines. The facility accepted the lamps from the private business but some of the lamps were dropped and broken on the loading dock. Pursuant to Fla. Admin. Code Ann. r. 62-737.400(5) [40 C.F.R. § 273.33(d)J, Veolia is required by state and federal regulations to properly manage universal wastes received by the facility. The facility immediately addressed the spill by using a non-hazardous chelating agent (HGX) that bound any loose mercury. The broken glass and debris will be processed along with the lamps.

#### 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. At the time of the inspection materials were being staged here for processing through the Fluorescent Lamp Processing Lines #1 and #2. No violations observed at the time of the inspection.

#### 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 last annual inspection the Retort process was being facilitated at the Port Washington, Wisconsin facility. Veolia has since repaired its Retort Oven and restarted its reclamation of mercury from mercury containing wastes. No violations were observed at the time of the inspection.

#### 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.

Inspection Date: 12/17/2015

During the inspection there were several boxes that were not properly closed (Rows 6, 7 and 10). Rows 10 and 11 also had issues with aisle spacing. Palletized materials were beyond the permitted lines and some were leaning into the aisle area. Inspectors reviewed the permit conditions with the facility personnel to ensure understanding of the permit requirements for the universal waste storage area. Adjacent to the area is a SAA for an aerosol can puncturer. The new SAA was not apart of the facility permit and had just been implemented by the new operating manager. Inspectors informed Mr. Melott that any new changes to the facility site plan should be discussed with the Department permitting staff before being implemented. The Department permitting staff must determine if the change is a minor, moderate, or major modification and follow all appropriate regulations to modify the facility operating permit.

#### H. HID Processing, Maintenance:

HID lamps are processed through a custom built HID machine in the southern end of the building. Veolia previously used a manual process in conjunction with the automated process but that has been discontinued. 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. The automatic feeder/conveyor has been reduced to allow for more area to stage the HID lamps for processing. A new conveyor belt has been used to help facilitate the increased processing of the HID lamps.

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 separated from processing equipment. The facility has a shop-vacuum that is used to clean up dust and floor sweepings. Inspectors informed the facility to apply a hazardous waste label to the vacuum due to the possibility of the dust containing waste mercury. Mr. Melott asked inspectors about the future plans to move the maintenance area to the South building to allow for more storage of universal wastes. Inspectors informed him that any changes made to the facility site plan should be addressed in the permit application that the facility was going to submit to the Department this year.

#### 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 CY2014 and CY2015 and found to have some manifests without a final signed copy (Manifest 000666944 VES -8/17/2015). Veolia was able to acquire the copies before the end of the inspection. A review of the sampling records showed that there were exceedences with the weekly composite sampling for the aluminum end caps for 2014. This information was self-reported by Veolia during this time and the new HID lamp processing method was introduced at this time that addressed the issue and no exceedences have been recorded since that time.

During the course of the inspection, Inspectors asked questions and viewed facility operations that were not in compliance with the operating permit. Veolia needs to ensure that all staff are thoroughly familiar with the operating permit or section of the operating permit that pertains to

Inspection Date: 12/17/2015

their specific job duty. This understanding of the permit requirements will assist in reducing the possible violations observed at the time of the inspection.

### New Potential Violations and Areas of Concern:

#### Violations

Type:	Violation
Rule:	265.16(a)(1)
Explanation:	Due to the improper aisle of Universal waste pallets, SAA addition without Department notice, open containers, and not having the final signed copy of a waste manifest, Veolia appears to not have thoroughly trained its personnel in the operating permit requirements and state and federal hazardous waste regulations.
Corrective Action:	Veolia needs to ensure that all personnel are thoroughly trained in the permit conditions of the facility operating permit and state and federal hazardous waste regulations as they pertain to their individual job duties.
<hr/>	
Type:	Violation
Rule:	265.173(a)
Explanation:	The facility had several boxes of universal waste lamps open at the time of the inspection. The boxes were not actively being processed according to the facility operating permit and state and federal hazardous waste regulations.
Corrective Action:	Veolia needs to ensure that all boxes that are not actively being processed are properly closed according to the facility operating permit and state and federal hazardous waste regulations.
<hr/>	
Type:	Violation
Rule:	265.35
Explanation:	Veolia had several pallets in its Universal waste storage area that were not properly in their permitted area according to its operating permit and state and federal hazardous waste regulations.
Corrective Action:	Veolia needs to ensure that all pallets and containers are within the permitted facility storage areas to ensure compliance with its operating permit and state and federal hazardous waste regulations.
<hr/>	
Type:	Violation
Rule:	265.71(a)(2)
Explanation:	Veolia did not have the final signed copy of the uniform hazardous waste manifest for Manifest # 000666944 VES- 08-17-2015. The waste manifest was not acquired within the 45-day time limit
Corrective Action:	Veolia during the course of the inspection acquired the manifest and showed it to inspectors. Veolia needs to ensure that a final signed copy of all manifests are retained onsite for three years. The final signed copy must be attained within 45-days of the hazardous waste being transported offsite for recycling or disposal.



PHOTO ATTACHMENTS:

North Outside Storage



Container Storage Area #1



Container Storage Area #2



Fluorescent Lamp Processing



Universal Waste Storage



Universal Waste Storage



Inspection Date: 12/17/2015

Aerosol Can SAA



South Bldg Battery storage and E-waste

**Conclusion:**

The facility needs to ensure that all pallets are within their permitted areas in the Universal waste Storage area and Container Storage Areas (1 and 2). Veolia also needs to ensure that boxes and containers in the Universal waste storage area are properly closed at all times while awaiting processing. Final signed copies of waste manifests need to be acquired by the facility before the 45-day time limit is exceeded to ensure compliance with state and federal hazardous waste regulations. The facility also needs to ensure that all employees are thoroughly trained in the requirements of the facility's operating permit and enclosed permit conditions.

Inspection Date: 12/17/2015

**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.

Aaron Mitchell

**PRINCIPAL INSPECTOR NAME**

Inspector

**PRINCIPAL INSPECTOR TITLE***Aaron Mitchell***PRINCIPAL INSPECTOR SIGNATURE**

FDEP

**ORGANIZATION**

5/5/2016

**DATE****Supervisor:** Brad Hartshorn

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.