

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

N709749927

FACILITY: NTVB MEDIA, INC.		SRN / ID: N7097
LOCATION: 209 PARK STREET, TROY		DISTRICT: Southeast Michigan
CITY: TROY		COUNTY: OAKLAND
CONTACT: Lonnie Shipley, Vice President of Operations		ACTIVITY DATE: 07/25/2019
STAFF: Kaitlyn Leffert	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY2019 Scheduled Inspection - Violation Notice sent due to records indicating that appropriate RTO temperatures were not maintained during process operation.		
RESOLVED COMPLAINTS:		

On July 25, 2019, I conducted a scheduled inspection of NTVB Media, Inc, 213 Park Drive, Troy Michigan. NTVB Media prints TV guides and magazine or newspaper advertisement inserts. The facility has Permit to Install No. 15-02A to operate six lithographic printing processes. The facility has two old lithographic printing lines that are not controlled by any air pollution control equipment, as well as four new lithographic printing lines that are controlled by a regenerative thermal oxidizer (RTO). The purpose of the inspection was to assess compliance with the requirements of the Federal Clean Air Act, Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; and Permit to Install (PTI) number 15-02A.

I first visited the facility on July 19th to conduct my scheduled inspection. When I arrived, I was informed that the operations manager was out on vacation and that there is not anyone available to take me through the building. I left my business card and said I would plan to return when the operations manager had returned from vacation. I subsequently returned to the facility on July 25th to conduct the inspection. I was greeted by Lonnie Shipley, Vice President of Operations. He introduced me to Jack Thomsen. Both were present throughout records review and escorted me through the facility during my inspection.

Recordkeeping

We started by going over the required records. Per Special Conditions 1.8 and 2.11, the facility is required to keep monthly records of the type of material used, the VOC content of each material, the usage rate of each material as applied, the amount of each material reclaimed, and rolling 12-month VOC emissions calculations for both FG-NewLitho and FG-OldLitho. In addition, NTVB must keep records of each material used, VOC content of each material, and VOC mass emissions calculations on a monthly and yearly basis for FG-Facility (S.C. 3.5). NTVB Media must also keep facility-wide records of the gallons or pounds of material used, gallons or pounds of material reclaimed, HAP content of each material used, and individual and aggregate HAP emissions calculations on a monthly and yearly basis (S.C. 3.6). All of the required records were provided and are attached.

NTVB is also required to maintain records of the chemical composition of each material used. I was provided Safety Data Sheets for all materials currently used by the facility to demonstrate compliance with S.C. 1.10, 2.13, and 3.7.

Per S.C. 1.7, 2.10, and 3.4, all records should be made available for the previous month by the 15th day of the calendar month. My inspection as on July 25th and NTVB had records available for June 2019.

Emissions Limits

NTVB Media is permitted to emit 12.5 tons per year (tpy) from the stack and 4.5 tpy fugitive emissions from FG-OldLitho and a total of 39.4 tpy from FG-NewLitho (S.C. 1.1b, 1.1c, and 2.1b). All emission limits are measured over a 12-month rolling time period. The attached records show the calculated 12-month rolling average VOC emissions for June 2019. VOC emissions from FG-OldLitho were 3.3 tpy from the stack and 0.7 tpy fugitive emissions. NTVB reported 9.1 tpy VOC emissions from FG-NewLitho. NTVB is in compliance with the emissions limits for FG-OldLitho and FG-NewLitho (S.C. 1.1b, 1.1c, and 2.1b).

The emissions limits also include a VOC content limit of less than 5% for materials applied in FG-OldLitho and FG-NewLitho (S.C. 1.1a and 2.1a). The attached records of VOC content for materials used in FG-Old Litho and FG-NewLitho indicate that VOC content of the material applied in both lines is 1.4%. NTVB Media is therefore in

compliance with S.C. 1.1a and 2.1a. In addition, conditions 1.9 and 2.12 require the VOC content to be calculated using the method detailed in Appendix A. I performed spot check calculations and confirmed that the calculations were performed using this methodology.

