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

P045549992

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|---|---|---|
| **FACILITY:** ELITE CLEANROOM SERVICES | | **SRN / ID:** P0455 |
| **LOCATION:** 548 S COURT STREET, LAPEER | | **DISTRICT:** Lansing |
| **CITY:** LAPEER | | **COUNTY:** LAPEER |
| **CONTACT:** Robert Schodowski , General Manager | | **ACTIVITY DATE:** 08/20/2019 |
| **STAFF:** Daniel McGeen | **COMPLIANCE STATUS:** Compliance | **SOURCE CLASS:** MINOR |
| **SUBJECT:** Scheduled inspection of facility pursuant to EPA initiative to inspect industrial laundromats. | | |
| **RESOLVED COMPLAINTS:** | | |

**On 8/20/2019, the Michigan Department of Environment, Great Lakes, and Environment (EGLE), Air Quality Division (AQD), conducted a scheduled inspection of Elite Cleanroom Services, pursuant to an initiative from the U.S. Environmental Protection Agency (EPA) to conduct inspections of industrial laundromats.**

**Environmental contact:**

**Robert Schodowski, General Manager; 810-667-8940; bob@elitecleanroom.com**

**Facility description:**

**This facility launders cloth rags used for cleaning at industrial facilities.**

**Emission units:**

| Emission unit* ID | Emission unit description | Flexible Group ID | Permit to Install (PTI) No. or Rule | Compliance status |
|---|---|---|---|---|
| EUWASHPROCESS | Nine (9) industry standard washers | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER1 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER2 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER3 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER4 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER5 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER6 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER7 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| EUDRYER8 | Natural gas-fired industry standard dryer | FGLAUNDRY | 101-13B | Compliance |
| Natural gas-burning processes | Natural gas-fired air makeup unit, gas heater, and hot water heaters | NA | Rule 282(2)(b)(i) | Compliance |
| 3 new dryers, as of 2018 | 2 new natural gas-fired dryers, installed after April 2018 | NA | Rule 282(2)(b)(i) | Compliance |

***An *emission unit* is any part of a stationary source which emits or has the potential to emit an air contaminant.**

**Flexible Group summary table:**

| Flexible Group ID | Flexible Group Description | Associated Emission Unit IDs |
|---|---|---|
| FGLAUNDRY | Nine (9) industry standard washers and eight (8) industry standard dryers. The washers are programmed to wash at various times and temperatures. The dryers are programmed to dry at various times and temperatures. | EUWASHPROCESS, EUDRYER1 through EUDRYER8 |

**Regulatory overview:**

This facility is considered to be a true minor source, rather than a major source of air emissions. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns.

This facility is also considered a minor, or *area source*, for Hazardous Air Pollutants (HAPs), because it is not known to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

The facility has an air use permit, Permit to Install (PTI) No. 101-13B. There are no HAPs in their raw materials that they use, according to the permit evaluation notes in the PTI, but they are allowed to use materials with toxic air contaminants (TACs). The most notable among these is propylene carbonate, but the plant subsequently eliminated that from their raw materials, in 2017.

The previous PTI, No. 101-13 A, allowed for use of Diethylene glycol monobutyl ether (DGME), which was found in the Uniclean cleaning product. However, the Uniclean product is no longer used here, as of 2015 or 2016.

The facility also has natural gas-fired processes which are exempt under Rule 282(2)(b)(i) from the requirement to obtain a permit to install, because the total heat input capacity of 1.7 million Btu/hr is less than the 50 million Btu/hr threshold. These processes include a natural gas-fired air makeup unit, gas heater, and hot water heaters. They were installed as exempt under Rule 282(b)(i), originally, and on 12/20/2016, this rule was revised as 282(2)(b)(i).

The two natural gas-fired hot water heaters at a facility which is considered a minor, or area source of HAPS may possibly be considered exempt from the area source boiler MACT, 40 CFR Part 63, Subpart JJJJJJ, *National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. A hot water heater at an area source would not be subject, under Section 63.11195(f). To meet the definition of a hot water heater in this area source Generally Achievable Control Technology (GACT) standard, the unit must be no more than 120 gallons in capacity. It is my understanding that each hot water heater has a capacity of less than 50 gallons per unit., and so both units are exempt from this federal regulation. AQD has not been delegated authority to enforce Subpart JJJJJJ.

