

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

A576425371

FACILITY: Ventra Evart, LLC		SRN / ID: A5764
LOCATION: 601 W. Seventh Street, EVART		DISTRICT: Cadillac
CITY: EVART		COUNTY: OSCEOLA
CONTACT: Nick Spivey, Environmental Specialist		ACTIVITY DATE: 05/01/2014
STAFF: Caryn Owens	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: Field Inspection & Records Review. Non-compliance due to inconstant air flow data, was addressed in VN dated 4/9/14, and will be addressed in updated consent order & compliance plan.		
RESOLVED COMPLAINTS:		

On Thursday, May 1, 2014, Caryn Owens, Shane Nixon, and Jeremy Howe of the DEQ-AQD inspected Ventra Evart, L.L.C (Ventra) (SRN: A5764) located at 601 West Seventh Street in Evart, Osceola County, Michigan. The site is located on the south side of West Seventh Street and consists of one building on the property. The field inspection and records review were to determine compliance with the Renewable Operating Permit (ROP) MI-ROP-A5764-2009a. The site is currently a major source for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs), and the source is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products in 40 CFR, Part 63, Subparts PPPP. DEQ attempted to hand Nick Spivey, the Environmental Specialist with Ventra, an inspection brochure, but he already had one from the DEQ-WMRP that was given to him on April 30, 2014. Additionally, a consent order is cited to the facility due to alleged failure to timely complete performance testing on the EUFASCIA-LINE, dated August 17, 2009, which has not been terminated as of the date of the field inspection.

On-site Inspection:

During the field inspection it was cloudy with wind speeds approximately 10 miles per hour out of the southwest, and approximately 45°F. DEQ met Mr. Spivey, for a facility inspection and records review. Mr. Spivey accompanied DEQ through the facility to observe the permitted emission units and associated processes. Ventra manufactures automotive parts including trim components, exterior fascia parts, and tail light assemblies. The facility has a fascia line that uses both automatic and manual spray booths where the parts are painted using robots, and hand painted when necessary. Prior to entering the spray booths, the parts are washed by a four stage washing system, then blown off to dry, and painted, and dried again. The fascia line is controlled by a water curtain and regenerative thermal oxidizer (RTO), and the manual booths are controlled by fabric filters. The fascia system air is re-circulated through the line, where only a certain percentage goes to the RTO. The facility also has manual spray booths called the North C line that operate manual spray booths C6-C10, Area D service manual booths (asset No. AM4698), and the quality control lab manual spray booth area (asset No. AM3800). These manual spray booths are controlled by fabric filters. DEQ also observed the paint kitchen that contained 29 systems for 110 gallons of base coat, Ventra also has two adhesion promoter (AP) systems, four clear coat systems, one 2K clear coat system, eight pigable basecoat systems, and two pigable clearcoat systems. The pigable systems are set-up in 55 gallon drums and can be changed quickly (within a day), whereas the other systems are changed approximately every six months because they are more difficult to clean the lines.

EUSOUTH-C-LINE, EUREMEDIATION, and EUDBOOTH-3655 have been either dismantled or removed from the facility, so those areas will not be addressed below.

Records Review:

Source-Wide Conditions: No Source-wide conditions are applicable for this facility.

A. EUFASCIA-LINE: This is a line to apply adhesion promoter (AP), base coat, and clear coat to fascia. There are automatic (robot) and manual booths for each coating type. The automatic booths are vented through a water curtain, and a RTO, and the manual booths use fabric filters for control.

I. Emission Limits:

The VOC emission limits are 168.3 pounds per hour and 135 tons per 12-month rolling time period. Based on the first quarter VOC Emission report, the VOC emissions from January 1, 2014 through March 31, 2014 ranged between 8.0 to 11.7 pounds per hour, and the 12-month rolling time period VOC emissions ranged between 24.9 to 27.5 tons per year for EUFASCIA-LINE. Based upon the records reviewed, the facility is

within the permitted VOC emission limits.

