

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

P098369228

FACILITY: FALCON RME, LLC		SRN / ID: P0983
LOCATION: 2600 W SALZBURG ROAD, AUBURN		DISTRICT: Bay City
CITY: AUBURN		COUNTY: BAY
CONTACT:		ACTIVITY DATE: 08/10/2023
STAFF: Benjamin Witkopp	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Facility inspection		
RESOLVED COMPLAINTS:		

On August 10, 2023, Ben Witkopp of the Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division (AQD) conducted an inspection of Falcon Asphalt Repair Equipment. The facility contact was previously Mr. Jim Jurgens, VP of Operations. However, Jim was no longer with the company. Now handling the aspects of environment, health, and safety was Charles Varnes.

The company began operation in 2004. It was originally located on Waldo Rd in Midland Michigan and moved to a couple of locations before building a new facility at the NW corner of Salzburg and Flajole Rds in Bay County. The facility was issued air use permit 203-18 on December 18, 2018.

The company makes the small sized equipment used to help repair holes in asphalt pavement. Municipalities are its primary customers. Falcon is the largest company in its industry group. The company does not use prefabricated metal parts. It receives steel in various sizes and shapes. It then fabricates parts through cutting, drilling, and welding. The fumes from the metal fabrication area are routed outside into a baghouse and the air returned inside. Each unit is hand assembled as required. Falcon does fulfill custom orders to accommodate the customer's needs.

Prior to being painted the units are placed into a blast booth. The blasting operation uses glass as the blasting media. The booth exhaust is routed to a cartridge style collector. Installation of a drop box prior to the collector had been mentioned to Mr. Jurgens in 2019. A drop box could then facilitate dropping out a large amount of material thereby preserving the filters in the collector. A drop box was now in place.

The blasting serves a twofold purpose. The primary function is to create a tiny bit of roughness on the surface, so the coatings have improved adhesion. It also provides some cleaning of the metal. No prewash or spray cleaning is conducted. Since the permit is a general coatings line permit, the blasting area is not covered. Additionally, due to the use of glass as the blasting media it may technically not be able to be exempt from permitting based only upon a first glance of the exemption. Rule 285 I vi does not specifically list glass in the list of blasting material. However, if one realizes that glass is nothing more than liquid sand (sand which is heated to a molten state and allowed to cool) the exemption found under rule 285 (I) (vi) (B) readily fits based on the material used. The air for the blasting operation is also released only into the general in-plant environment. The air could also be exhausted externally under rule 285 (I) (vi) (C) now that a drop box has been installed, though that would result in the loss of energy efficiency during cool / colder weather.

The actual coating occurs in two production lines. The lines run east to west, and each is comprised of a prime booth, a drying area, and then a topcoat booth. Ovens

are not used to dry or cure the painted products. Two separate paint kitchens are used. High volume low pressure (HVLP) spray guns are used to apply the coatings. The booth numbering system is a bit confusing. Line 1 is the primary coating line but has booths 2 and 4. It is the northerly line. Line 2 is comprised of booths 1 and 3 and it located to the south of Line 1. The guns are placed in small holders that allows the guns to be cleaned when not is use or between color changes. This helps to cut down on solvent usage. The primer is a urethane while the topcoat is an epoxy. Booth filters were in place though no painting was occurring at the time. Charles said coating Line 2 just recently started being used again in production.

After the coating is completed, the units can proceed to any one of several racks. The racks can raise the units to facilitate final assembly of lights, controls etc. This final step used by Falcon enables the employees to have better access to each unit thereby making their work easier.

