

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

N579038015

FACILITY: REGAL FINISHING COMPANY, INC.		SRN / ID: N5790
LOCATION: 3927 BESSEMER RD, COLOMA		DISTRICT: Kalamazoo
CITY: COLOMA		COUNTY: BERRIEN
CONTACT: Rick Hildebrand,		ACTIVITY DATE: 12/21/2016
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On December 21, 2016 AQD Staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Regal Finishing (RF) facility located in Coloma, Berrien County. According to district file records RF is an opt-out (Synthetic Minor) source for VOCs and HAPs and they have one air permit (PTI No. 336-96A) issued to them by the AQD for 15 paint booths and 3 drying/curing ovens. The intent of staff's inspection was to determine the facilities compliance with the air use permit as well as any other state or federal air regulations. Staff departed for the facility at approximately 9:30 a.m.

Staff arrived at the RF facility at approximately 10:35 a.m. Prior to entering the facility, staff took a few minutes of see if there were any visible emissions or if any odors could be detected coming from the facility and none were noted. Staff then proceeded into the office area. Upon entering the office reception area, staff introduced them self to an employee and stated the purpose of the visit. Staff then mentioned that in the past he had met with and/or been in contact with Alex Kincade (Quality Assurance Manager) regarding air compliance issues. The employee (Chris) said that Alex is no longer with the company and that Rick Hildebrand had taken over Alex's duties. Chris then contacted Rick and also Jason who Chris said is an employee with a lot of knowledge of operations. Both Rick and Jason came to greet staff a few minutes later. Staff then introduced them self and exchanged business cards. Staff then mentioned why they were there and they asked staff where they wanted to start. Staff mentioned that they would first like to ask some general questions about the facility operations, take a walk through of the facility, and then finish up by reviewing the records required to be kept by their permit. The following is a summary of staff's discussion with Rick and Jason, the facility operations, and their compliance with PTI No. 336-96A and other state or federal air regulations.

According to Rick and Jason, no new coating booths have been added since staff's last inspection and they still have the 15 spray booths and 3 cure ovens. Rick said that they did add two robotic sprayers to a couple of the paint booths though. He went on to state that they also added 2 new vacuum metallizers that for the most part have replaced the use of the previous 3 they have because they are a lot more efficient. As mentioned in the previous inspection report, the process basically consists of the coating material being placed in the vacuum chambers along with the part to be coated. The coating is then vaporized onto the part. The vacuum metallizers are self-contained and there are no stacks or vents related to the process.

Staff then asked about business and they said it has kind of slowed down some and they are down to 31 employees. They said some of this is related to the slower business but also to the cross training of employees so they can do multiple things, thus limiting the number of people they have to have on payroll. Staff noted in the prior inspection they had about 50 employees. Staff then asked about hours of operation and they said that they currently are working 7 a.m. to 5 p.m. Monday through Friday. Staff then asked what types of parts they coat at the facility and they stated the parts are still similar to what they've always done. Rick said the majority are components for the automotive and agricultural sectors, appliances, medical equipment, insulators for electrical conductors, etc. They said that they do get some job shop type of orders and currently they had one for coating trophies.

Staff then proceeded with Rick and Jason out into the various painting and curing areas. The following describes the emission units staff observed.

Paint Booth 1 (Rod End Line) and Paint Booth 2 (Vintage Line) are identical painting systems. They are both automatic paint sprayers that have the parts going by on a chain rolled conveyor system and then into a drying oven. Rick stated that they still hardly use them. He said that the Rod End Line might get used was a month and the Vintage Line once a week. They both are equipped with water curtains for particulate control. The Vintage Line was in use during the inspection.

Paint Booth 15 is a manual spray paint operation and is equipped with a water curtain for particulate control.

Paint Booth 17 and Paint Booth 18 are now housed together in one room that they refer to as the Clean Room. It is totally enclosed and each booth is equipped with a robotic sprayer. Staff noted that there were filters on the doors and both booths had water curtains inside of them for particulate control.

Paint Booth 16 is also designated as the Front 7400. This paint booth is equipped with a rotary table paint sprayer and Rick said it isn't used very much.

Drying Oven 1 is also designated as the Ring Oven. It was currently in use and according to Rick it is a low temperature bake oven. Staff noted it was now equipped with a digital temperature recorder instead of a paper chart recorder. It was operating at 140 degrees F. Staff asked how long it takes to cure the parts and Rick and Jason said it depends on the coating specs. They said it typically ranges between 15 minutes and 2 hours.

Paint Booth 12 is now just a manual hand spray paint booth. Previously it had been designated as Ring Basecoat and was equipped with an axial sprayer. The axial spray nozzle would run back and forth on a bar while the part being painted is stationary below it. The booth is equipped with a water curtain for particulate control.