II. Material Limits:

The permitted material limits are as follows for Ventra: 1.0 pounds of VOC per gallon of coating for AP, 0.7 pounds of VOC per gallon of coating for basecoat, and 0.7 pounds VOC per gallon of coating for clearcoat. These material limits are all minus water as applied, after controls, based on a daily average. Based on the records reviewed, the actual AP VOC content was 0.29 pound of VOC per gallon of coating minus water, after controls. The actual basecoat was 0.21 pounds of VOC per gallon of coating minus water, after controls, and the actual clearcoat was 0.18 pounds of VOC per gallon of coating minus water, after controls. The records reviewed indicated Ventra is in compliance with the material limits.

III. Process/Operational Restrictions:

The RTO shall not operate unless there is a minimum of 1,400 degrees Fahrenheit. During the inspection, the RTO was operating at a temperature of 1,513 degrees Fahrenheit. Additionally, according to the CAM plan for Ventra, EUFASCIA-LINE cannot operate until the RTO is at least 1,400 degrees Fahrenheit, if the temperature drops below this temperature, the process completely shuts down.

The minimum overall VOC control efficiency (combined capture and destruction) is not to be less than 86 percent across EUFASCIA-LINE. Based on the most recent capture and destruction efficiency performance test for the RTO (completed October 24, 2012), the overall combined control efficiency was greater than 95 percent.

During the field inspection of Ventra, the automatic booth water wash, dry fabric filters and RTO appeared to be operating properly.

IV. Design/Equipment Parameters

According to Mr. Spivey, Ventra operates electrostatic guns for the automatic and manual booths for the application of basecoats and clearcoats. The spray guns are considered High Volume Low Pressure (HVLP) guns.

The appropriate range of the RTO to define proper operation shall be between 1,400 and 1,600 degrees Fahrenheit. As previously stated, during the field inspection, the RTO was at 1,513 degrees Fahrenheit.

The appropriate range of the inlet duct air flow, defining proper operation of the capture system, is 55,000 scfm, to 65,000 scfm. During the inspection, the air flow rate was 70,140 scfm. Based on the records reviewed, the air flow rate varied. DEQ requested Ventra to explain the differences in the air flow data supplied. Ventra's response was that: in addition to the automated airflow data recording software and the chart wheels for the RTO's temperature monitoring; a visual and manual check is completed multiple times per shift to insure the proper operation of the aforementioned equipment. The aforementioned observations and checks are done visually at the control panel, specific to air flow, temperature, operating fans, and the RTO is interlocked to the paint booths. Painting operations cannot be activated/started until the RTO is in operation.

In an effort, to reduce the recurrence of operating discrepancies, the following measures will be implemented:

- The air flow for the painting booths as well as the air flow into the RTO will be monitored and recorded. Variations and fluctuations will be adjusted, as identified, until a balance is achieved.
- The RTO's fan will be removed, clean and balanced during the 1st week of July 2014, as part of the scheduled Preventive Maintenance (PM) procedures.
- The system will undergo a full system (air) balance after the aforementioned maintenance is completed.
- All pilot air probes comprising the air flow monitoring system will be removed, cleaned, and calibrated.
- Any probes identified within the aforementioned process as in poor condition will be replaced. The preventive maintenance activities involving the pilot air probes will be completed during the next two weeks.
- The Preventive Maintenance activities (Pilot Air Probes) are being incorporated into the PM procedures with a semiannual frequency.

V. Testing/Sampling

The five most frequently used coatings and five coatings at random are tested annually for VOC content, as applied, minus water. The last analysis was completed in 2013, and the test results were submitted and reviewed by the AQD. Test results of the 2013 VOC Coating Testing indicated compliance with limits contained in the ROP.

October 2012 was the last capture and destruction efficiency testing that was completed for the facility. Based on the testing data, the RTO capture efficiency was 97.77 % and the destruction efficiency was 98.97 %.

