

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N320570614

FACILITY: PS Business Acquisition		SRN / ID: N3205
LOCATION: 122 SOUTH ASPEN STREET, SPARTA		DISTRICT: Grand Rapids
CITY: SPARTA		COUNTY: KENT
CONTACT: Chris Beauchene , Quality Manager		ACTIVITY DATE: 12/21/2023
STAFF: Dillon King	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Unannounced Inspection		
RESOLVED COMPLAINTS: C-24-00433		

Air Quality Division (AQD) staff Dillon King (DK) and Scott Evans (SE) arrived at the PS Business Acquisition – Packaging Personified (SRN N3205) facility at 12:00 pm on December 21, 2023 to complete an unannounced, scheduled inspection. The purpose of this inspection was to investigate a complaint and determine compliance with Permit to Install (PTI) No. 401-96F.

Prior to entering the facility visible emission and odor observations were completed. No odor or visible emissions were observed. The weather conditions were overcast, 38° F with a E wind at 8 mph.

Upon entering the facility, AQD staff DK and SE met with Mr. Chris Beauchene, Quality Assurance Manager, who escorted AQD staff through the facility and provided information regarding site operations and select requested documents.

Facility Description

Packaging Personified (PP) is a manufacturer of printed plastic bags. Resins are transported to the facility via train and stored in silos until it is used in the plastic film blowing process. From there the plastic film is routed to flexographic printing presses and finally the slitting and bagging area. The facility currently operates under one PTI that was issued on October 12, 2017, and consists of four blown plastic film machines of various sizes, two flexographic printing presses with associated natural gas fired drying ovens, three slitting machines and 11 gusset bagging machines. Emissions from the presses and ovens are captured via NFEs and controlled by a regenerative thermal oxidizer (RTO).

Compliance Evaluation

PTI No. 401-96F FGFLEXOPRINT

This flexible group consists of two flexographic printing presses (EUFLEXOTECH8CL & EUFLEXO2014). The presses are flexotechnica 57 inch wide 8-color flexographic printing presses each with an associated natural gas fired drying oven. Emissions from the presses and drying ovens are controlled by an RTO. This flexible group is subject to emissions limits for volatile organic compound (VOC) (15.4 tons per year based on a 12-month rolling time period) and Hydrotreated Light Distillate, CAS No. 68410-97-9 (420 pounds per year (lb/yr) per 12- month rolling time period). Records were requested for the time period of March 2022 through November 2023 and provided from Jan 2022 through November 2023. After a review of the records provided, the highest VOC emissions occurred during the 12-consecutive month period ending in July 2022 when 9.49 tons of VOC was emitted. The highest hydrotreated light distillate emissions occurred during the 12-consecutive month period ending in February 2023, when 12.2 pounds of hydrotreated light distillate were emitted.

PP requested the use of manufacturer's formulation data in a letter to AQD on September 15, 2017. A letter dated October 17, 2017, was sent to PP approving the use of manufacturer's formulation data from the AQD Grand Rapids District Office. Material usage records for the time period of March 2022 through November 2023, were requested and provided by the facility. Based on the review of the records received, PP appears to be calculating VOC and hydrotreated light distillate emissions properly.

Special Condition (SC).III.2 in the permit prohibits the facility from operating the presses unless a malfunction abatement plan (MAP) was received and approved by AQD. The facility submitted the MAP on May 5, 2017. The MAP prescribes monthly preventative maintenance and recording of several operating parameters. In addition, SC.IV.2 in the permit requires a minimum VOC destruction efficiency (DE) of 96% and a minimum temperature of 1475°F at the RTO inlet to demonstrate satisfactory operation of the RTO. The most recent stack testing for the RTO was performed in 2014. The RTO demonstrated compliance with a 97.4% VOC DE at a temperature of approximately 1500°F. After a review of the records provided, PP appears to be correctly following the submitted MAP and the RTO appears to be operating in a satisfactory manner.

SC.IV.1 in the permit prohibits operation of the presses unless the non-fugitive enclosure (NFE) is installed, maintained, and operating in a satisfactory manner. SC.V.3 in the permit requires a quarterly capture efficiency (CE) performance test of the NFE to verify the direction of airflow at each natural draft opening (NDO) is into the NFE. After a review of records received, it appears that PP is in compliance with both these requirements.

The ink and solvent mix-room and storage area was also observed during the site walk through. All waste materials were properly stored in closed containers. Waste rags are kept in a closed 55-gallon drum and staged in the facility's waste area before being removed offsite. The trimming, cutting, and sealing lines were also observed. Emissions from these processes are exhausted in the general in-plant environment. At the time of the inspection, the plastic film blowing machines, one printing press, and several trimming, cutting, and sealing lines were in operation. The RTO was also in operation and the inlet temperature was observed to be 1522.3°F at the time of the inspection. The one stack in association with FGFLEXOPRINT was observed as well. Direct measurements were not taken, but the stack appeared to be consistent with the dimensions listed in PTI No. 401-96F.

Rule 201 Permitting Exemptions

The slitting and gusset bagging machines appear to be exempt per Rule 285(2)(l)(vi). The blown plastic film machines observed appear to be exempt per Rule 286(2)(c). One parts washer was observed in the vicinity of the trimming, cutting, and sealing lines that appeared to be exempt per Rule 281(2)(h). A solvent distillation unit for reclaim with a rated batch capacity of thirty-five gallons was observed on site and appears to be exempt per Rule 285(2)(u).

Conclusion

Based on the review of the records provided and the observations made at the time of the inspection, PP appears to be in compliance with PTI No. 401-96F and any other applicable air quality rules and regulations.

NAME

Dil A King

DATE

1/24/2024

SUPERVISOR

[Signature]