

N7422

MANILA

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

N742242768

FACILITY: CYGNET AUTOMATED CLEANING, L.L.C.		SRN / ID: N7422
LOCATION: 45889 MAST STREET, PLYMOUTH		DISTRICT: Detroit
CITY: PLYMOUTH		COUNTY: WAYNE
CONTACT: Mark Walentovic , Quality Systems Manager		ACTIVITY DATE: 12/05/2017
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Target Inspection		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION : 12/5/2017  
 TIME OF INSPECTION : 1:30 pm  
 NAICS CODE : 32551  
 EPA POLLUTANT CLASS : VOC  
 INSPECTED BY : Jill Zimmerman  
 PERSONNEL PRESENT : Mark Walentovic  
 EMAIL : mark@ibcresources.com  
 FACILITY PHONE NUMBER : 734-455-7631  
 FACILITY FAX NUMBER : 734-455-7504

### FACILITY BACKGROUND

On December 5, 2017 Jill Zimmerman of the Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Detroit Field Office conducted an unannounced inspection of Cygnet Automated Cleaning, Inc. (Cygnet). The facility is located 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. The plant is operating about 1 shift per day, 4 days per week.

### COMPLAINT/COMPLIANCE HISTORY

Cygnet was last inspected on November 25, 2013. 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 regards 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 2015 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 major source. Therefore PTI 75-05A is an opt-out permit, which limits the VOC emissions to 25 tons per year.

## INSPECTION NARRATIVE

I arrived at the facility at 1:30 pm 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. Mark Walentovic. Mr. Walentovic stated that no changes had been made to the process since my last inspection. Together we walked through the plant, where Mark 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. Record log books were also reviewed during the onsite inspection, and copies for the records for the past 3 years were collected and are attached to this report. The facility maintains a bookshelf in the office area with binders containing all MSDS associated with the facility, as well as all record keeping requirements.

## APPLICABLE RULES/PERMIT CONDITIONS

Cygnnet 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. The special conditions regarding this flexible group are evaluated as follows:

1.1a Compliance – I collected records from the past 3 years. I put this information into a spreadsheet to determine the 12-month rolling average. The highest month for the annual emissions was August 2017, when the facility reportedly emitted about 5.84 tons of VOC. This is less than the permit limit of 25 tons per monthly rolling time.

1.1b Compliance – No opacity was observed during the inspection. Based on Operational Memoranda 14, less than 0.1 pounds PM per 1000 pounds exhaust is emitted.

1.2 Compliance – All waste is stored in closed 55 gallon drums until the drums are sent offsite. Properly labels waste drums were observed during the inspection.

1.3 Compliance – All used filters are stored in closed drums until being sent offsite.

1.4 Compliance – The facility maintains monthly records for the number of totes cleaned. The facility never processed more than 2180 totes in a month. If the facility processed the permitted limit of 225 totes per calendar day, 5 days per week, 4 weeks per month, the facility would process 4,500 totes per month. The actual amount processed is less than 4,500 totes. A one-month sample of the daily totes cleaned record is attached to this report.

1.5 Compliance – The carbon adsorption system is in place and inspected weekly. Sensors on the filters indicate when the filters need changed based on a color change.

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1.7 Compliance – Records collected between January 2015 and November 2017 demonstrate compliance.

1.8 Compliance – A binder containing all the MSDS for the company was kept in the office and reviewed during the onsite inspection.

1.9 Compliance – Records were collected between January 2015 and November 2019. The 12-month rolling average was not calculated, however, I was able to determine this value based on the records collected. I have asked the company to maintain this record with their monthly records.

1.10 Compliance – An acceptable number of totes are processed and recorded. Monthly records are maintained for the number of totes processed. Daily records for the number of totes processed are maintained onsite. A one-month sample of the daily totes cleaned record is attached to this report.

1.11 Compliance – Based on the information submitted through MAERS, the stack dimensions are at the permitted values.

## MAERS REPORT REVIEW

The MAERS report was submitted to DEQ on February 23, 2017. I reviewed the MAERS report on March 31, 2017 and determined that all emissions were reported accurately. During 2016, the facility emitted approximately 4.98 tons VOC. The MAERS report was submitted in a timely manner.

## FINAL COMPLIANCE DETERMINATION

Cygnnet 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. Records were maintained to

show compliance with all permit conditions. I have asked the facility to keep the 12-month rolling average for the VOC emissions.

NAME Jill Zimmerman

DATE 7/2/18

SUPERVISOR JK