

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

N505628064

FACILITY: Magna Mirrors Corporation - Newaygo		SRN / ID: N5056
LOCATION: 700 S. Park Dr., NEWAYGO		DISTRICT: Grand Rapids
CITY: NEWAYGO		COUNTY: NEWAYGO
CONTACT: Kaitlyn Laug, Env. Health & Safety Specialist		ACTIVITY DATE: 12/11/2014
STAFF: Jenifer Dixon	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: The purpose of this inspection was to complete a scheduled inspection and to determine the facility's compliance with Title V Permit No. MI-ROP-N5056-2011a (ROP) and all other applicable Air Quality Rules and Regulations.		
RESOLVED COMPLAINTS:		

This was an unannounced inspection on December 11, 2014. A copy of the "Environmental Inspections: Rights and Responsibilities" was supplied.

The purpose of this inspection was to complete a scheduled inspection and to determine the facility's compliance with Title V Permit No. MI-ROP-N5056-2011a (ROP) and all other applicable Air Quality Rules and Regulations.

JD arrived in the area of the facility and no odors or excess opacity was observed during the time before, during, or after the inspection. Ms. Kaitlyn Laug, Environmental, Health, and Safety Specialist, and Mr. Bill Latsch, Maintenance Manager, provided pertinent information regarding the facility and the operations contained therein.

Magna Mirrors (Magna) manufactures and coats plastic automotive parts - primarily automobile mirrors and other small parts. The facility is also permitted to coat metal automotive parts; however, no metal parts have been coated since the permit was modified.

The plastic parts are manufactured using approximately 70 plastic injection molding machines. Several more machines have been added to the facility since the previous inspection. The plastic injection molding machines are exempt from Rule 201 permitting requirements under Rule 286(b).

The facility also has several assembly areas that are used to finalize the parts before shipping. Some of the assembly requires the use of adhesive. The adhesive is applied via a sticker.

Magna has two natural gas small boilers. These boilers are exempt from Rule 201 permitting requirements and are not subject to the Boiler NSPS, because of their small size (less than 10 mmbtu) or the Boiler MACT, because they burn only natural gas. Typically only one boiler is fired at a time.

The Title V Renewable Operating Permit (ROP) regulates the paint line at the facility and all equipment and processes associated with it. The facility has several recordkeeping requirements in the ROP. The necessary records were supplied by the facility via Mr. Bruce Connell, Environmental Consultant with Environmental Partners, Inc. These records were reviewed by JD in order to help establish the compliance status of the facility. This records review and other discussion regarding the ROP is summarized below.

NOTE: Various records are attached to this report. These records will be referred to periodically throughout the report.

ROP NO. MI-ROP-N5056-2011a

SOURCE-WIDE CONDITIONS

All process equipment at the stationary source including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

The primecoat portion of EUWETCOAT is controlled by a regenerative thermal oxidizer, RTO No. 2. The basecoat and clearcoat portion of EUWETCOAT and EUPURGE/CLEANUP are also controlled by a regenerative thermal oxidizer, RTO No. 1. All three spray booths utilize downdraft waterwash particulate control.

I. EMISSION LIMIT(S)

1. Each Individual HAP from all process equipment at the stationary source including equipment covered by other permits, grand-fathered equipment, and exempt equipment is limited to less than 10.0 tpy based on 12-month rolling time period as determined at the end of each calendar month.

The highest used individual HAP for the facility is Diethylene Glycol Butyl Ether Acetate. Based on the October 2014 rolling time period emissions calculations the emissions for xylene were 3.1 tons. This is well below the permitted limit.

2. Aggregate HAPs from all process equipment at the stationary source including equipment covered by other permits, grand-fathered equipment, and exempt equipment is limited to less than 25.0 tpy based on a 12-month rolling time period as determined at the end of each calendar month.

The aggregate 12-month rolling HAPs emissions for October 2014 are 8.44 tons. This is well below the permitted limit of 25.0 tpy.

