

N7422

MANILA

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

N742256397

FACILITY: CYGNET AUTOMATED CLEANING, L.L.C.		SRN / ID: N7422
LOCATION: 45889 MAST STREET, PLYMOUTH		DISTRICT: Detroit
CITY: PLYMOUTH		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 12/15/2020
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Target Inspection		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION : 12/15/2020

TIME OF INSPECTION : 1:30 pm

FACILITY BACKGROUND

On December 15, 2020, Jill Zimmerman of the Michigan Department of Environmental, Great Lakes and Energy, Air Quality Division (EGLE-AQD) Detroit Field Office conducted an unannounced inspection of Cygnet Automated Cleaning, Inc. (Cygnet). The facility is in the City of Plymouth on Mast Street, an industrial area west of Sheldon Road and North of M-14 highway. Cygnet cleans the paint totes used in the automobile industry.

COMPLAINT/COMPLIANCE HISTORY

Cygnet was last inspected on December 5, 2017. During this inspection, no violations were discovered. No complaints have been received since the last inspection.

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.

This facility is considered a synthetic minor opt-out source based on the potential to emit VOCs, which are greater than 100 tons per year, although Rule 205 was not cited in permit 75-05A. The Potential To Emit (PTE) is calculated based on the facility operating 365 days per year and without taking into account the efficiency of the carbon adsorber. The PTE for this facility would be 120.2 tons per year of VOC, which is above the threshold for a Title V major source. Therefore PTI 75-05A is an opt-out permit, which limits the VOC emissions to 25 tons per year.

INSPECTION NARRATIVE

I parked in the parking lot for this facility, which was vacant. There was a For Lease sign in the front of the building. The building was dark, and it appeared to be vacant. I am aware that the facility recently applied for a permit at a new address. I am assuming that this facility has relocated to the new location, and no operations are currently occurring at this location. After verification that all equipment has been removed from this location, I will void all permits associated with this location.

APPLICABLE RULES/PERMIT CONDITIONS

Cygnet is permitted under permit number 75-05A, which was issued on November 19, 2007. This permit covers three emission units, EU-ToteExteriorCleaning, EU-PaintTransfer, and EU-TestBooth, all of which operate as one flexible group, FG-ToteCleaning. These permit conditions were not evaluated since I was unable to enter the facility.

MAERS REPORT REVIEW

The MAERS report was submitted to DEQ on March 12, 2020. I reviewed the MAERS report on March 25, 2020, and determined that all emissions were reported

accurately. During 2019, the facility emitted approximately 17.5 tons VOC. The MAERS report was submitted in a timely manner.

FINAL COMPLIANCE DETERMINATION

Cygnnet Automated Cleaning, Inc appears to no longer be operating at this location. All permits will be voided once it is verified that all equipment has been removed from this location.

NAME Jill Cz.

DATE 6/3/2022

SUPERVISOR JK