

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

A615335522

FACILITY: B & P PROCESS EQUIPMENT AND SYSTEMS LLC		SRN / ID: A6153
LOCATION: 1000 HESS ST, SAGINAW		DISTRICT: Saginaw Bay
CITY: SAGINAW		COUNTY: SAGINAW
CONTACT: Gonzalo Maulanda , Technology Center Manager		ACTIVITY DATE: 07/12/2016
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Targeted inspection to determine compliance with PTIs #407-92 and 35-88.		
RESOLVED COMPLAINTS:		

I (glm) conducted a targeted inspection of B & P Process. I met with Mr. Gonzalo Marulanda, Technology Center Manager, and Mr. John Kress, Vice President of Operations. The purpose of the inspection was to verify compliance with PTI #s 407-92 and 35-88. The facility is a specialty machinery manufacturing facility. The operations at this location include equipment research and development, equipment assembly and parts coating.

The Technical Development Center building houses the pyrolysis process that is covered under PTI 407-92, as discussed below. Additional operations in this building include research and development for customers that intend to purchase equipment for full scale production. Bench scale pilot tests are conducted using existing equipment to determine operational feasibility of the manufacturing process. Control, if necessary, is typically a condenser to reclaim material. Occasionally, the vent combustor on the pyrolyzer is used for control. Customers are primarily in the chemical manufacturing field concentrating on plastics, rubbers and resins. The non-permitted operations in this building appear to meet the R283(1) exemption requirements.

The other operational building at the facility is the equipment assembly operations. Full scale machinery is assembled in this facility. Parts are manufactured at other facilities and the final equipment assembly is conducted here. Machining operations included lathes, drills, mills and saws. These operations are all vented internally and appeared to meet the requirements of the R285(l)(vi).

#### PTI 35-88: Compliance

This PTI was issued for a paint spray booth. The booth is located in the assembly building and is used to coat various metal parts before final assembly. At the time of the inspection, the filters in the booth were in place and in good condition. The booth was not in operation at the time of the inspection.

Based on purchase records, B&P used 176 gallons per year of coatings. The usage and operations at the facility currently meet the requirements of exemption R287(c), however, B&P intends to maintain the existing permit.

#### PTI 407-92: Compliance

This permit was issued for operation of a twin screw mixer to demonstrate the pyrolysis process for potential customers. The demonstrations utilize a sample of the customers waste stream, typical municipal solid waste. The waste is sorted to remove non-combustibles. The remaining materials are subjected to the pyrolysis process, which produces a synthetic coal material and a gas stream. For full scale processes, the gas stream would be used to produce steam that is reused in the process. For this permit, the gas stream is vented through a gas conditioner and knock-out pot before going to a combustor for control and discharged.

Based on records reviewed during the inspection, the pyrolyzer was last operated in 2010 for 30 minutes, see attached. The PTI limits hours of operation to 600 hours per year. The facility contracts Honeywell to perform burner tune up on the unit.

There is a waste blender included in the PTI. This blender is a batch operation capable of processing approximately 150 lbs per batch that is used to condition the waste sample prior to a pyrolysis demonstration, if necessary. Mr. Jones indicated that the blender is very rarely used, as the waste samples provided by customers are typically adequate for the process. The wet scrubber for the blender exhaust was in place and appeared to be operational.

At the time of the inspection, B&P was in compliance with all conditions of PTI 407-92

NAME *Wendy L. McR...*

DATE 7/21/2016

SUPERVISOR *C. New*