

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

N320562531

<b>FACILITY:</b> PS Business Acquisition		<b>SRN / ID:</b> N3205
<b>LOCATION:</b> 122 SOUTH ASPEN STREET, SPARTA		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> SPARTA		<b>COUNTY:</b> KENT
<b>CONTACT:</b> Chris Beauchene , Quality Manager		<b>ACTIVITY DATE:</b> 03/16/2022
<b>STAFF:</b> Michael Cox	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Scheduled Unannounced Inspection		
<b>RESOLVED COMPLAINTS:</b>		

Air Quality Division (AQD) staff Michael Cox (MTC) arrived at PS Business Acquisition (Packaging Personified) at approximately 9:00 am on March 16, 2022, to conduct a scheduled unannounced inspection. The purpose of this inspection was to determine the facility's compliance with applicable air quality rules and regulations as well as to observe the facility's quarterly non-fugitive enclosure (NFE) testing.

### Facility Description

PS Business Acquisition (Packaging Personified) is a manufacturer of printed plastic bags. The site is presently in operation under one Permit to Install (PTI) No. 401-96F that was issued on October 12, 2017, and consists of two flexotechnica 57 inch wide 8-color flexographic printing presses with associated natural gas fired drying ovens. Each press has a chambered ink system where ink is continuously being pumped throughout the system. While being pumped in the system, the viscosity of the ink is checked to verify the appropriate range with varying amounts of solvent added to remain within that range. Emissions from the presses and ovens are captured via NFEs and controlled by a regenerative thermal oxidizer (RTO). Following the printing presses, the plastic sheets are sent to the slitting or bagging area for final processing. Three slitting machines and eleven gusset bagging machines were observed. During the bagging process a heated edge is used to cut the plastic sheets into the required sizes.

### Compliance Evaluation

Prior to entering the facility MTC drove around the facility to observed possible odors and visible emissions. No visible emissions or odors were observed.

Upon entering the site MTC met with Mr. Chris Beauchene, Quality Manager, who provided a tour of the facility, answered site specific questions, and provided requested records during and after the inspection.

### PTI No. 401-96F

### FGFLEXOPRINT

This flexible group consists of two flexographic printing presses (EUFLEXOTECH8CL & EUFLEXO2014) which are two flexotechnica 57 inch wide 8-color flexographic printing presses with associated natural gas fired drying ovens controlled by an RTO.

This flexible group is subject to volatile organic compound (VOC) emission limits of 15.4 tons per year (tpy) per 12-month rolling time period and a Hydrotreated Light

Distillate (CAS No. 68410-97-9) emission limit of 420 pounds per year (lb/yr) per 12-month rolling time period. Records were requested and provided for the time period of January 2021 through March 16, 2022. After a review of the records provided, the highest 12-month rolling VOC emission occurred during the 12-consecutive month period ending in January 2022 when 7.80 tons of VOC was emitted. The highest 12-month rolling Hydrotreated Light Distillate (CAS No. 68410-97-9) emission occurred during the 12-consecutive month period ending in January 2021, when 13.9 lb/yr of Hydrotreated Light Distillate (CAS No. 68410-97-9) were emitted.

During the facility walk through the inks and solvents mix-room and storage areas were observed. All waste materials were noted to be in closed containers and were properly stored. Waste rags used for clean-up are stored in a 55-gallon drum and staged in the facility's waste area before being removed offsite. 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).

As stated in the permit, a malfunction abatement plan (MAP) must be implemented and maintained. The facility submitted the MAP on May 5, 2017. Records of preventative maintenance of the RTO and two printing presses were requested and reviewed for the time period of January 1, 2021, through March 16, 2022. After a review of the preventative maintenance records provided, Packaging Personified appears to be correctly following the submitted MAP.

During the inspection of the printing presses, it was observed that the NFE is part of the press configuration and not a separate enclosure. For the capture efficiency test, Mr. Beauchene used a smoke tube and demonstrated that airflow goes into the NFE on EUFLEXO2014 for the required quarterly NFE testing plan. The facility stated that EUFLEXOTECH8CL was down during this quarter due to maintenance and production related issues and could not be tested. The facility has been adequately testing the NFEs of both printing presses quarterly and submitting the test results to the Grand Rapids District Office accordingly.

At the time of the inspection the temperature at the inlet of the thermal oxidizer was observed at 1538°F. Per Special Condition (SC).IV.2, proper operation of the RTO requires a minimum VOC destruction efficiency of 96% and a minimum temperature of 1475° F at the inlet. Records of the RTO operating temperature were requested and provided for the time period of January 2021 through Marh 16, 2022. It was noted during the review that the facility's spreadsheet denoting the temperatures of the RTO were either recorded as 1500°F for operating temperature or 1200°F for idle temperature with no variation. After a discussion with Mr. Beauchene, it was determined that the chart recorder is transcribed to the spreadsheet in approximation. Mr. Beauchene provided copies of the charts used to record the temperature data. After a review of the chart records, it appears that the facility is operating the RTO as required. The most recent stack testing for the RTO was performed on December 2, 2014. The RTO demonstrated compliance with a temperature during testing of 1500°F, which is above the set point of 1475°F at the inlet of the thermal oxidizer. The VOC destruction efficiency demonstrated during the test was noted to be 97%.

Per SC.V.1. VOC content of the materials used by the facility shall be determined using Test Method 24. Packaging Personified submitted a letter requesting the use of manufacturer's formulation data on September 15, 2017. A letter dated October

17, 2017, was sent to Packaging Personified approving the use of manufacturer's formulation data from the Grand Rapids District Office. Formulation Data Sheets and material usage records for the time period of January 2021 through March 16, 2022, were requested and provided for the materials used by the facility. Based on the review of the formulation data of the inks and solvents, Packaging Personified appears to be correctly calculating VOC and Hydrotreated Light Distillate (CAS No. 68410-97-9) emissions properly.

One stack is listed in association with FGFLEXOPRINT and was observed during the site inspection. The stack appeared to be consistent with the dimensions listed in PTI No. 401-96F.

#### Additional Observations

One parts washer was observed in the vicinity of the printing presses that appeared to be exempt per Rule 281(2)(h).

#### Conclusion

Based on the review of the records provided and the facility walk through, Packaging Personified appears to be in compliance with PTI No. 401-96F.

NAME Michael T. Cox

DATE 4/7/2022

SUPERVISOR HH