

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

A248123712

FACILITY: INDUSTRIAL FINISHING CO		SRN / ID: A2481
LOCATION: 3620 MILLCREEK, COMSTOCK PARK		DISTRICT: Grand Rapids
CITY: COMSTOCK PARK		COUNTY: KENT
CONTACT: Dan Welch , Owner		ACTIVITY DATE: 11/12/2013
STAFF: Jenifer Dixon	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: The purpose of this inspection was to conduct a scheduled inspection and to determine compliance with all applicable Air Quality Rules and Regulations and General Permit No. 61-09.		
RESOLVED COMPLAINTS:		

This was an unannounced inspection. A copy of the "Environmental Inspections: Rights and Responsibilities" was supplied.

The purpose of this inspection was to conduct a scheduled inspection and to determine compliance with all applicable Air Quality Rules and Regulations and General Permit No. 61-09.

JD arrived in the area of the facility at 10:00AM and left at approximately 11:00AM on November 12, 2013. No excess odors or opacity were observed during the inspection time. Mr. Dan Welch, President, provided pertinent information regarding the facility and the operations contained therein.

Industrial Finishing's primarily operation is the coating of wood office furniture. The facility has four coating booths and one sanding booth. The sanding booth is seldom used. Three booths have the capability of running in series and used as one coating line, however according to Mr. Welch, it has been several years since the booths were used in line. The product the facility is coating does not require that. All of the coating booths had mat panel filters in place. According to Mr. Welch, the filters are changed out every Friday. Some of the filters appeared to need to be changed more often and it may be prudent to change them on an as needed basis. This being said, JD observed spraying in one of the booths and the pull of the fan was sufficient to pull the over-spray into the filter. The stains and finish coatings are used as received unless a thinner is required to obtain a proper viscosity. Thinner is also used for clean-up.

FG-COATING

I. EMISSION LIMITS

- VOC emissions are limited to 2000 lb/month based on a calendar month. This must include all coatings, plus associated purge and clean-up operations.

At the time of the inspection, Mr. Welch is treating the facility as one emission unit, even though he has one booth that is exempt and three others that operate independently. These should be treated as four separate emission units.

Mr. Welch has contracted with a paint company Rollie Williams Paint Spot to supply all of the coating and thinner the facility utilizes as well as to do the VOC emissions records. JD requested permission from Mr. Welch to speak with Mr. John Bline of Rollie Williams regarding the usage and emissions records for the facility.

Mr. Bline provided all monthly records from August 2012 through October 2013. Currently the records are kept on a facility wide basis. There were a few months when the facility wide VOC emissions exceeded 2000 pounds (October 2012 and January, July and August 2013). Many other months were close to this limit. However, according to Mr. Welch, the work is typically distributed as evenly as possible between whatever booths are operating. There has never been a month where only one booth is in operation for the duration. Although Mr. Welch is not maintaining booth by booth records, it is highly unlikely that any one booth has exceeded the 2000 pound per month limit. JD

has spoken with Mr. Welch about keeping booth by booth records of usage to verify this is true for the future.

2. VOC emissions are limited to 10 tons per year based on a 12 month rolling time period as determined at the end of each calendar month. This must include all coatings, plus associated purge and clean-up operations.

The 12 month rolling emissions are attached to this report. The highest month is August 2013 at 11.75 tons. Although this exceeds the limit in the permit for one booth it does not exceed the facility wide limit of 30.0 tons for all coating lines. Although Mr. Welch is not maintaining booth by booth records, it is highly unlikely that any one booth has exceeded the 2000 pound per month limit. JD has spoken with Mr. Welch about keeping booth by booth records of usage to verify this is true for the future.

II. MATERIAL LIMITS

No applicable requirements.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall capture all purge/clean-up solvents and waste coatings from all coating applicators used in FG-COATING. The permittee shall store these materials in closed containers and shall dispose of them in an acceptable manner in compliance with all applicable state rules and federal regulations.

This is being done as required. The facility reclaims and recycles as much as possible.

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain FG-COATING with high volume-low pressure (HVLP) spray applicators or comparable technology with equivalent transfer efficiency (e.g., electrostatic spray, dip, flow-coat, roller, dip-spin). For HVLP applicators, the permittee shall keep test caps available for pressure testing.