NTVB Media has a facility-wide VOC emission limit of 90.0 tpy, based on a 12-month rolling average (S.C. 31.a). Attached are records showing calculated 12-month rolling average VOC emissions of 13.1 tpy, which is well below the permit. There are also facility-wide emission limits for individual and aggregate HAPs (S.C. 3.1b and 3.1c). The facility does not use any HAP-containing inks or materials and therefore did not report any HAP emissions. NTVB is in compliance with all facility-wide emission limits.

Thermal Oxidizer Temperature Records

The facility provided continuous temperature records for the RTO control on FG-NewLitho, as required by S.C. 2.9. Attached are copies of the temperature records for the months of March, April, May, and June of 2019.

I reviewed the temperature records and noted that there were much larger gaps or periods of time where the temperature of the RTO was below the permit required temperature of 1450F. I pointed this out to the facility and pointed to previous temperature records, where the temperature was more consistently maintained at or above the 1450F permit requirement.

Mr. Thomsen explained that there were two reasons for the larger variations in temperature. One was that ceramic material in the RTO needs to be replaced. He informed me that contractors will be coming to replace the ceramic material soon. The second reason for the variations in temperature is because the printing presses have been running less frequently than in previous years. Mr. Thomsen explained that when the lines are shut down, the RTO detects the change in incoming air and can drop the RTO temperature in response.

This second reason explains the large gaps where no or very low RTO temperatures are recorded, followed by a short but tall spike in temperature when the RTO returns to full operation. Regardless of the large gaps where the RTO temperature drops due to the process not operating, the RTO temperature records from March through June (attached) indicate that even when the RTO was in full operation, the temperature typically fell below 1450F. This constitutes a potential violation of the permit conditions. A violation notice will be NTVB Media to alert them that they need to correct the RTO temperature.

Facility Walk-Through

Following records review, Mr. Thomsen and Mr. Shipley walked me through the facility. We walked through the room that houses the old lithographic printing presses and the adjoining room with the new lithographic printing presses. All printing presses were running at the time of my inspection. In the new lithographic printing room, Mr. Shipley walked me through the printing process, noting where the ink is dispensed, where it is transferred to the paper, the heat set process, and showed me what the final product looks like.

I then inspected the RTO. I noted the following operating parameters from the electronic control panel. The chamber temperature indicates the combustion chamber temperature, which was above the minimum temperature requirement of 1450°F.

Chamber Temp: 1529°F
Bed #1 Temp: 1643°F
Bed #2 Temp: 1585°F
Inlet Temp: 267°F

Disposal of Solvents and Solvent-Saturated Towels

Throughout my inspection, I noted that waste solvents were stored in closed containers and that solvent-saturated rags were being disposed of in bins that had lids secured on them. I inquired about the disposal of waste solvents and solvent-saturated materials. Mr. Shipley explained that the waste solvents and solvent-saturated materials are collected in closed containers and sent off-site for proper disposal. This satisfies the requirements of special conditions 1.2, 1.4(b-d, g), 2.2, and 2.4(b-d, g).

I also inquired about the type of solvents used and whether any solvents on site contained hazardous air pollutants, such as toluene or xylene. Per S.C. 1.4(a) and 2.4(a), cleaners containing HAPS should be eliminated or used only on hard to clean spots. Mr. Shipley stated that all materials used on site are mostly plant-based and considered non-toxic. The Safety Data Sheets submitted during record review confirm that there were not any HAP-containing solvents used on site.

Negative Pressure

I inquired about the requirement to maintain negative air pressure within each dryer for both FG-NewLitho and FG-OldLitho. Mr. Shipley and Mr. Thomsen explained that the pressure is monitored and that the equipment will shut down if proper pressure is not maintained. He also noted that the pressure difference can be observed when opening the door to the outside or to the office area of the building.

Conclusion

The RTO temperature records indicate that the RTO has not operated at appropriate operating conditions while the new lithographic printing presses were running. A violation notice is being sent to the facility regarding the RTO temperature.

NAME *Harley Jeffers* DATE 9/6/19 SUPERVISOR *SK*