Fee category:

This facility is not considered fee-subject, for the following reasons. Because it is not a major source for criteria pollutants, it is not classified as Category I. Additionally, because it is not a major source for Hazardous Air Pollutants (HAPs), and is not subject to federal New Source Performance Standards, it is not classified as Category II. Finally, because it is not subject to federal Maximum Achievable Control Technology standards, it is not classified as Category III.

This facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS). Pursuant to AQD's Operational Memorandum No. 13, the threshold for a facility to be required to report to MAERS is typically 10 TPY or more of VOCs.

Location:

The facility is located near the northern edge of a small industrial area within the City of Lapeer. There are industries to the immediate west and the immediate south. There are offices or commercial businesses to the east. To the north is a small parking lot, followed by residences. The nearest residences are about 100 feet to the north and to the northwest.

Recent history:

In 2012 and 2013, AQD had investigated several odor complaints which were attributed to Elite Cleanroom Services. The company went through New Source Review, and obtained a PTI for their

**cleaning processes. They additionally pursued reformulating some of thr cleaning products which they use onsite. No complaints have been received since 2013.**

**An odor evaluation on 2/22/2017, and an inspection on 4/11/2017 found the facility to be in compliance with their PTI and with applicable air pollution regulations.**

**In March of 2018, Mr. Schodowski, General Manager, contacted AQD to discuss the potential addition of 2 or possibly 3 new dryers for drying laundry. After researching this, I subsequently advised him by email on 4/13/2018 that Michigan Air Pollution Control Rule 282(2)(b)(i) provides an exemption which the dryers should be able to meet, for natural gas-fired heating processes where each unit has a rated heat input capacity of not more than 50 million Btu per hour.**

**Rule 282(2)(b)(i) exempts:**

(b) Fuel-burning equipment which is used for space heating, service water heating, electric power generation, oil and gas production or processing, or indirect heating and which burns only the following fuels:
(i) Sweet natural gas, synthetic natural gas, liquefied petroleum gas, or a combination thereof and the equipment has a rated heat input capacity of not more than 50,000,000 Btu per hour.

**Additionally, I also advised Mr. Schodowski on 4/13/2018 that there is no condition in PTI No. 101-13B which prohibits the addition of additional dryers. The permit engineer's review of the permit did not consider the emissions from the burning of natural gas in the 8 original dryers to be noteworthy enough to limit the natural gas throughput on an annual basis, so any additional fuel burned by the new dryers would not be a concern. The 8 original dryers all combined would only add up to 1.7 million Btu/hr, far below the 50 million Btu/hr threshold for a single unit.**

**I further advised that they should not be excluded from utilizing this exemption by Rule 278, because it excludes major sources of HAPs, which they are not. a major source of (they have zero HAPs, as I understand it) Lastly, I advised that they should not be excluded from using Rule 278 because the proposed change would not realistically result in emissions of a criteria pollutant above the "significance levels." For instance, significance level for VOCs is 40 TPY, and dryer emissions would be far less than this.**

<u>Odor evaluation:</u>

**Upon arrival in the area today, I conducted an odor evaluation in the vicinity of Elite Cleanroom Services. Weather conditions were mostly cloudy, humid, and 74 degrees F, with winds out of the south southwest at 0-5 miles per hour.**

**At 9:44 AM, I noticed a barely detectable (level 1) detergent odor in a parking lot immediately north of the facility. At the north end of the parking lot, at the corner of Court Street and Elms, I detected a very brief level 1 odor of detergent at 9:48 AM. Also at 9:48 AM, I detected a floral odor on Elms Street, about 100 feet north of the plant, which may actually have been from flowers in a residential yard. The wind shifted to out of the south southeast, at I detected a level 1 detergent odor on Elms Street, slightly west of the plant. These odors were determined to be insufficient to constitute a violation of Rule 901(b), which prohibits air emissions which cause unreasonable interference with the comfortable enjoyment of life and property.**

**The 0 to 5 odor scale used by AQD reads as follows:**

0 - Non-Detect
1 - Just barely detectable
2 - Distinct and definite odor
3 - Distinct and definite objectionable odor
4 - Odor strong enough to cause a person to attempt to avoid it completely
5 - Odor so strong as to be overpowering and intolerable for any length of time

**Arrival:**

**This was not an unannounced inspection. I had tried to inspect the facility unannounced on 7/22/2019, but Mr. Rob Schodowski was offsite for the day. Due to the nearness of deadlines to complete inspections, I subsequently arranged the time and date for today, 8/20/2019, to do the inspection.**

