



Florida Department of
Environmental Protection
Hazardous Waste Inspection Report

FACILITY INFORMATION:

Facility Name: Veolia ES Technical Solutions LLC

On-Site Inspection Start Date: 06/11/2012

On-Site Inspection End Date: 06/11/2012

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)

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: Aaron Mitchell, Inspector

Other Participants: 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 July 01, 2013. 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.

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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, UW bulk delivery drop off (FEDEX), 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.

The concrete pad as been expanded to accomodate the two additional roll-offs that have been added to the facility. The two new roll-offs were added to ensure that all processed glass is below the permitted levels of mercury. If a sample is found to exceed permitted levels the additonal roll-offs allows for the glass to be resampled and reprocessed if needed. Located behind the four roll-offs are new concrete/metal bracers to ensure that the building is protected from a roll-off loading incident. The area had previously been used as an offloading area for FEDEX trucks that could not backup to the loading bays near the eastern side of the building. The trucks now pull up to the docks for off-loading. There were no trucks in the 10-day hazardous waste transfer area at the time of this inspection.

B. Container Storage Areas:

Veolia previously had two separate hazardous waste staging areas, "Hazardous Waste Storage Area" (HWS Area) and "90-Day Accumulation Area" (90-Day Area), both located inside the north end of the main building. In the new operating permit these areas are now 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 the CSA One included 24 55-gallon drums, nine five-gallon buckets, two one-gallon buckets and three coardboard boxes of spill pads and belting from the HID machine.

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CSA Two contained three containers of aluminum end caps and a 55-gallon drum of mop water that was being accumulated. The oldest date observed in the storage areas was March 07, 2012. No violations were observed during the time of the inspection.

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. Veolia has a second processing line that is used when there is a need to process more materials. No violations were observed at the time of the inspection.

D. Loading Dock, Processed Powder Storage, Maintenance:

The loading and unloading area consists of two trailer docking areas for forklift transfer of materials to/from transport vehicles. All FEDEX deliveries are now unloaded at this dock. 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. The facility maintenance area has been moved to the southern end of the building closer to the HID processing machine. The area is enclosed by a cage that keeps all maintenance materials separated from processing equipment. During the inspection of the facility, approximately 10 drums total of post-retort phosphor powder and a box of used non-hazardous PPE were being stored in this area. No violations were observed at the time of the inspection.

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.

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

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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 (1120F max) then cools down. This process is repeated several times during the 24-hour time period.

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. The all 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:

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 HWS 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. A new automatic feeder/conveyor belt has been added to the HID processing machine. The new conveyor belt allows for in the increased processing of HID lamps to 37,000 lamps per 8-hour shift.

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. 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, and Weekly Safety Inspections, and the Contingency Plan. The records were randomly reviewed for CY2011 and CY2012 and found to have no violations at the time of the inspection. The Weekly HW Storage Inspection Checklist did not have a space to place the number of containers in storage. This was not corrected during the permitting process and is not a violation of the facility's permit. Though the Department recommends adding a space for container number to the inspection checklist for all future weeks. The addition of the four roll-offs for the storage of processed glass has alleviated the the problem of retesting samples. The processed glass can now be held until results are received and the glass is sent off for disposal or recycling.

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PHOTO ATTACHMENTS:

Outside North Storage



Outside North Storage



Container Storage



Conveyor/Feeder on HID Machine



New Maintenance Area



Battery Storage



Conclusion:

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

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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.

Aaron Mitchell

PRINCIPAL INSPECTOR NAME

Inspector

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

FDEP

ORGANIZATION

7/17/2012

DATE**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.