



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

FACILITY INFORMATION:

Facility Name: Lighting Resources LLC
On-Site Inspection Start Date: 01/28/2021 **On-Site Inspection End Date:** 01/28/2021
ME ID#: 40403 **EPA ID#:** FLR000070565
Facility Street Address: 1007 SW 16th Ln, Ocala, Florida 34471
Contact Mailing Address: 1007 SW 16th Lane, Ocala, Florida 34471
County Name: Marion **Contact Phone:** Data is missing from FIESTA

NOTIFIED AS:

LQG (>1000 kg/month), TSD Facility, Transporter

WASTE ACTIVITIES:

Generator: LQG **Other Status:** Offsite Waste Received **Transporter:** Commercial Waste **TSD:** Treater
Universal Waste: Indicate types of UW generated and/or accumulated at the facility:
Generate/Accumulate: Batteries, Mercury Containing Lamps, Mercury Containing Devices **Transport:** Mercury
Containing Lamps, Mercury Containing Devices **Maximum quantity of UW handled or transported at any
time:** 5000 kg or more; Large Quantity Handler (LQH), Mercury containing devices (LQH) - 100kg or more
accumulated, Mercury containing lamps (LQH) - 2000kg or more accumulated **Destination Facility for UW
Mercury Recovery and/or Reclamation**

INSPECTION TYPE:

Routine Inspection for TSD Facility Facility

INSPECTION PARTICIPANTS:

Principal Inspector: John E. White, Inspector
Other Participants: Buff Fritz, Branch Manager

LATITUDE / LONGITUDE: Lat 29° 10' 20.7785" / Long 82° 8' 49.0004"

NAIC: 562111 - Solid Waste Collection

TYPE OF OWNERSHIP: Private

Introduction:

On January 28, 2021, John White, Florida Department of Environmental Protection, accompanied by Buff Fritz, Lighting Resources Branch Manager, inspected Lighting Resources, LLC for compliance with RCRA permit 0309339-003-HO and federal and state hazardous waste regulations. The permit was issued on May 24, 2017 and expires on July 6, 2022.

The facility most recently notified the Department on November 17, 2020 as a large quantity generator of hazardous waste, an operating commercial treatment, storage, and disposal facility, a large quantity handler of universal waste lamps, batteries, and mercury containing devices, a destination facility for universal waste, a transporter of universal waste, a mercury recovery and/or reclamation facility, and a transporter of hazardous waste. Lighting Resources originally received EPA ID FLR000070565 on February 17, 2011. The facility began lamp processing operations at this location on July 11, 2012.

Lighting Resources' operating hours are from 8 AM to 5 PM, Monday to Friday, for office personnel and in two shifts from 6 AM to 11 PM, Monday to Friday, for processing personnel. Lighting Resources has three drivers and operates one semi and two straight trucks. The trucks are leased from Penske and Penske provides maintenance services. Lighting Resources is connected to the municipal wastewater collection and potable water systems.

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Inspection History (Past 5 Years):

Lighting Resources was inspected on December 5, 2019, in response to a fire on November 28, 2019 in the Balcan Room where the lamp processing equipment is located. The fire destroyed several pallets of fiber containers storing lamps and the lamp processing machine. Repairs to the processing room itself were completed in June 2020 and installation of the new Balcan lamp processing machine was completed in September 2020. Because the equipment was an exact replacement of the permitted equipment, no updates to the RCRA permit were required.

Lighting Resources was inspected on January 25, 2019, by the Department and was not in compliance at that time. The facility failed to comply with the permit requirements by exceeding the 12-week average total mercury content of 1 ppm for glass and metal wastes on seven occasions and the total mercury content of 3 ppm on two occasions. Also, records of the 12-week average was not maintained as required. The violations were corrected, and case was resolved through the issuance of a consent order, OGC case number 19-0381, that included the assessment of civil penalties.

Lighting Resources was inspected on March 23, 2017, by the Department and the U.S. Environmental Protection Agency Region IV and was not in compliance at that time. This was an EPA lead inspection. The following violations were cited: One 55-gallon drum of debris in the processing area was not marked with an accumulation start date and training was not conducted in accordance with the training plan outlined in the permit application. The facility returned to compliance and the case was closed without formal enforcement.

Process Description:

Lighting Resources, LLC is permitted to operate a mercury containing lamp and device storage and recovery facility. The storage of mercury containing lamps are limited to 139,104 T-12 lamps or 45 tons (90,000 pounds). Total storage of processed glass is limited to a maximum volume of four 20-yard roll-off containers, or 120,000 pounds (lbs.), of separated glass. Total storage of processed metals is limited to a maximum of 45,000 lbs. or sixty 55-gallon drums. Maximum storage capacity of phosphor powder is limited to 24,000 lbs. or thirty-two 55-gallon drums.

Universal waste coming into the facility is off-loaded at one of two loading docks and placed inside the warehouse where the number of containers described on the shipping papers are counted to verify the number of containers delivered by the trucking company. Once verified, intact lamps are moved to rows 1 through 9 in the warehouse, crushed lamps are moved to Row 10, and other materials are placed in open rows 1 through 9, as space is available. weighed Electronics for recycling are stored on the loading dock. A written log is maintained identifying the shipping paper number, the generator of the waste, the date the waste arrived on-site, and the date the waste was verified. Universal waste batteries are stored along the north wall of the warehouse.