I then met with Sarah Clifford and went into her office. Sarah is Falcons Human Resources Manager. Sarah and Charles both wanted to learn about the air permit, rules etc. Sarah explained there had been a fairly swift turnover in Falcons upper management which was accompanied by a subsequent loss of institutional knowledge. Sarah and Charles wanted to learn together so knowledge didn't just rest within one person. I told them about the National Emissions Standards for Hazardous Air Pollutants (NESHAP) XXXXXX for nine metal fabrication and finishing source categories at area sources. The information had previously been provided to Mr. Jurgens. The AQD does not have delegation to enforce the regulation. We discussed the existing air permit, exemptions, rules and reviewed options for various scenarios such as powder coating as well as other means of blasting parts. Review of the permit entailed review of specific terms. The permit limits each coating line to 2,000 pounds of volatile organic compounds (VOC) per month and 10 tpy based on a 12-month rolling time period. The entire source has an overall VOC limit of 30 tpy. Charles had recently started working on maintaining records using the spreadsheet Jim Jurgens had in place. The highest monthly total was 1,847 pounds of VOC in June of 2023 and was from Line 1. The records were not being conducted on a 12-month rolling time period for each line nor the facility as a whole. Charles was told to check the daily records / material data and the calculations of the emissions. He was to then compile the monthly VOC emissions into 12-month rolling time periods and provide the updated records by close of business Friday August 18, 2023.

The next day, Charles and Sarah were furnished with copies of the AQD permit exemption handbook and a copy of Falcon's air permit. I also provided information concerning the Michigan Guide to Environmental Regulations, Hazardous Materials and Liquid Industrial By-Products, and lastly, the Industrial Stormwater program.

On August 18, 2023, Charles submitted a blank spreadsheet that presented two separate coating lines and merely listed the name of the materials and days of the week. It was basically a daily usage tracking form. It did not contain any actual data or calculations let alone anything concerning emissions based on a 12-month rolling time period.

An email was sent to Charles and Sarah on Tuesday August 22, 2023. Having discussed the concept of 12 month rolling time period at length, after Charles had even pointed out the short fall in the records, left AQD perplexed as to why a blank tabulation sheet for daily usages was provided.

Regardless of the reason for the lack of submitting the requested records, Charles was instructed to provide the records of actual emissions records for the latest 12 months, in entirety, as required by Falcon's air permit. The deadline given was by close of business Friday August 25, 2023. Failure to do so, would necessitate a violation notice be sent.

On Friday August 25, 2023, both a call and email were received from Mr. Korey Lester of Falcon. Korey is the President and CEO of the company. He apologized for the initial response received from Falcon. He also provided a spreadsheet he had prepared to provide the records required by the company's air permit.

On Monday, August 28, 2023, the spreadsheet was checked. Since the facility has two coating lines but the line 2 was just put back into use starting in August, that is where the review started. More than a few problems were noted. The usages in both gallons and pounds were not properly summed for Line 2. Line 2's VOC emissions column calculations referenced incorrect materials as one progressed down the column. Though the facility is not required to track the emission of hazardous air pollutants (HAPs) they are tracked to keep tabs on amounts to provide information for any future air permitting. However, Line 2 reported HAPS yet no VOC's for some materials though many of the HAPs listed were VOC's.

In a random check of other months, in the February tab one material had the VOC emissions being calculated by multiplying the gallons of material by its density rather than the VOC content. The material also had a density of 1.93 pounds per gallon which is basically unheard of. This raises several questions itself as the accuracy of the material information is fundamental to records. It also appeared the two paint thinner VOC contents were in the wrong column and therefore not used in calculations.

Due to the relatively small size of the equipment being coated and overall low production volume, it is questionable if limits are being exceeded. The use of solvents, if used only for cleaning and properly handled as waste, should be subtracted from VOC emissions. However, the true use and status of the thinners is not known.

On August 30, 2023 Corey provided another spreadsheet. Once again errors were found. The situation was discussed with District Supervisor Chris Hare and we agreed there isn't an indication any limits were exceeded and the company seems willing to work at improvement. For that reason it was deemed to be in compliance. However, the site will be placed on a list for inspection followup in 2024 with the records thoroughly reviewed.

NAME B. Zuthoff

DATE 9/12/23

SUPERVISOR C. Hare