This is being done as required.

2. The permittee shall not operate any spray application unless particulate control (dry filters or a water curtain) is installed, maintained and operated in a satisfactory manner.

According to Mr. Welch, the dry filters are changed once per week or on an as needed basis. At the time of the inspection, most of the filters appeared to be in satisfactory condition, however one appeared to need to be changed. JD mentioned this to Mr. Welch and he stated that the filter would be changed as soon as possible.

3. A thermal oxidizer or catalytic oxidizer may be installed, maintained and operated in a satisfactory manner to meet the requirements of this general permit. If a thermal oxidizer or catalytic oxidizer is used for FG-COATING, satisfactory operation requires an overall minimum of 76 percent reduction of VOC emissions to the atmosphere.
 - a) Satisfactory operation of a thermal oxidizer includes maintaining a minimum combustion chamber temperature of 1400°F and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, an average temperature of 1400°F based upon a three-hour rolling average may be used.
 - b) Satisfactory operation of the catalytic oxidizer includes maintaining a minimum catalyst bed inlet temperature of 600°F. In lieu of a minimum temperature, an average temperature of 600°F based upon a three-hour rolling average may be used.

NOTE: This condition does NOT apply as the facility does not utilize a thermal oxidizer.

4. For a coating line using a thermal oxidizer: The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the thermal oxidizer to monitor and record the temperature on a continuous basis, during operation of FG-COATING. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.

NOTE: This condition does NOT apply as the facility does not utilize a thermal oxidizer.

5. For a coating line using a catalytic oxidizer: The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device to continuously monitor the inlet and outlet temperatures of the catalytic oxidizer catalyst bed during operation of FG-COATING. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.

NOTE: This condition does NOT apply as the facility does not utilize a catalytic oxidizer.

V. TESTING/SAMPLING

1. Within 60 days of notification by the AQD, verification of VOC emissions and VOC content (in pounds per gallon) of any coating, reducer or purge/clean-up solvent, as applied or as received, using federal Reference Test Method 25A, Method 24 or other EPA approved reference method, may be required for continued operation. Verification of the emission rates includes the submittal of a complete report of the test results to the AQD with 60 days following the last date of the test. Upon prior written approval by the AQD District Supervisor, VOC content may alternatively be determined from manufacturer's formulation data. If the Method 25A or Method 24 should differ from the formulation values, the permittee shall use the Method 25A or Method 24 results to determine compliance.

AQD is not requesting VOC testing at this time for this facility.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.

1. For a coating line using a thermal oxidizer: The permittee shall monitor the temperature in the combustion chamber of the thermal oxidizer and record the temperature on a continuous basis, during operation of FG-COATING. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.

NOTE: This condition does NOT apply as the facility does not utilize a thermal oxidizer.

2. For a coating line using a catalytic oxidizer: The permittee shall continuously monitor the inlet and outlet temperatures of the catalytic oxidizer catalyst bed during operation of FG-COATING. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.

NOTE: This condition does NOT apply as the facility does not utilize a catalytic oxidizer.

3. The permittee shall keep the following information on a monthly basis for FG-COATING:
 - a) Purchase orders and invoices for all coatings, reducers, and purge/clean-up solvents.
 - b) VOC content, in pounds per gallon, of each coating, reducer and purge/clean-up solvent used.
 - c) Gallons of each coating, reducer and purge/clean-up solvent used and reclaimed.
 - d) VOC mass emission calculations determining the monthly emission rate for each coating line, in tons per calendar month, using the method specified in Appendix B.
 - e) VOC mass emission calculations determining the annual emission rate for each coating line, in tons per 12-month rolling time period as determined at the end of each calendar month, using the method specified in Appendix B.

The permit shall keep all records in the format specified in Appendix B. The permittee shall keep all records and make them available to the Department upon request.

This is being done as required. Based on a review of the records, the facility is using their own format as completed by Mr. Bline. JD reviewed all records for the time period of August 2012 through October 2013. The records appeared to be in order. All of these records are attached to this report.

4. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of Material Safety Data Sheets (MSDS), manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records and make them available to the Department upon request.