Paint Booth 11 is the same type of booth as Paint Booth 12 and it is equipped with a water curtain for particulate control. Previously Booth 11 had been designated Ring Topcoat. It was not in use during the inspection.

Paint Booths 9 and 10. These 2 booths are separate but are enclosed in one room. Painting is done either manually or robotically here. The booths are equipped with water curtains for particulate control. Rick said Booth 10 is not used very much and is mainly used when they need to blow off parts. Neither was in use during the inspection.

Drying Oven 2 is also designated as the Michigan Oven. It was in use and operating at 170 degrees F. Like Drying Oven 1, it is also now equipped with a digital temperature recorder instead of a strip chart recorder.

Paint Booth 14 is also designated as the Big Paint Machine. Rick mentioned that it is still hardly used and they use it to blow particulate matter off of parts with compressed air. It was not in use during the inspection.

Paint Booth 13 is also designated as the Deco Oven. It operates by a chain rolled conveyor with a rotary spraying system (2 sets of rotating spray guns). Parts are air dried here, no baking. It is equipped with a water curtain for particulate control. Rick said that they don't use it very often. He said when used, it may be once or twice a day for 5 to 10 minutes. It was not in use during the inspection.

Drying Oven 3 is also designated as the Flow Coat Oven. It was in use and operating at 180 degrees F. It is also now equipped with a digital temperature recorder instead of a strip chart recorder.

Paint Booth 6 is now designated as the Ring Topcoat. It had been designated as Back 7400 that had a rotary table sprayer that has been removed. It was not in use during the time of inspection and it is equipped with a water curtain for particulate control.

Paint Booth 7 is also designated as Charlie's Machine. It uses an axial paint application process and is equipped with a water curtain for particulate control. It was not in use during the inspection.

Paint Booth 8 is also designated as the Flow Coater. Parts are placed under a trough which runs back and forth over the parts applying the coating. It is equipped with an infrared tunnel to flash off the parts prior to going be placed into the Flow Coat Drying Oven 3. It was not in use during the inspection.

Vacuum Metallizers - The three old units were not in use and the 2 new ones were. The Their operation was explained previously.

Staff then proceeded with Rick and Jason to an office to view records. Arriving at office, staff mentioned the conditions of the permit and that it would probably be easiest to just go through them one by one. The following lists the Special Conditions (SC) of PTI No. 336-96A and what staff noted:

1. The volatile organic compound (VOC) emission rate from the plastic parts coating process consisting of fifteen (15) spray paint booths and three (3) ovens, hereinafter "process" shall not exceed 84.0 pounds per hour nor 63.0 tons per year, based upon a 12-month rolling time period as determined at the end of

each calendar month.

AQD Comment: Appears to be in COMPLIANCE. Staff viewed the records from the most recent 12-month time frame (November 2016) that they had the emissions calculated for and they indicated the VOC emissions were 25.28 tons. The hourly emission rate was calculated to be 13.17 pounds per hour.

2. The acetone emission rate from the process shall not exceed 13.3 pounds per hour nor 13.5 tons per year, based upon a 12-month rolling time period as determined at the end of each calendar month.

AQD Comment: Appears to be in COMPLIANCE. Staff viewed the records from the most recent 12-month time frame (November 2016) that they had the emissions calculated for and they indicated the Acetone emissions were 8.54 tons. The hourly emission rate was calculated to be 3.54 pounds per hour.

3. The volatile organic compound (VOC) emission rate from the use of clean-up solvents shall not exceed 15.6 tons per year, based upon a 12-month rolling time period as determined at the end of each calendar month.

AQD Comment: Appears to be in COMPLIANCE. Staff viewed the records from the most recent 12-month time frame (November 2016) that they had the emissions calculated for and they indicated emissions at 1.25 tons.

4. The emissions of hazardous air pollutants (HAPs) as defined pursuant to Section 112(b) of the Clean Air Act, shall be less than 8.9 tons per year for any individual HAP or 22.4 tons per year for any combination of HAPs at this stationary source. This annual limit shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

AQD Comment: Appears to be in COMPLIANCE. Their highest single HAP is Toluene at .10 tons and combined HAPs was 3.11 tons.

5. The VOC content of the coatings as applied in the process for painting plastic parts shall not exceed 5.0 pounds of VOC per gallon of coating (minus water) as applied.

AQD Comment: COMPLIANCE. The facility uses a job shop sheet for each customer order and as part of their QA process and it contains the mix ratio for the coating being applied. Before this ratio is mixed they calculate the VOC content to make sure it is under 5.0 pounds per gallon minus water. Staff did not take a sample of any coatings during this inspection but the AQD has taken them in the past and found them to be in compliance.