VI. Monitoring/Recordkeeping

DEQ observed the paint kitchen where each coating is stored. Each coating system had daily log sheets to track the amount of coating used on a daily basis. The daily log sheets are entered into a computer system which is then used to calculate daily emissions and VOC content and volume for each coating used.

DEQ reviewed records of Ventra's cleanup and purge solvents used and reclaimed and monthly records for the daily hours of operation. The records were kept in satisfactory order.

DEQ reviewed records of the RTO temperatures and inlet airflow. During the winter months the RTO is not completely shut down during non-production periods, so the start-up of the fascia line wouldn't be delayed trying to have the RTO reach appropriate temperatures. The low temperatures and airflows are observed in the records during non-production time. DEQ contacted Mr. Spivey regarding the airflow records which is addressed in Section IV above.

VII. Reporting

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. Test results of the 2013 VOC Coating Testing indicated compliance with limits contained in the ROP. It should be noted, a violation was cited on April 9, 2014 for EUFASCIA-LINE because the records of the RTO inlet airflow were not recorded for a total of 123 days for the 2013 calendar year.

VIII. Stack/Vent Restrictions

The stack heights for EUFASCIA-LINE were in compliance with the ROP diameters and heights.

IX. Other Requirements

The equipment at the facility appeared to be well maintained. The purge solvents and coatings were captured and stored in closed 55-gallon containers. Waste materials are shipped off-site.

B. FGCOLDCLEANERS

The facility's parts cleaner appeared to be well maintained. According to Mr. Spivey, the parts are dried appropriately, and the solvent is not agitated or heated to clean the parts. DEQ observed the lid closed and proper instructions on the parts cleaner. FGCOLDCLEANERS was in compliance with the ROP.

C. FGMISC-PLANT The North C-Line (booths C6-C10) and the D Service Booth (Assest # AM 4698) and Area D drying oven. FGMISC-PLANT uses dry filter fabrics for control.

I. Emission Limits

The emission limits are 87.2 tons per month, 484.3 tons per 12-month rolling time period, and no visible emissions from the stacks. Based on the first quarter VOC Emission report, the VOC emissions from January 1, 2014 through March 31, 2014 ranged between 0.99 to 2.12 tons per month, and the 12-month rolling time period VOC emissions ranged between 17.6 to 19.9 tons per year for FGMISC-PLANT. Based on the records reviewed, the facility is within the permitted VOC emission limits.

II. Material Limits:

The permitted material limit is 6.3 pounds of VOC per gallon of coating for FGMISC-PLANT. The material limit is minus water as applied, after controls, based on a daily average. Based on the records reviewed, the actual coating VOC content was 4.8 pounds of VOC per gallon of coating minus water, after controls. The records reviewed indicated the Ventra is in compliance with the material limit.

III. Process/Operational Restrictions

During the facility inspection, dry fabric filters were in place during the operations in FGMISC-PLANT. According to Mr. Spivey, the fabric filters are changed daily.

IV. Design/Equipment Parameters

Design/Equipment Parameters are not applicable for FGMISC-PLANT.

V. Testing Sampling

The five most frequently used coatings and five coatings at random are tested annually for VOC content, as applied, minus water. The last analysis was completed in 2013, and the test results were submitted and reviewed by the AQD. Test results of the 2013 VOC Coating Testing indicated compliance with limits contained in the ROP.

Ventra conducts monthly visible emission observations from the stacks associated with FGMISC-PLANT. The records are attached, and no visible emissions were observed from March 2013 to March 2014.

VI. Monitoring/Recordkeeping

As stated in EUFASCIA-LINE, DEQ observed the paint kitchen where each coating is stored. Each coating system had daily log sheets to track the amount of coating used on a daily basis. The daily log sheets are entered into a computer system which is then used to calculate daily emissions and VOC content and volume for each coating used.

VII. Reporting

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

VIII. Stack/Vent Restrictions

The stack heights for FGMISC-PLANT were in compliance with the ROP diameters and heights.