II. MATERIAL LIMIT(S) - NA**III. PROCESS/OPERATIONAL RESTRICTION(S) - NA****IV. DESIGN/EQUIPMENT PARAMETER(S) - NA****V. TESTING/SAMPLING**

1. The permittee shall determine the HAP content of any coating, conductive prep solution, reducer, clean-up and/or purge solvent, or other material, as applied or otherwise used, and as received, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311.

No testing has been requested at this time.

VI. MONITORING/RECORDKEEPING

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.

These calculations are being completed in a timely manner, as required.

2. The permittee shall keep the following information on a calendar month basis:

- a. Gallons or pounds of each HAP containing material used.
- b. Where applicable, gallons or pounds of each HAP containing material reclaimed.
- c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
- d. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
- e. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

Based on the records reviewed, the information listed in 2a - 2e is being kept in an appropriate manner, as required.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for

reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.

- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.

All necessary reports in VII.1 – VII.3 have been submitted in a timely manner, as required.

VIII. STACK/VENT RESTRICTION(S) - NA

IX. OTHER REQUIREMENT(S) - NA

EUWETCOAT

EUWETCOAT has one conveyerized coating line with automatic electrostatic reciprocating applicators and automatic robots with electrostatic and HVLP applicators used for the surface coating of automotive plastic and metal parts. The parts pass through an aqueous wash line, drying oven, a prime coat spray booth equipped with a separate Regenerative Thermal Oxidizer (RTO No. 2) control system and an uncontrolled prime bake oven. The parts pass next through one base coat spray booth and one clear coat spray booth, each with recirculating air flow with a portion of return air exhausting to a RTO No. 1, and a final uncontrolled bake oven. All three spray booths utilize downdraft water wash particulate control.

Parts of the line are controlled by the oxidizer. The oxidizer is also regulated by the flexible group FGCAMPLAN. Waterwash System, RTO No. 2 for the prime coat spray booth, recirculation/RTO No. 1 for the basecoat and clearcoat spray booths.

The emissions of the individual toxics are variable based on the coatings being used at the time. All of the emissions calculations are computed with the use of the Manufacturer's Specification Sheet and the Facility Mix Sheet. The quantities of the various constituents are batch specific.

I. EMISSION LIMIT(S)

- VOC emissions are limited to 130.0 tons based on a 12-month rolling time period as determined at the end of each calendar month.

Based on records reviewed, the 12-month rolling VOC emissions for October 2014 were 106.2 tons. This is below the permitted limit.

- VOC and acetone combined emissions are limited to 5.2 lbs/hr based on the EUWETCOAT thermal oxidizer outlet testing.

This is a stack testing requirement that can be used to show equivalency with the destruction efficiency requirement. No testing is required at this time.

- Acetone emissions are limited to 13.6 tons based on a 12-month rolling time period as determined at the end of each calendar month.

The 12-month rolling acetone emissions for October 2014 were 1.03 tons. This is well below the permitted limit.

- Formaldehyde [CAS # 50-00-0] emissions are limited to 1.37 pounds per hour based on stack testing in the form of a bench test, if required by the department.

No testing is required at this time.

- Basecoat uncontrolled total formaldehyde content is limited to 0.63 percent by weight based on stack testing in the form of a bench test, if required by the department.

No testing is required at this time.

6. Clearcoat uncontrolled total formaldehyde content is limited to 0.39 percent by weight¹ based on stack testing in the form of a bench test, if required by the department.

No testing is required at this time.

7. Primer uncontrolled total formaldehyde content is limited to 0.70 percent by weight based on stack testing in the form of a bench test, if required by the department.

No testing is required at this time.

8. Dibasic ester*** [CAS # 95481-62-2] emissions are limited to 0.78 lb/hour based on stack testing in the form of a bench test, if required by the department.

No testing is required at this time.

9. Cumene [CAS # 98-82-8] emissions are limited to 0.40 lb/hour based on stack testing in the form of a bench test, if required by the department.

No testing is required at this time.

10. Ethyl benzene [CAS # 100-41-4] emissions are limited to 2.96 lb/hour based on stack testing in the form of a bench test, if required by the department.

No testing is required at this time.