Located in a separate room with an air filtering system and a self-contained, negative pressure process, is a Balcan MP8000 lamp processor. The Balcan MP8000 lamp processor separates the glass, end caps and phosphor powder from mercury containing lamps. The equipment can operate all day during each business day. Lamps are fed into the processor on a conveyor belt and pass through crushers. Phosphor powder is continuously pulled out of the system by air handlers. Glass and metal end caps are separated and fall out into separate containers. Lamps are processed by type with one machine handling long tubes and a second, multi-purpose machine, handling crushed lamps, HID lamps, and CFLs.

Inspection of the warehouse found lamps stored in rows 1 through 9 and crushed lamps stored in row 10 in compliance with the permit. The middle of the warehouse was being used as a workflow area for processing and sorting of materials unloaded from trucks.

Located along the east wall near the bay doors was a 55-gallon drum containing floor sweepings. The drum was closed and properly labeled dated and marked.

Stored along the north wall of the main warehouse were the following universal waste containers:

- Eight 5-gallon containers of lithium ion batteries
- Sixteen 5-gallon containers of lithium metal batteries
- Nine 5-gallon containers of lead acid batteries
- Five 30-gallon drums of lead acid batteries
- Ten 55-gallon drums of lead acid batteries

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- Four 5-gallon containers of mercury containing devices
- Six 55-gallon drums of mercury containing devices

All of the containers were closed and properly labeled and marked. These waste streams are shipped off-site on average every three weeks.

A shipment of drums was staged and ready for off-site transport later that day. Included in the shipment were eleven drums of floor sweepings and twenty-eight drums of phosphor powder. The drums were stored on pallets and were secured with shrink wrap. All of the drums were closed, labeled, dated, and marked. It was noted the facility possess a torque wrench to ensure the container lids and bungs are properly secured in accordance with the container manufacturers requirements.

In the Balcan lamp processing area staff were actively processing lamps. Located in the area was one 55-gallon drum of phosphor powder, one 55-gallon drum of toxic floor sweepings, and one 55-gallon drum of hazardous debris and contaminated personal protective equipment. All of the drums were closed and properly labeled, dated, and marked.

Located beneath each of the two phosphor powder collection points associated with the Balcan machine is a 55-gallon drum for accumulation of mercury contaminated powder. Both of the drums were properly labeled, dated, and marked.

Adjacent to the Balcan machine was one 55-gallon drum for accumulation of phosphor powder generated by trays contained within the Balcan machine. The trays are periodically emptied of powder residue into the drum that is being managed as a satellite accumulation container. The drum was properly labeled and marked. Due to the slow accumulation rate, this drum may also be used to replace one of the 90-day phosphor powder accumulation drums.

Records Review:

A copy of the permit and application is maintained on site. Review of inspections of emergency and safety equipment, weekly container inspection logs, and air monitoring logs found no issues. The Contingency Plan was reviewed, and no issues were noted. Job titles and job descriptions for staff are included in the permit application and are kept on file at the facility.

Review of the weekly sample composite required for recovered mercury containing materials (phosphor powder, glass, metal end caps) per permit condition, Part II Subpart B – Specific Operating Conditions, Specific Condition 3, and rule 62-737.840(3)(d), F.A.C., found one sample of phosphor powder on 1/20/2021 contained 6.2 parts per million (ppm) mercury. The sample was retested in accordance with the requirements of Part II Subpart A – General Operating Conditions, Specific Condition 21, and found to contain less than 3 ppm mercury; however, the data was not included on the log. The log has since been updated with the correct data.

Permit condition, Part II Subpart B – Specific Operating Conditions, Specific Condition 5 requires Lighting Resources to maintain a rolling 12-week average of mercury contained in the process wastes. The permit, and rule 62-737.840(3)(d), F.A.C., require the rolling average to be less than 1.0 ppm. No issues were noted with the log and the rolling 12-week average did not exceed 1.0 ppm.

Conclusion:

Lighting Resources was inspected as a permitted mercury recovery facility and was in compliance at the time of this inspection.

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1.0: Pre-Inspection Checklist

Requirements:

The requirements listed in this section provide an opportunity for the Department's inspector to indicate the conditions found at the time of the inspection. A "Not Ok" response to a requirement indicates either a potential violation of the corresponding rule or an area of concern that requires more attention. Both potential violations and areas of concern are discussed further at the end of this inspection report.

Note: Checklist items with shaded boxes are for informational purposes only.

Item No.	Pre-Inspection Review	Yes	No	N/A
1.1	Has the facility notified with correct status? 262.18(a)	✓		
1.2	Has the facility notified of change of status? 62-730.150(2)(b)			✓
1.3	Did the facility conduct a waste determination on all wastes generated? 262.11	✓		

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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

John E. White**Principal Investigator Name**JW**Principal Investigator Signature**Inspector**Principal Investigator Title**DEP**Organization**02/17/2021**Date**Buff Fritz**Representative Name**Branch Manager**Representative Title**Lighting Resources**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.

Report Approvers:**Approver:**Daniel K. Hall**Inspection Approval Date:**02/19/2021