The facility is using MSDSs to show compliance with this permit condition.

5. For a coating line using a thermal or catalytic oxidizer: The permittee shall keep records of the date, duration and description of any malfunction of the control equipment, any maintenance performed, any replacement of catalyst and any testing results.

NOTE: This condition does NOT apply as the facility does not utilize a catalytic or thermal oxidizer.

5. For a coating line using a thermal oxidizer: The permittee shall keep, in a satisfactory manner, operating temperature records for the thermal oxidizer as required by SC VI.1. If the measured operating temperature of the thermal oxidizer falls below 1400°F during operation of FG-COATING, the permittee may demonstrate compliance based upon a three-hour average temperature, by calculating the average operating temperature for each three hour period which includes one or more temperature readings below 1400°F. The permittee shall keep all records and make them available to the Department upon request.

NOTE: This condition does NOT apply as the facility does not utilize a thermal oxidizer.

7. For a coating line using a catalytic oxidizer: The permittee shall keep, in a satisfactory manner, operating temperature records for the catalytic oxidizer as required by SC VI.2. If the measured operating temperature of the catalytic oxidizer falls below 600°F during operation of FG-COATING, the permittee may demonstrate compliance based upon a three-hour average temperature, by calculating the average operating temperature for each three hour period which includes one or more temperature readings below 600°F. The permittee shall keep all records and make them available to the Department upon request.

NOTE: This condition does NOT apply as the facility does not utilize a thermal oxidizer.

VII. REPORTING

No applicable requirements.

VIII. STACK/VENT RESTRICTIONS

1. The exhaust gases from FG-COATING shall be discharged unobstructed vertically upwards to the ambient air at exit points not less than one and one half times the building height (from ground level to point of discharge).

Based on visual observations of the stack, the stacks appear to comply with the restrictions of this condition.

IX. OTHER REQUIREMENTS

1. The permittee shall not replace or modify any portion of FG-COATING, including control equipment or coatings, nor install additional coating lines (or any portion of, including control equipment or coatings) unless all of the following conditions are met:
 - a) The permittee shall update the general permit by submitting a new Process Information form (EQP5759) to the Permit Section and District Supervisor, identifying the existing and new

equipment a minimum of 10 days before the replacement, modification or installation of new equipment.

- b) The permittee shall continue to meet all general permit to install applicability criteria after the replacement, modification or installation of new equipment is complete.
- c) The permittee shall keep records of the date and description of the replacement or modification, installation of new equipment, or any coating change. All records shall be kept on file for a period of at least five years and made available to the Department upon request.

As of the time of the inspection, there are no plans to modify the coating operations at the facility and therefore, no plans to modify the permit.

FG-SOURCE

I. EMISSION LIMITS

1. VOC emissions are limited to 30 tons per year based on a 12 month rolling time period as determined at the end of each calendar month.

As stated above, the 12 month rolling time period emissions are attached to this report. With the highest monthly rolling emissions being on 11.75 tons, this is well below the permitted limit.

II. MATERIAL LIMITS

No applicable requirements.

III. PROCESS/OPERATIONAL RESTRICTIONS

No applicable requirements.

IV. DESIGN/EQUIPMENT PARAMETERS

No applicable requirements.

V. TESTING/SAMPLING

No applicable requirements.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.

1. The permittee shall keep VOC mass emission calculations, on a monthly basis for FG-SOURCE determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month for all coating lines and associated purge and clean-up operations at the source. The permittee shall keep all records in the format specified in Appendix B and make them available to the Department upon request.

Based on a review of the records this is being done as required.

VII. REPORTING

No applicable requirements.


VIII. STACK/VENT RESTRICTIONS

No applicable requirements.

IX. OTHER REQUIREMENTS

No applicable requirements.

Based on observations made at the time of the inspection and subsequent records review, Industrial Finishing appears to be in compliance with all applicable Air Quality rules and regulations, as well as Permit No. 61-09. The facility will be required to make few changes in the way that recordkeeping of usages are handled to better address the conditions of the permit. No further action is necessary at this time.

NAME 

DATE 11/26/13

SUPERVISOR PAB