6. Applicant shall keep a separate record for each calendar month of the following for the process:

AQD Comment for SC A1 through A4 Below: Appears to be in COMPLIANCE. They keep track of this by the job sheets mentioned earlier which they then enter into their monthly spreadsheets for doing the emission calculations. They also have quite a few binders of MSDS sheets on the various coatings they may use.

- A. For each coating sprayed, record the following on a monthly basis:

1. The coating identification and associated coating category.
2. The total volume used, in gallons, of each coating and reducer.
3. The pound of VOC per gallon of each coating and reducer, as received and as applied.
4. The coating to reducer mixing ratio.

Comment for SC B1 through B4 Below: Appears to be in COMPLIANCE. The facility is maintaining this information on the spreadsheet mentioned under SC A1 through A-4 above.

- B. Monthly calculation of the following for process HAPs:

Monthly calculation of each individual HAP emission rate in tons per month by process

2. Monthly calculation of aggregate HAPs emission rate in tons per month for all processes at the facility.
3. Monthly calculation for each individual HAP determining a 12-month rolling time period emission rate in

tons per year.

Monthly calculation of aggregate HAPs determining a 12-month rolling time period emission rate in tons per year.

C. The total hours of operation.

AQD Comment: Appears to be in COMPLIANCE. The facility keeps track of hours of operation.

D. The amount, in gallons, of clean-up and/or purge solvents used.

AQD Comment: Appears to be in COMPLIANCE. According to November 2016 records they used 110 gallons of clean-up (B Mask Wash) that month. Rick and Jason stated that they typically use between 110 and 165 gallons per month.

E. The amount, in gallons, of acetone used.

AQD Comment: Appears to be in COMPLIANCE. They keep track of this by monthly purchase records and records reviewed by staff show that they typically use between 55 and 110 gallons per month.

All records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.

7. Applicant shall keep a separate record for each calendar month of the VOC and acetone emission calculations determining a calendar month emission rate in tons per month, and a 12-month rolling time period emission rate in tons per year. All records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.

AQD Comment: Appears to be in COMPLIANCE. The facility is calculating the above emissions.

8. The VOC content of any coating as applied and as received shall be determined using federal Reference Test Method 24. Upon prior approval of the District Supervisor, Air Quality Division, VOC content may alternatively be determined from manufacturer's formulation data.

AQD Comment: Appears to be in COMPLIANCE.

9. Applicant shall not operate the process unless the dry filters/or wash water systems are installed and operating properly.

AQD Comment: Appears to be in COMPLIANCE. All painting operations are equipped with dry filters and/or water curtains. Any painting operations in use during the inspection had these installed and they appeared to be operating properly.

10. The disposal of collected waste coatings and solvents shall be performed in a manner which minimizes the introduction of air contaminants to the outer air.

AQD Comment: Appears to be in COMPLIANCE. Staff will have to assume the facility is disposing of wastes properly. Rick said that they use Heritage for their waste disposal now.

11. The exhaust gases from the process shall be discharged unobstructed vertically upwards to the ambient air at exit points as described below.

AQD Comment: Appears to be in COMPLIANCE. All painting or drying operations were equipped with vertical exhaust stacks.

12. All coatings applied in the process shall be applied utilizing high volume low pressure (HVLP) applicators or equivalent technology with comparable transfer efficiency. All applicators shall be properly installed, maintained and operated according to manufacturer's specifications.

AQD Comment: Appears to be in COMPLIANCE. Staff noted that HVLP applicators are used.

13. Applicant shall maintain a current listing of the manufacturer's formulation data for each coating.

AQD Comment: Appears to be in COMPLIANCE. As mentioned earlier, the facility has quite a few binders containing MSDS for the coatings they may use.

Table I. (Stack Information)

STACK #	Height (ft)	Diameter (ft)
001	23	1.5
002	23	1.5
003	25	2.5
004	23	1.67
005	24	0.5
006	23	1.5
007	23	1.5
008	23	1.0
009	23	2.67
010	23	2.0
011	24	3.5
012	24	2.0
013	25	0.5
014	25	0.83
015	23	3.5
016	23	2.0
017	23	2.0
018	23	3.5

AQD Comment: Appears to be in COMPLIANCE. The stack diameters and heights appear to meet these requirements.

INSPECTION SUMMARY: Overall the facility appears to maintain good records and staff will consider them to be in COMPLIANCE with PTI No. 336-96A at the present time. Staff thanked Rick and Jason for their time and departed the facility at approximately 12:00 noon.

NAME Matt Decker

DATE 12-22-16

SUPERVISOR MA 12/27/2016

