

P0997

MAJILA

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

P099759268

FACILITY: Cygnet Automated Cleaning, LLC		SRN / ID: P0997
LOCATION: 9120 General Drive, PLYMOUTH		DISTRICT: Detroit
CITY: PLYMOUTH		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 08/12/2021
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Onsite inspection		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION : 08/12/2021

TIME OF INSPECTION : 10:00 am

NAICS CODE : 32551

PERSONNEL PRESENT : George Stolzenfeld, Rob Harvey

### FACILITY BACKGROUND

On August 12, 2021 I conducted a prescheduled air quality inspection at Cygnet. The facility recently moved to a new location, though the process is the same as it was at the previous location (N7422). Cygnet cleans the paint totes used in the automobile industry. The plant is operating about 1 shift per day.

### COMPLAINT/COMPLIANCE HISTORY

No complaints have been received regarding this facility. This is the first time this facility was inspected.

### OUTSTANDING VN's

There are no outstanding violations regarding this facility.

### PROCESS EQUIPMENT AND CONTROLS

The totes are delivered to the facility by the clients; thus, Cygnet has no responsibilities to collect or return the totes to the clients. The totes are brought into the facility, the paint residue is drained from the totes, and the labels are removed manually. The valves and lids are then removed before the totes enter the cleaning process. Within the sealed cleaning station, nozzles are lowered into containers and spray the containers with a hot (approximately 155 F) caustic solution of approximately 2% potassium hydroxide (KOH). The totes are cleaned with butyl solvent solution. The lids, valves, and plugs are manually washed in the KOH solution and rinsed with water. The used caustic solution is transferred to a settling tank to be reused. Next the containers are refitted with the lids, plugs and valves. Finally, the interior of the reassembled containers is sprayed with ethylene glycol monobutyl ether (CAS No. 111-76-2) (EB). The EB is drained and tested to determine the particulate content, which determines the containers cleanliness.

Glycol ethers, as a class of compounds that contains EB, were identified as hazardous air pollutants (HAPs). However, on November 29, 2004, the EPA removed the compound EB from the group of glycol ethers that are to be considered HAPs. In regard to this facility, because as part of the permit evaluation for PTI 75-05A, nearly all of the VOC emissions from the paint transfer process (3.9 TPY controlled) and the cleaning bath / test process

(10.8 TPY controlled) is EB. About 14 tons of the 25 tons of VOC in the permit limit would be a single HAP, had EB not been excluded from the HAP list by the EPA. This source is not classified as a major source of HAPs since EB has been removed from the glycol ether group of compounds.

## INSPECTION NARRATIVE

I arrived at the facility at 9:45 am and performed surveillance outside of the facility. No odors were detected in the area surrounding the facility. No opacity was observed rising from the stack. When I entered the facility, I met with Mr. George Stolzenfeld, owner, as well as other plant personnel and consultants. Mr. Stolzenfeld stated that no changes had been made to the process since Cygnet relocated from the former location. Next, we walked through the plant, where Mr. Stolzenfeld explained the process to me. Solvent odors were detected inside the facility work area. No odors were detected in the office area or outside the facility.

## APPLICABLE RULES/PERMIT CONDITIONS

Cygnet is permitted under permit number 25-19A, which was issued on October 23, 2020. This permit covers five emission units, EUTOTEEXTCLEAN, EUISOTOTESCRAPE, EUPAINTTRANSFER, EUCLEANINGLINE and EUFINALRINSE, all of which operate as one flexible group, FG-TOTECLEANING. The special conditions regarding this flexible group are evaluated as follows:

### FG-TOTECLEANING:

- I. Emission Limits: Compliance – At the time of the inspection, the facility had been operating at this location for less than a year. Based on the MAERS for 2021, the facility emitted 36.27 tons VOC, which is less than the permitted limit of 37.8 TPY.
- II. Material Limits: NA
- III. Process / Operational Restrictions: Compliance—All waste materials are handled in a manner to minimize air emissions. Based on the MAERS for 2021, the facility processed 19,970 totes during the year, which is an average of 384 totes per week, less than the permitted limit of 200 totes per day.
- IV. Design / Equipment Parameters: Compliance – During the onsite inspection, proper filters were in place, the carbon adsorption system and mist eliminator and recovery system were operating properly.
- V. Testing / Sampling: NA
- VI. Monitoring / Recordkeeping: Compliance – Records were briefly reviewed during the onsite inspection and appeared to be acceptable. However, multiple email requests for records have not been answered.
- VII. Reporting: NA
- VIII. Stack / Vent Restrictions: Compliance – All stacks were installed to the required specs in the PTI
- IX. Other Requirements: NA

### FGFACILITY:

- I. Emission Limits: Unknown – No response has been received regarding a record request.
  - II. Material Limits: NA
  - III. Process / Operational Restrictions: NA
  - IV. Design / Equipment Parameters: NA
  - V. Testing / Sampling: NA
- I. Monitoring / Recording Keeping: Compliance – Records were briefly reviewed during the onsite inspection and appeared to be acceptable. However, multiple email requests for records have not been answered.
- I. Reporting: NA
  - II. Stack / Vent Restrictions: NA
  - III. Other Requirements: NA

## MAERS REPORT REVIEW

This report was received on March 15, 2021. The reported emissions were supported by information supplied by the company and appear to have been reported accurately.

**FINAL COMPLIANCE DETERMINATION**

Cygnat Automated Cleaning, Inc is **in compliance** with all permit conditions and all state and federal regulations. During the inspection, no odors were detected outside of the facility.

NAME JTG

DATE 10/14/22 SUPERVISOR JK