**There were no visible emissions from the exhaust stacks, upon arrival. The two large diameter stacks with rain caps are actually air intakes, as I understand it, while the numerous tall stacks with rain sleeves, also k nown as "no loss" rain caps, are the dryer vents. A large, square vent n the north side of the building is inactive. It is my understanding that there is a smaller square vent on the north side of the building which draws air in. (SVGENEXHAUST is actually on the south side of the building. There is also an air intake for the office on the south side of the building.)**

**I arrived at the plant office at 10:00AM. I provided my identification/credentials, per AQD procedure. I met with Mr. Robert Schodowski, General Manager, who is the environmental contact, and with Mr. Steve Russette, Plant Manager. Mr. Schodowski accompanied me through the plant today.**

**Pre-inspection meeting:**

**I explained that the U.S. EPA has an initiative this current fiscal year, for states to inspect industrial laundromats. The reason for this is that EPA discovered at a national level that industrial laundry can be a source of VOC and/or HAP emissions, based on oils, grease, solvents, etc. which may be on dirty industrial rags. I would therefore like to learn about what kinds of customers they serve, I in addition to conducting an air inspection to check compliance with applicable air regulations and their PTI.**

**Mr. Schodowski explained that their customers include:**

- 4-5 wood cabinet makers, some of whom use oil-based and some of whom use water-based finishes.
- A number of auto manufacturers, who send them rags with a caulk-like material on them.

**He informed me that automotive rags make up a larger percentage of their business, now that Sherwin Williams has developed a sprayable finish, whereas before, wood cabinet makers wiped on finishes with rags. Therefore, there are less rags from cabinet makers in need of cleaning. He showed me some of the soiled rags that they receive, from both cabinet makers and auto manufacturers, as we walked through the plant. I detected a faint odor like acetone or a solvent from a container of rags from a cabinet maker.**

**Mr. Schodowski advised me that business has really picked up for the plant, and. because they are cleaning with mostly non-volatile ingredients, they have no increase in their VOC emissions. He also informed me that they are recycling 20% of their wastewater, reducing water pollution. He added that in 2018, their practice of washing industrial rags kept 2 million lbs of waste from going to the landfill.**

**Since 2017, Mr.. Schodowski advised me, they have now added VOC % by weight to their spreadsheet for tracking air emissions. He provided me with a copy of the 2019 records year to date (YTD), as of 7/31/2019, please see attached. He also provided me with a copy of recordkeeping from August 2018 through 7/31/2019, for 12-month rolling totals, please see attached.**

**There have been no changes to the equipment at the plant since t2017, other than the 3 new dryers which were installed in 2018, I was informed. Please see discussion of the dryers under the recent history section of this report.**

**Mr. Schodowski mentioned that mentioned that originally their industrial clothes dryers were vented horizontally, until AQD's Brian Culham recommended, around 2013, that they exhaust vertically, with a rain cap, to try to reduce odors detectable by nearby residences. Additionally, they reformulated their cleaning products, he advised. Odor complaints have ceased, but they are always trying to**

**reduce VOCs, to use environmentally friendlier materials onsite.**

**It is my understanding that when they tweak the formula for their cleaning products, they are staying under the 0.1 millimeters of mercury vapor pressure exemption threshold of Rule 281(2)(e). Other exemptions which may relate to the reformulation of cleaning products used onsite include Rule 285(2)(b)(i)(A) and 285(2)(c)(iii).**

**Rule 285(2)(b)(i)(A) exempts:**

(b) Changes in a process or process equipment which do not involve installing, constructing, or reconstructing an emission unit and which do not involve any meaningful change in the quality and nature or any meaningful increase in the quantity of the emission of an air contaminant therefrom.
(i) Examples of such changes in a process or process equipment include, but are not limited to, the following:
(A) Change in the supplier or formulation of similar raw materials, fuels, or paints and other coatings.

**Rule 285(2)(c)(iii) exempts:**

(c) Changes in a process or process equipment that do not involve installing, constructing, or reconstructing an emission unit and that involve a meaningful change in the quality and nature or a meaningful increase in the quantity of the emission of an air contaminant resulting from any of the following:
(i) Changes in the supplier or supply of the same type of virgin fuel, such as coal, no. 2 fuel oil, no. 6 fuel oil, or natural gas.
(ii) Changes in the location, within the storage area, or configuration of a material storage pile or material handling equipment.
(iii) Changes in a process or process equipment to the extent that such changes do not alter the quality and nature, or increase the quantity, of the emission of the air contaminant beyond the level which has been described in and allowed by an approved permit to install, permit to operate, or order of the department.

