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

P122670090

FACILITY: Ziebart of Michigan		SRN / ID: P1226
LOCATION: 44033 Van Dyke Avenue, UTICA		DISTRICT: Warren
CITY: UTICA		COUNTY: MACOMB
CONTACT: Tom Bowler , Director, U.S. Retail Operations		ACTIVITY DATE: 11/28/2023
STAFF: Adam Bognar	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On Tuesday, November 28, 2023, Michigan Department of Environment, Great Lakes, and Energy– Air Quality Division (EGLE-AQD) Staff, I, Adam Bognar conducted a scheduled inspection of Ziebart at 44033 Van Dyke Ave, Utica, MI, 48317. The purpose of the inspection was to determine the facility's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); and Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) Administrative Rules; and Permit to Install (PTI) No. 154-22.

I arrived at the facility at around 11:40 am. I met with Ed Russell, Director of U.S. Retail Operations. I identified myself and stated the purpose of the inspection. Ed gave me a tour of the facility.

Ziebart specializes in automotive aftermarket protections. Services provided include detailing, paint protection, window tint, rust protection, undercoating, and spray-on bed liner. Ziebart operates Monday through Friday from 7:45 am to 5:30 pm, and Saturday until 4:30 pm.

There are two spray booths at Ziebart. Both are controlled by fabric filters. One booth is used only for applying bed liner to truck beds ("Rhino" liner). The other booth is used only for applying rust preventative coating. No automotive paint is applied at this facility.

PTI No. 154-22

During a previous inspection in July 2021, it was found that the booths are excluded from using permit to install exemption Rule 287(2)(c) per Rule 278 because the potential to emit an individual Hazardous Air Pollutant (HAPs) from these two coating booths exceeds 10 tons per year.

This Potential to Emit (PTE) was determined by taking the Rule 287(2)(c) limit of 200 gallons per month per booth and multiplying that by the worst case HAP content of 7.5 pounds per gallon, minus water, as applied. 400 total gallons per month equates to 4800 gallons per year. 4,800 gallons multiplied by 7.5 lbs/gallon equals 36,000 lbs of HAPs (18 tons).

I reviewed safety data sheets for both the Rhino bed liner and the rust preventative coating. Neither the bed liner nor the rust preventative coating contain any HAPs. Mineral spirits are the only VOC present in the rust preventative coating at around 60%. The Rhino Liner contains up to 75% polyols (VOC), but the majority of these polyols are intended to polymerize into the bed liner rather than evaporate while curing. It appears that no HAPs are emitted from this facility, only VOC.

Although there are no HAPs currently used at Ziebart, there are no enforceable limits in place that prevent Ziebart from switching to HAP containing materials in the future. Thus, AQD required that Ziebart obtain an opt-out Permit to Install for both the Rhino bed lining spray booth and the rust preventative coating spray booth.

No violation notice was issued because Ziebart applied for and obtained PTI No. 154-22 in a timely manner.

FG-ZIEBART (includes rhino lining, undercoat spraying, and cleanup operations)

Section I – Special Condition 1: Limits VOC emissions from FG-ZIEBART to 5.2 tons per year. The facility meets this emission limit based on the records I reviewed. There has not been a 12-month period since the permit was issued in late November 2022. VOC emissions are reported at 1.95 tons during the 11-month period ending in October 2023. All VOC emissions come from the undercoat spraying in the form of mineral spirits.

Section I – Special Condition 2: Limits Acetone emissions from EU-CLEANUP to 0.3 tons per year. The facility meets this emission limit based on the records I reviewed. Acetone emissions are reported at 0.15 tons during the 11-month period ending in October 2023.

Section II – Special Condition 1: Limits the VOC content of the undercoat material to 3.5 lb/gallon (minus water). Based on the product data I reviewed as part of the PTI application, the VOC content minus water is 3.45 lb/gallon (minus water). Ed stated that they have used this same undercoat material for decades and they do not plan on switching.

Section II – Special Condition 2: States that the permittee shall only use acetone in EU-CLEANUP. Only acetone is used based on the records I reviewed.

Section III – Special Condition 1: States that all waste shall be captured and stored in closed containers. All containers were closed during my inspection.

Section III – Special Condition 2: States that the permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. Ed stated that spent filters are thrown in the dumpster. The materials used at this facility are very tacky and it is unlikely that any of it will fall off of the filters.

Section III – Special Condition 3: States that the permittee shall handle all VOC/HAP containing materials in a manner to minimize fugitive emissions. I observed that the material storage containers were equipped with lids. I did not notice any open containers of materials.

Section IV – Special Condition 1: States that the permittee shall not operate the undercoat or rhino line processes unless the exhaust filters are installed properly. I observed that these filters were in place in both processes. Ed stated these filters are changed as needed.

Section IV – Special Condition 2: States that the permittee shall equip EU-BEDLINER and EU-UNDERCOAT with HVLP applicators. All applicators appeared to be HVLP.

Section V – Special Condition 1: States that the permittee shall determine the VOC content of any material as applied and as received using Method 24. At Ziebart, there is only one product that has any VOC content. Ziebart has utilized this same rust preventative undercoat product for decades. Ziebart provided the composition data for the undercoat product when they applied for and received a permit to use this product. This is not a automotive body shop that uses many different coatings. AQD will accept the material composition data provided by the manufacturer of the undercoat product. If Ziebart switches the material used for the undercoating process, then a Method 24 test may be required.

Section VI – Special Conditions 1,2,3,4: Specifies recordkeeping requirements for FG-ZIEBART. The facility must maintain records of the chemical composition of each material, the gallons of each material used, and the VOC/Acetone mass emission calculations on a monthly and 12-month rolling basis. I verified that these records are maintained.

Section VIII – Special Conditions 1,2: Specifies stack requirements. I did not take stack measurements during this inspection. Both the undercoat and rhino liner stacks appear to meet these minimum height requirements. I observed that they both exhaust from the roof of the building.

As a result of my complaint investigation on August 22, 2023, a Rule 901 violation notice was issued to Ziebart due to odors caused by the undercoating process. To address this violation, Ziebart made changes to the undercoat exhaust system and trained employees to keep the bay doors closed when performing undercoat spraying. Per AQD's suggestion, Ziebart installed a 6 ft stack extension onto their existing undercoat stack bringing the total stack height to 1.5x the height of the building. During this installation, the

obstructive rain cap was removed from the stack and a no-loss rain cap was installed on the new stack extension. Additionally, since the undercoat spray is heavier than air, the intake to the exhaust system was modified to draw air from 2 ft from the floor rather than near the ceiling. The Rule 901 violation notice issued on September 7, 2023 will be resolved as a result of this inspection.

Compliance Determination

Based on my inspection and record review, Ziebart is operating in compliance with the requirements of the federal Clean Air Act: Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); and Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) Administrative Rules; and Permit to Install (PTI) No.

NAME Adam Bognar

DATE 12/12/2023 SUPERVISOR K. Helly