11. Dibasic ester* [CAS # 95481-62-2] emissions are limited to 3,390 pounds per year based on a 12-month rolling time period as determined at the end of each calendar month for the prime coat spray booth and prime bake oven.

The dibasic ester 12-month rolling emissions for the prime booth and oven for October 2014 were 710 pounds. This is well below the permitted limit.

12. Dibasic ester* [CAS # 95481-62-2] emissions are limited to 1,891 pounds based on a 12-month rolling time period as determined at the end of each calendar month for the base coat spray booth and final bake oven.

The dibasic ester 12-month rolling emissions for the base coat and final bake oven for October 2014 were 1606 pounds. This is below the permitted limit.

13. Cumene [CAS # 98-82-8] emissions are limited to 3,258 pounds based on a 12-month rolling time period as determined at the end of each calendar month for the prime coat spray booth and prime bake oven.

The cumene 12-month rolling time period emissions for the prime coat booth and bake oven for October 2014 were 118 pounds. This is well below the permitted limit.

14. Cumene [CAS # 98-82-8] emissions are limited to 3,587 pounds based on a 12-month rolling time period as determined at the end of each calendar month for the base coat spray booth and final bake oven.

The cumene 12-month rolling time period emissions for the base coat booth and final bake oven were 111 pounds for October 2014. This is well below the permitted limit.

15. Ethyl benzene [CAS # 100-41-4] emissions are limited to 9,986 pounds based on a 12-month rolling time period as determined at the end of each calendar month for the prime coat spray booth and prime bake oven.

Ethyl benzene 12-month rolling time period emissions for the prime booth and bake oven were 66 pounds. This is well below the permitted limit.

16. Ethyl benzene [CAS # 100-41-4] emissions are limited to 10,014 pounds based on a 12-month rolling time period as determined at the end of each calendar month for the base coat spray booth and final bake oven.

The ethyl benzene 12-month rolling time period emissions for the base coat and final bake oven were 1552 for October 2014. This is well below the permitted limit.

*Dibasic Ester emission rate shall be determined based on the sum of dimethyl glutarate, dimethyl succinate, and dimethyl adipate emissions.

II. MATERIAL LIMIT(S)

1. The permittee shall not exceed the material usage rates or the melamine resin and free formaldehyde [CAS # 50-00-0] content limits listed below:

	Material ID	Material Usage (gallons per year)	Time Period	Maximum Melamine Resin Content (wt %)	Maximum Free Formaldehyde Content (wt %)	Monitoring/ Testing Method
1.a	Primer containing melamine resin	46,043 ¹	Based on a 12-month rolling time period as determined at the end of each calendar month	34.15 ¹	0.1 ¹	SC VI.4
1.b	Basecoat containing melamine resin	53,296 ¹	Based on a 12-month rolling time period as determined at the end of each calendar month	30.00 ¹	0.1 ¹	SC VI.4
1.c	Clearcoat containing melamine resin	55,859 ¹	Based on a 12-month rolling time period as determined at the end of each calendar month	16.78 ¹	0.1 ¹	SC VI.4

1.a. The 12-month rolling primer coating (containing melamine resin) usage for October 2014 was 33,849 gallons. This is well below the permitted limit.

1.b. The 12-month rolling base coating (containing melamine resin) usage for October 2014 was 27,790 gallons. This is well below the permitted limit.

1.c. The 12-month rolling clear coating (containing melamine resin) usage for October 2014 was 30,319 gallons. This is well below the permitted limit.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the coating line unless the recirculation/RTO No. 1 and RTO No. 2 control systems are installed, maintained, and operated in a satisfactory manner.

Based on observations at the time of the inspection as well as a review of limited maintenance records, the facility appears to have installed, and are maintaining and operating RTO No. 1 and RTO No. 2 in a satisfactory manner.

2. The permittee shall not operate the coating line unless the recirculation/RTO No. 1 and RTO No. 2 control system maintains a minimum VOC destruction efficiency of 95 percent (by weight) across each RTO and overall VOC emissions capture efficiency for the prime coat, base coat, and clear coat spray booths of not less than 80 percent.

This value is assumed to be true based on proper operation of both units. Only a stack test could replicate this value. No stack test is requested at this time.