**We went through the plant, observing their clean room, which was in use. We also observed the washing and drying equipment, some of which was in use. As described in the PTI, the washers are programmed to wash at various times and temperatures, while the dryers are programmed to dry at various times and temperatures.**

**They have a carbon filter for cleaning indoor air, for employees. They have two larger units, which have not yet been installed., I was informed.**

**Compliance with PTI No. 101-13B was checked. The following Special Conditions apply to the Flexible Group FGLAUNDRY:**

**I. EMISSION LIMITS**

**Special Condition (SC) No. I. 1. Volatile organic compounds (VOCs) are limited to emissions of 10.7 TPY. As shown in the attached recordkeeping provided by Mr. Schodowski, the total VOC emissions for the 2019 YTD are 4.47 tons so far, below the permitted limit. The 12-month rolling total is also shown for each individual month. The 12-month rolling total report for 7/31/2019 shows that 12-month rolling value for July was 7.42 tons VOC, below the 10.7 TPY limit.**

**II. MATERIAL LIMITS**

**SC No. II. 1. The facility is limited to use a maximum of 20,000 lbs/year of propylene carbonate. The Underlying Applicable Requirements (UARs) are Rules 224 and 225. As previously discussed in this report, propylene carbonate use ceased in 2017.**

## III. PROCESS/OPERATIONAL RESTRICTIONS

**SC No. III. 1. The facility is required to handle all VOC and/or HAP containing materials in a manner to minimize the generation of fugitive emissions. I did not see any evidence that the facility was failing to meet this requirement. They no longer have any HAP materials onsite, as I understand it.**

## IV. DESIGN/EQUIPMENT PARAMETERS

**Non-applicable (NA).**

## V. TESTING/SAMPLING

**NA.**

## VI.MONITORING/RECORDKEEPING

**SC No. Vi. 1. This requires that all required calculations shall be completed in an acceptable format by the 15th calendar day of the calendar month, for the previous calendar month, unless otherwise specified. The calculations for the 12-month rolling average as of 7/3/12019 had clearly been completed as of today's date, 8/20/2019, as evidence by the recordkeeping Mr. Schodowski provided.**

**SC No. VI. 2. This requires that the permittee shall maintain a current listing from the manufacturer of the chemical composition of each cleaner and solvent, including weight percent of each component. This data may consists of Material Safety Data Sheets (MSDS), now known as Safety Data Sheets (SDS) or manufacturer formulation data. It is my understanding that hard copy SDS sheets are kept onsite for all the products which Elite Cleanroom Services uses.**

**SC No. VI. 3. This requires the permittee keep the following information on a monthly basis for FGLAUNDRY:**

**a.) Gallons or pounds (with water) of each cleaner and solvent used.**

**The attached recordkeeping for 2018 and 12-,month rolling totals for 2019 show the monthly usage in gallons of each cleaning product or solvent. Because there is no mention of water being subtracted, it appears that gallons (with water) are being tracked, as required.**

**b.) VOC content, in percent by weight, of each cleaner and solvent.**

**VOC content is provided in the attached records, in VOC percent by weight as required, plus in lbs/gallon.**

**c.) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.**

**The attached recordkeeping includes monthly VOC mass emissions, for each month in 2018 and so far in 2019.**

**d.) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period.**

**The attached recordkeeping contains calculations for emissions in tons per 12-month rolling time period, for each month in 2018 and 2019.**

**SC No. VI. 4. This requires records of the amount of propylene carbonate used in pounds per calendar month, and pounds per 12-month rolling time period. Propylene carbonate use ceased in 2017, AQD was advised by email, on 12/14/2017.**

**VII. REPORTING**

**NA**

**VIII. STACK/VENT RESTRICTIONS**

**The 8 permitted dryer stacks each appeared to meet their minimum height above ground requirements of 22 feet. The SVGENEXHAUST (horizontal) exhaust vent is required to attain a minimum height above ground of 15 feet, and it appeared to meet this requirement.**

**IX. OTHER REQUIREMENTS**

**NA**

**(End of permit special conditions)**

**The facility appeared to be clean and neat. I left the site at 12 noon.**

**Conclusion:**

**I could not find any instances of noncompliance. The facility was in compliance with their PTI No. 101-13B, and with applicable Michigan Air Pollution Control Rules.**

NAME _____ DATE 9/28/2019 SUPERVISOR _____