

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

N120348124

FACILITY: SpaceRAK		SRN / ID: N1203
LOCATION: 6300 KAREN ST, MARLETTE		DISTRICT: Saginaw Bay
CITY: MARLETTE		COUNTY: SANILAC
CONTACT: Brittany Price, Environmental Specialist		ACTIVITY DATE: 02/21/2019
STAFF: Matthew Karl	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection to determine compliance with PTI No. 738-85A.		
RESOLVED COMPLAINTS:		

On Thursday (2/21/19) I (Matt Karl) conducted a scheduled compliance inspection at SpaceRAK located at 6300 Karen Street, Marlette, Michigan. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Administrative Rules; Permit to Install (PTI) No. 738-85A. Mr. Nick Wendorf, Supervisor, SpaceRAK and Mr. Terry Kloc, Material Coordinator, SpaceRAK assisted me during my inspection. Ms. Brittany Price, Environmental Specialist, Huron-Yeoman Consultants, provided requested records.

Facility Description:

The facility takes stock steel components and produces coated racks for storage and display use. The operations process consists of receiving the stock steel, cutting, grinding and assembling the racks. The steel goes through an iron phosphate cleaning step prior to being coated. The coating operation consists of two manual spray areas that are found on the conveyORIZED line.

Site Inspection:

I arrived on site at approximately 10:00. I met with Nick Wendorf and Terry Kloc in the facility office. They provided me with updated contact information for the SpaceRAK Marlette office. Mr. Anthony Aguinaga, the former supervisor, is no longer with the company. I then reviewed a folder they provided entitled "Environmental Permits and Related Documents" it contained the following information:

- Storm Water Certificate of Coverage
- Air Permit and Record Keeping Sample
- Waste Generator and Hauler Information
- Employee Training Information

Under the "Air Permit and Record Keeping Sample" I observed a copy of the 1998 PTI No. 738-85A approval letter, the permit application for PTI No. 738-85A as well as PTI No. 738-85A. It also included an old emissions summary and an example of the monthly VOC reporting from August 2015. As described in the permit application, PTI No. 738-85A covers the following equipment:

Surface coating of miscellaneous metal parts- conveyor 2 coat, spray SCC 40202536

- A. 5 MMBTU gas fired washer
- B. 1.5 MMBTU gas fired dry-off chamber
- C. 2 manual airless paint booths
- D. 2.25 MMBTU gas fired 2-stage oven
- E. 12 ft cool down tunnel

Nick Wendorf informed me that no changes or additional equipment had been added to what was listed in the permit. He informed me that there currently were no plans for changes or expansion. He stated that the paint booths are run on one shift Monday-Friday.

Nick Wendorf and I then performed a walkthrough of the conveyORIZED coating operation. First, the steel parts are cleaned with a phosphoric acid wash. Next, they pass through a natural gas fired open flame dryer to dry out the cleaned steel parts. They then pass into the spray booth area, where two staff use two manual sprayers to coat the steel parts with the desired coating color. Nick Wendorf informed me that the filters are changed out daily at the end of every shift. The filters are wrapped in plastic and taken to an on-site dumpster. The coated parts then proceed to a natural gas fired drying oven and cooling tunnel. The coated parts are then taken off the

conveyorized line and are prepared for shipment. Nick Wendorf told me that they have had no recent issues with the coating line and have not received any odor or visible emissions complaints from the process. Nick Wendorf also stated that they have been coating parts with the following colors: PRS Green, PRS Orange, HEP Yellow, Safety Yellow, white, brown and black (rarely).

Nick Wendorf and I returned to the facility office. I informed him that I would be contacting Brittany Price, Huron-Yeoman Consultants, to obtain the emissions records for the facility. I shared the records request I prepared with him, and informed him that I would CC Wes Boyne, Plant Manager, SpaceRAK on the records request as well. I departed the site at approximately 10:45.

Records Review:

I sent a records request to Brittany Price and Wes Boyne via email on 2/21/19. I received the following records from Brittany Price via email on 2/22/19; these records can be found in the district office files:

- Marlette HAPs Records January 2019
- Marlette January 2019 VOC Monthly Data
- Marlette VOC Monthly Emissions January 2019
- Rule 290 January 2019 Monthly Log

The records I reviewed covered the time period from January 2016 to January 2019 for the coating line. Over this time period the VOC emission rate based on a 12-month rolling time period ranged from 7.00 to 9.45 tons per year (TPY), which was well below the emission limit of 24.1 TPY VOC. The maximum 12-month rolling total of 9.45 TPY represents approximately 39% of the emission limit.

