

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

A134643812

FACILITY: Merrill Fabricators		SRN / ID: A1346
LOCATION: 520 REPUBLIC ST, ALMA		DISTRICT: Lansing
CITY: ALMA		COUNTY: GRATIOT
CONTACT: Jesse Willoughby , Safety Coordinator		ACTIVITY DATE: 03/26/2018
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled, unannounced inspection to determine compliance with Merrill Fabricators' General PTI 95-17		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow (author) and Kelly Richart (AQD LDO Inspector)

Personnel Present: Jesse Willoughby, Safety Coordinator (jlwilloughby@MerrillTG.com)

Purpose

Conduct an unannounced, scheduled compliance inspection by determining compliance with Merrill Fabricators' General Permit to Install (PTI) No. 95-17 for a 3 coating lines emitting up to 10 tons per year VOC, which was issued June 29, 2017.

Facility Background/Regulatory Overview

Merrill Fabricators (Merrill) is a "job shop." They do welding, fabricating and painting of parts for various customers, including military/navy projects. The most recent job Merrill has undertaken is the painting of large train car bodies, which is why they pursued a General Permit to Install for coating operations. Train car painting operations have not started yet, but the booths have been installed.

The facility was last inspected in October 2012.

Table 1 contains a list of the equipment currently located onsite. Jesse Willoughby confirmed that there are no emergency generators, boilers or parts washers located at this facility.

Table 1. Installed equipment

Emission Unit	Description	PTI/ Exemption
Paint booth	This paint booth consists of 1 large room containing 4 mat fabric filter "stations." Each station can be used for painting operations	Rule 287(2)(c)
Two (2) Train Car Paint booths	Booths have been installed, but are not operating. Expected to be in operation between June and October 2018. Openings in the floor (booth 1) and side wall (booth 2) will covered with fabric filters to control paint particulate	General PTI 95-17
Three (3) Sand blasting booths	2 new sand blasting booths have been installed for the Train Car project. One is in operation, the other is not. The third booth was installed pre-2012 and was not in use.	Rule 285(2)(l)(vi)(C)
Several Welding Stations	NA	Rule 285(2)(i)

Inspection

This was an unannounced, scheduled compliance inspection. At approximately 10:00 a.m. on March 26, 2018 Kelly Richart and I met with Jesse Willoughby, Safety Coordinator. I provided J. Willoughby with the January 2017 Permit to Install exemptions handbook. J. Willoughby said that the 2 new paint booths have not yet been operated, but are installed. I reminded him that if Merrill decides to install more than 3 coating lines they must submit a new Process Information form to the Permit Section and District Supervisor identifying the existing and new equipment a minimum of 10 days before replacement, modification or installation of new equipment.

General PTI No. 95-17: 3 Coating Lines

This general PTI is composed of FG-COATING and FG-SOURCE. FG-COATING covers one or more coating lines and all associated purge and clean-up operations, where each coating line is a single series in a coating process. Flash-off areas drying areas, and ovens are included in FG-COATING. Installation is not complete; the 2 paint booths associated with this permit are not operating.

FG-COATING VOC's are limited to 2000 lb/month for each coating line and associated purge/clean-up operations and VOC's are limited to 10 tpy per 12-month rolling period for each line. I will remind J. Willoughby that if Merrill plans on using manufacturer's formulation data to determine VOC emissions, they must submit a request to the District Supervisor for approval to do so.

FG-SOURCE encompasses VOC emissions from all VOC sources, including exempt and grandfathered equipment. Total FG-SOURCE VOCs are limited to 30 tpy.

A determination of compliance with this permit cannot be made at this time. Future inspections should address compliance with this permit.

Rule 287(2)(c): One-Room Paint Booth

This "booth" is a large room that contains 4 mat fabric filter stations where painting is conducted. Each of these could be considered its own paint booth, each with its own 200 gallon minus water limit, but J. Willoughby currently logs paint usage for Rule 287(2)(c) totaling paint usage across all 4 stations combined. Only one of the 4 stations was being used during the inspection.

J. Willoughby provided me with January – March 2018 monthly coating use records (attached). The highest usage month was February at 170.5 gallons, which includes water. Merrill Fabricators is meeting the Rule 287(2)(c) limit of 200 gallons minus water per month at this time.

K. Richart and I observed each of the 4 stations' mat fabric filters to ensure that they installed in a satisfactory manner. The fabric filters at the station in use were installed properly. The other 3 booths appeared to have a consistent curling up of the fabric in the lower right-hand corner. I made mention of this to J. Willoughby to ensure that the fabric filters are installed properly prior to operating them.

Rule 285(2)(l)(vi)(C): Sand Blasting Stations

One of the three sand blasting stations was being operated during the inspection. Two of the sand blasting stations, including the one operating during the inspection, are routed to a cartridge filter baghouse located outside. The third sand blasting station, not yet being operated, is routed to a baghouse located inside the facility.

I verified that each sand blasting station had mechanical precleaners (slats/vents in the walls of the booths).

We went outside and found that the waste sand blasting media was on the ground underneath the baghouse and surrounding the roll-off Billy's waste bin. Additionally, the waste sand blasting media in the Billy's waste bin was exposed to the outdoor air and above the fill line on the bin (see attached photos).

I informed J. Willoughby that the waste sand blasting media and other particulate from the blast process needs to be swept up to ensure it is not being entrained into the ambient air. Additionally, I mentioned that there should be a lid on the Billy's waste bin to prevent entrainment into the ambient air.

J. Willoughby made a verbal commitment to have the particulate and associated waste blast media removed from the ground and disposed of properly, in addition to putting a lid on the Billy's waste bin. I requested that he send me pictures when these items have been fixed. As of 4/3/18 I have not heard from him and will proceed to issue a VN if cleanup has not been conducted by 4/4/18.

J. Willoughby said the particulate spillage is caused by transfer or media from the 2 55-gallon collection bins to the Billy's waste bin, and specified that the spillage we saw during the inspection was because Merrill staff had not cleaned it up yet. He also said that during the winter they do not clean up spillage. I reminded him that this should be cleaned up immediately and at all times and recommended that a program for housekeeping be implemented to ensure particulate is being captured according to good air pollution control practices. He said that such a program would be implemented.

Compliance Statement

At this time Merrill Fabricators is in compliance with General PTI 95-17 and the aforementioned exemptions, pending cleanup of the sand blasting media.



Image 1(New Booths) : L to R: new sand blasting booth, 2 new paint booths for train car coating operations



Image 2(Sand Blast Baghouses) : Note the waste particulate from sand blasting on the ground: both the sand blast media itself and the particulate removed from metal parts



Image 3(Shot Blast media) : Close-up view of sand blast media (pink) and metal particulate (gray)



Image 4(Waste bin) : Billy's waste bin uncovered/open to atmosphere with particulate (sand blast media and waste metal particulate) on the ground surrounding the bin.

NAME M. L. Lupton

DATE 4/3/18

SUPERVISOR B. M.