IX. Other Requirements

Other Requirements are not applicable for FGMISC-PLANT.

- D. FGMACT-PPPP** Requirements of the surface coating of plastic parts and products as required by 40 CFR, Part 63, Subpart PPPP. FGMACT-PPPP is applicable for emission units EUFASCIA-LINE, EUNORTH-C-LINE, and EUDBOOTH-4698. The pollution control equipment (the RTO) for FGMACT-PPPP is only applicable when the company chooses to use the "emission rate with add-on control" option. Currently Ventra uses the "emission rate without add-on control" option.

I. Emission Limits

As stated above, Ventra uses the "emission rate without add-on control" option due to low HAP content of coatings used at the facility. The emission limit for organic HAPs for each existing thermoplastic olefin (TPO) coating affected source is 0.26 pounds HAP per pound of coating solids on a 12-month rolling time period. Based on the most recent summary of HAP emissions from the coating operations from September 13, 2013, and facility is between 0.17 and 0.18 pounds HAP per pound of coating solids on a 12-month rolling time period. Based on the records reviewed, the facility is within the permitted HAP emission limit without using control.

II. Material Limits

The facility is not using the "Compliant Material option", and therefore material limits do not apply to the facility.

III. Process/Operational Restrictions

The facility is currently not using the "emission rate with add-on controls" option; therefore, the process and/or operational restrictions do not apply.

IV. Design/Equipment Parameters

No design or equipment parameters are associated with FGMACT-PPPP; therefore, this section is not applicable.

V. Testing/Sampling

Testing/Sampling requirements are not applicable with FGMACT-PPPP.

VI. Monitoring/Recordkeeping

Certificates of Analysis provided by the manufacturer were used to determine the mass fraction of organic HAP and density of each coating, thinner, and other additives. These records were available upon request

and are used to calculate the organic HAP emissions from the facility. The emission calculation records documenting compliance with the organic HAP emission limit were submitted in the semi-annual certification of compliance for NESHAP PPPP. The report was previously reviewed and documented Ventra was within the HAP emission limits.

VII. Reporting

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

VIII. Stack/Vent Restrictions

Stack/Vent Restrictions are not applicable with FGMACT-PPPP.

IX. Other Requirements

Other Requirements are not applicable for FGMACT-PPPP.

E. FGRULE290 There are currently no Rule 290 emission units located at the facility; therefore, this flexible group is not applicable at this time.

F. FGRULE287(c) Currently, the only emission unit the facility is using in this flexible group is the Quality Control lab manual spray booth, Asset # AM3800. The paint supplier uses the booth to spray new paints to determine their effectiveness.

I. Emission Limits

Emission Limits are not applicable for FGRULE287(c).

II. Material Limits

Coating usage is limited to 200 gallons per month, minus water, as applied. According to Mr. Spivey, this booth is not used very often. Based on the records reviewed, the facility is well below the 200 gallons per month material limit.

III. Process/Operational Restrictions

Process/Operational Restrictions are not applicable for FGRULE287(c).

IV. Design/Equipment Parameters

Ventra uses fabric filters for control in the quality control spray booth.

V. Testing/Sampling

Testing/Sampling are not applicable for FGRULE287(c).

VI. Monitoring/Recordkeeping

Records of paint usage were available upon request and were adequate to demonstrate compliance with the requirements of the ROP.

VII. Reporting

Reporting of any deviations, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

VIII. Stack/Vent Restrictions

Stack/Vent Restrictions are not applicable with FGRULE287(c).

IX. Other Requirements

Other Requirements are not applicable for FGRULE287(c).

Summary:

The activities covered during the field inspection and records review for the facility indicate the facility was out of compliance with the air flow data for ROP MI-PTI-A5764-2009a. A Violation Notice was sent to Ventra on April 9, 2014. A consent order for the facility will be updated and a compliance plan will be incorporated into the ROP renewal for the facility.

NAME Caryn Owens

DATE 6/5/14

SUPERVISOR 