

N5861

Manila

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

N586140752

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|---------------------------------------|-------------------------------|---------------------------|
| FACILITY: CUL-MAC INDUSTRIES INC | | SRN / ID: N5861 |
| LOCATION: 3720 S VENOY, WAYNE | | DISTRICT: Detroit |
| CITY: WAYNE | | COUNTY: WAYNE |
| CONTACT: William P. McLaughlin, Owner | | ACTIVITY DATE: 07/18/2017 |
| STAFF: Jorge Acevedo | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Scheduled Inspection | | |
| RESOLVED COMPLAINTS: | | |

REASON FOR INSPECTION: Scheduled Inspection

INSPECTED BY: Jorge Acevedo, AQD

PERSONNEL PRESENT: Scott Crichton

FACILITY PHONE NUMBER: (800) 626-5089

FACILITY WEBSITE: www.culmac.com

FACILITY BACKGROUND

Cul-Mac Industries, Inc. established operations in 1981 making windshield washer solvent, gas line and Recreational Vehicle antifreeze. It became one of the largest manufacturers of automotive chemicals in the Midwest. In 1986, Cul-Mac expanded by joining forces with Kimco Janitorial. In 1991, under the name Tech Group, Cul-Mac Industries, Inc. expanded by introducing a comprehensive new line of car wash cleaning chemicals to the automatic car wash industry. In 1996, Cul-Mac added swimming pool chemicals manufacturing. In addition to the Cul-Mac Brands, Cul-Mac also makes private label cleaning chemicals. In 2007, Cul-Mac acquired Standhardt Chemical, a Grand Rapids, Michigan based company, which manufactured and sold car wash cleaning and detailing chemicals. Currently, Cul-Mac markets these chemicals under the Magic Finish name.

Cul-Mac currently occupies over 190,000 square feet of mixed manufacturing and warehousing. The facility is capable of manufacturing over 200 proprietary formulations packaged in sizes ranging for two ounces up to 500 gallons.

PROCESS OVERVIEW

Cul-Mac blends raw materials to produce its cleaning chemicals and solvents in 7 different mixing tanks, which range between 2,000 to 4,000 gallons in capacity.

There are three (3) 12,000 gallons tanks and one (1) 15,000 gallons tank for the storage of Sodium Hypochlorite (NaOCl) solution, and one (1) 100,000 gallons tank for the storage of Methanol (CH₃OH). The NaOCl tanks are exempt from the provisions of R 201(1), to obtain a PTI, pursuant to the provisions of R 284(h). The methanol tank was permitted in 2016 as result or resolving a Rule 201 violation.

There are three (3) boilers installed at the facility. Cul-Mac gained ownership of these boilers from the original owner, 3M Company, of the facility. Unlike 3M Company, who used the boilers for its processes, Cul-Mac dedicated these boilers for heating its plant and offices only. Two (2) of the three (3) boilers were decommissioned, by the previous facility owner (3M Company), prior to Cul-Mac's take over in 1988. The only operating boiler has an operating capacity of 1.84 MMBTU/HR and is used for space heating purposes. Therefore, this boiler is exempt from the provisions of R 201(1), to obtain a PTI, pursuant to the provisions of R 282(b)(i).

Cul-Mac also carries out a blow molding operation, where blowing air is used to produce different plastic bottles and containers for its products. The blow molding equipment and associated plastic resin handling, storage, and drying equipment are exempt from the provisions of R 201, to obtain a PTI, pursuant to the provisions of R 286(c) (i).

COMPLAINT/COMPLIANCE HISTORY

There are no citizen complaints for this facility on file.

The most recent inspection was conducted during January 8, 2016 by the Air Quality Division. At that time, it was determined that the facility was not operating in compliance with rule 201 regarding the methanol tank. The violation was resolved when Permit to Install was issued on May 31, 2016.

OUTSTANDING CONSENT ORDERS

None

OUTSTANDING VIOLATION NOTICES

None

INSPECTION NARRATIVE

On July 18, 2017 the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) inspector, Mr. Jorge Acevedo conducted a scheduled inspection of Cul-Mac Industries at 3720 S. Venoy Road, Wayne, Michigan.

I arrived at the facility at 12:04PM. I met with Scott Crichton. I explained to him the purpose of the visit. I asked Mr. Crichton if there had been any changes to the facility since the last inspection. He responded that there has not been any changes. I asked him for a summary of the operations since this was my first visit to the facility. After the summary, Mr. Crichton accompanied me into the facility. Our first stop was outside and I observed the Methanol storage tank. The tank condition appeared to be in good condition. Mr. Crichton explained the rail car loading to me. He explained that the facility receives around 3-4 rail cars a month. The loading occurs by having product pumped into the pump house and then to the rail car. Mr. Crichton explained that product is also loaded into 5000 gallon trucks. I checked the nameplate of the tank. It stated that the tank was constructed in 1973 with a nominal diameter of 28 feet and a capacity of 2400 barrels.

After observing the methanol storage tank, we went into the plant. I observed five tanks ranging from 2500 gallons to 6500 gallons, which contained diesel exhaust fluid. Next, I observed several small blending tanks which were less than 2500 gallons. Finally, I observed a silo which contained high density polyethylene beads which are used in the blow molding machine. The blow molding machine, as explained by Mr. Crichton produced around 4-5 million containers for their products. After observing the blow molding operations, we went back to Mr. Crichton's office. I requested methanol storage tank records. I left the facility at 12:41PM.

APPLICABLE RULES/PERMIT CONDITIONS

PTI 66-16 was issued on May 31, 2016. Determination of compliance with the PTI is determined below:

DESCRIPTION: 100,000 gallon capacity vertical above ground storage tank containing methanol.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

| Material | Limit | Time Period / Operating Scenario | Equipment | Compliance Determination |
|-------------|----------------------------------|---|----------------|---|
| 1. methanol | 1,500,000 gallons per year | 12-month rolling time period as determined at the end of each calendar month. | EUMETHANOLTANK | Compliance- 12 month rolling average is 1.3 million gallons per year. |

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUMETHANOLTANK unless it is filled via a fill pipe that is not more than six inches from the bottom of the tank. (R 336.1702(a))

Compliance- Tank is filled through pipe which is pumped from pump house.

2. The permittee shall not store any product in EUMETHANOLTANK other than methanol. (R 336.1225, R 336.1702(a))

Compliance- Only Methanol is stored in the tank.

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

The permittee shall keep records of the EUMETHANOLTANK throughput for each calendar month and 12-month rolling time period. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1702(a))

Compliance- Records are kept.

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

Not applicable. Fugitive dust was not observed to be a problem during the inspection.

MAERS REPORT REVIEW:

Not applicable. The facility is not required to submit Michigan Air Emissions Reporting System (MAERS).

FINAL COMPLIANCE DETERMINATION:

At this time, this facility is operating in compliance with PTI 66-16.

NAME



DATE

9-18-17

SUPERVISOR

W.M.