

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

P059328958

FACILITY: ENERGY POWER SYSTEMS, LLC		SRN / ID: P0593
LOCATION: 601 STEPHENSON HIGHWAY, TROY		DISTRICT: Southeast Michigan
CITY: TROY		COUNTY: OAKLAND
CONTACT: Brooks Lamb Budny , EHS Manager		ACTIVITY DATE: 03/24/2015
STAFF: Sebastian Kallumkal	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: Minor
SUBJECT: Onsite Inspection		
RESOLVED COMPLAINTS:		

On Tuesday, March 24 2015, AQD Permit Section Staff Ambrosia Brown and AQD Inspector Sebastian Kallumkal conducted a self-initiated inspection at Energy Power Systems, LLC. located at 601 Stephenson Highway, Troy, Michigan. The purpose of the inspection was to learn more about facility's proposed operations. The facility applied for a permit to install (PTI No. 29-15) to manufacture lead-acid battery. Facility's current operations are exempt from permit to install requirements pursuant to R283(2). In the future the facility intends to sell the manufactured batteries which would exclude the operations from exemption.

We arrived at the facility at about 10:00 AM. We met Mr. Bill Koetting, Engineering Director, Peter Buccilli, PMP, Senior Program Manager, Ms. Brooks Lamb-Budny, Manager, Product and Process Quality Assurance, Roy Smotherman and Daniel Askin, Consultant (President and Technical Director, ESCA Tech, Inc.). We introduced ourselves and stated the purpose of our visit. I provided them MDEQ Brochure for Environmental Inspections: Rights and Responsibilities.

Initially they gave us a description of the processes at the facility. Mr. Askin illustrated which processes have air pollutant emissions. The pilot plant would be producing 12 V. batteries.

1. Lead oxide paste mixing- No direct air emissions to the atmosphere
2. Pasting-Adding of paste to the grids- vented to the general in-plant environment
3. Waste water evaporator – to evaporate the decanted water from pasting pot cleaning-vented to the atmosphere via stack
4. 3 Process facility
5. Acid handling and filling- emissions vented outside in case of acid spilling
6. Formation
7. Heat seal-vented through stack

Mr. Askin also explained that this pilot plant would be moved to the new plant in Pontiac. So two new PTI applications would be submitted in the future-one for pilot plant and the other one for the large scale production. They also demonstrated a 3D virtual view of the new Pontiac facility.

Next Mr. Koetting and Mr. Askin provided a tour of the facility. The paste mixing area is completely enclosed. The process was not operating at the time of our visit. The air in this room is filtered using two step HEPA filter system and vented to the general in-plant area. We also visited grid pasting area. The pasting pots are washed daily using low VOC/no VOC cleaner in a parts washer. The decant water is evaporated in an evaporator. The vapors are vented to the atmosphere.

We also visited hot seal area, acid filling process, formation process, etc. The air in the plant is filtered using various stations HEPA filters.

Later during the post inspection meeting, we discussed the PTI process. We discussed the emission units which need to be included in the PTI. Mr. Askin offered to send the stack test results for hot seal process. They also discussed about getting a temporary permit if the review process is faster and offered to make decision about it in couple of days. The facility is an area source of hazardous pollutant emissions and the process is subject to 40 CFR 63, Subpart P- National Emission Standards for Hazardous Air

Pollutants for Lead Acid Battery Manufacturing Area Sources. The process is not subject to New Source Performance Standards (NSPS) Subpart KK- Standards of Performance for Lead-Acid Battery Manufacturing Plants because the design capacity of the facility to produce in one day (24 hours) batteries containing lead less than 5.9 Mg (6.5 tons).

The lead emissions from this facility are calculated to be less than 0.5 tons per year.

Conclusion: The PTI application is under review.

NAME Sebastian Kallamkal DATE 3/26/15 SUPERVISOR CJE