The pounds per hour VOC emission rate ranged from 4.38 to 11.35 lbs VOC/hr, which was well below the emission limit of 24.2 lbs VOC/hr. The maximum emission rate of 11.35 lbs VOC/hr represents approximately 47% of the emission limit.

HAPs emissions for the coating line are from the use of Zimmerman Lacquer Thinner which contains toluene and methanol. Over the time period of the records reviewed, the toluene emission rate based on a 12-month rolling time period ranged from 0.3524 to 0.7803 TPY. The methanol emission rate based on a 12-month rolling time period ranged from 0.0927 to 0.2053 TPY. Both of these emission rates were well below the individual HAPs emission limit of 9 TPY. The maximum individual emission rate of 0.7803 TPY of toluene represents approximately 9% of the emission limit.

The combined HAPs emission rate based on a 12-month rolling time period ranged from 0.4451 to 0.9856 TPY, which was well below the emission limit of 22.5 TPY HAPs. The maximum 12-month rolling total of 0.9856 TPY represents approximately 4% of the emission limit.

On 3/4/19 and 3/6/19 I received emails from Brittany Price with the material safety data sheets (SDS) for the coating line. The SDS can be found in the district office files. I've summarized the relevant information into the table below:

Product Name	VOC content, coating (minus water) lbs/gal
Kardol 10/Acrylic Lacquer Thinner	6.1* see update below (actually 6.8)
WR HF SS BLUE B.E.	2.95
WR HF SR GREEN B.E.	2.84
PRS ORANGE A/D TOUCH UP	3.88* see update below (actually 2.95)
FIRE RED W/R B/E	2.80
GLOSS (MIRROR) BLACK W/R B/E	2.99
HEP YELLOW W/R B/E	2.70
HI-HIDING WHITE W/R B/E	2.86
HEMOCENTER GREY W/R B/E	2.95
I.M. PLATINUM W/R A/D ENL.	2.87
JHC GREY W/R B/E	2.85
LOWES GREY W/R B/E	2.91
MADIX BLUE W/R B/E	2.99
MENARD IVORY W/R B/E	2.92
MENARD WALNUT W/R A/D ENL.	3.01
PRS GREEN W/R B/E	2.92
SAFETY YELLOW W/R B/E	2.78
SAHARA TAN WATER REDUCIBLE BAKING ENAMEL	2.90
SPACERAK ORANGE W/R B/E	2.84
WALNUT BROWN W/R B/E	2.93

RAL 7035 GREY W/R B/E	2.93
RAL 7038 AGATE GREY W/R B/E	2.89
FEDEX GREY W/R B/E	2.92
HEP GREY 1736 W/R B/E	2.91
RAL 9001 OFF WHITE W/R B/E	2.87

On 3/6/19 I called Brittany Price and discussed the VOC contents of PRS ORANGE A/D TOUCH UP which seemed to be higher in the SDS vs. the Marlette January 2019 VOC Monthly Data spreadsheet. The PRS ORANGE A/D TOUCH UP coating appears to be above the Special Condition (SC) 17. VOC content limit of 3.0 pounds per gallon of coating (minus water), as applied. We also discussed the HAPs tracking and recordkeeping. I inquired whether SpaceRAK is using Kardol 10/Acrylic Lacquer Thinner or E.E. Zimmerman Lacquer Thinner. They have different HAPs and in different concentrations. Brittany Price told me she would discuss these issues with SpaceRAK and would follow up with me at a later date.

On 3/8/19 Brittany price followed up and informed me that the Marlette facility actually uses Axalta lacquer thinner at the SpaceRAK Marlette facility. The Axalta lacquer thinner contains 6.8 lbs/gal VOC (minus water/exempt) and contains the following HAPs: Methanol 50%, Toluene 19%, Xylene 8% and Ethylbenzene 2%. Brittany Price informed me that she would adjust the recordkeeping spreadsheets to reflect the composition of the Axalta lacquer thinner.

On 3/14/19 Brittany Price informed me that the PRS ORANGE SDS that she had sent me on 3/4/19 was for the aerosol touch-up can, not the coating material used in the spray booth. Brittany Price provided the SDS for the PRS ORANGE water-based paint, which contains 2.95 lbs/gal VOC (minus water/exempt).

I discussed improving the accuracy of the recordkeeping associated with PTI No. 738-85A with Brittany Price. However, the adjustments improving the accuracy of the recordkeeping only caused small adjustments in the VOC and HAPs emissions and the results are still well below the permitted limits.

Summary:

**Based on my site inspection and review of relevant records, it appears that SpaceRAK is in compliance with PTI No. 738-85A.**

NAME Matthew R. Kard

DATE 4/5/19

SUPERVISOR C. Price