3. The permittee shall not operate the coating line unless a minimum combustion temperature of 1400°F and a minimum retention time of 0.5 seconds in both RTO No. 1 and RTO No. 2, individually, are

maintained.

Based on observations made at the time of the inspection and previous discussions with Magna staff regarding the lock-out system on the units, RTO No. 1 and RTO No. 2 are both operating at 1400°F or above.

4. The permittee shall not operate any of the paint spray booths unless:
 - a. The respective water wash control systems are installed and operating properly.
 - b. The permittee equips and maintains the plastic and metal parts coating process with automatic electrostatic reciprocating applicators and automatic robots with electrostatic and HVLP applicators, or equivalent technology with comparable coating transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing.

Conditions 4.a – 4.b have been met, as required.

5. The permittee shall not operate EUWETCOAT for more than 8,000 hours per 12-month rolling time period as determined at the end of each calendar month. EUWETCOAT shall be considered as operating whenever parts are being coated and/or cured in the prime coat spray booth, the prime bake oven, the base coat spray booth, the clear coat spray booth, or the final bake oven.

Based on records reviewed the 12-month rolling hours of operation for October 2014 was 6443 hours. This is well below the permitted limit.

IV. DESIGN/EQUIPMENT PARAMETER(S) - NA

V. TESTING/SAMPLING

1. To determine Daily and Monthly VOC emissions, the VOC content, water and exempt solvent content, density of any coating, conductive prep solution, reducer, cleanup and purge solvent, as applied shall be tested using Method 24. The VOC content for coatings shall be determined from the Facility Mix Sheet** supported by the Manufacturer's Specification Sheet, derived from Method 24 analysis on a batch specific basis. Alternatively, the VOC content may be determined from manufacturer's formulation data, derived from Method 24 analysis on a batch specific basis, with written approval by the AQD District Supervisor.

Magna is currently using the Manufacturer's Specification Sheet and Facility Mix Sheet to determine VOC content of each coating. No additional Method 24 testing is requested at this time.

2. The most recent Facility Mix Sheet and Manufacturer's Specification Sheet shall be kept on site and be available for all "in Use" and stand-by coating batches, or within 10 business days from when new coatings are put into use.

*The coating Manufacturer's Specification Sheet is coating batch specific and documents the actual coating density, non-volatile material content, resistivity, viscosity, and gloss.

**The Facility Mix Sheet is developed by Magna-Donnelly Corporation to show the mix of paint, thinner, and catalyst for each coating, based on the Manufacturer's Specification Sheet and the computed VOC content.

Based on discussions with facility personnel and historical discussions with the facility environmental consultant, this is being done as required.

3. Within 180 days from the issuance of this permit, the permittee shall verify destruction efficiency of each RTO (RTO Nos. 1 and 2) by testing at owner's expense, in accordance with Department requirements. No less than 120 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of destruction efficiency includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.

This testing has been completed as required and in a timely manner. No additional testing is

requested at this time.

VI. MONITORING/RECORDKEEPING

1. The permittee shall monitor and record the temperature in the combustion chamber of each RTO individually with a continuous temperature monitor or in a manner and with instrumentation acceptable to the AQD District Supervisor.

Based on visual observations made at the time of the inspection, the continuous recorder for one of the RTO has been replaced. The recorder was previously paper, but this has been replaced with a digital recorder. During discussions with Ms. Laug and Mr. Latsch regarding how often this data is examined, Magna staff indicated that the information from one of the RTO's was only downloaded once per year. This should be done on a monthly basis even though the permit does not require this action. Additionally, the instantaneous temperature and the temperature being continuously recorded were not the same. The temperature differed by about 5 degrees, even though neither of these was close to the minimum temperature required. It would be prudent for Magna to examine these on a more frequent basis.

2. For the entire line, individual records and calculations shall be kept in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request:
 - a. The VOC and acetone mass emission rates in tons per 12-month rolling time period as determined at the end of each calendar month.
 - b. The density and VOC content in pounds per gallon, minus water and exempt solvents, as applied, of all coatings.
 - c. The density and VOC content of any conductive prep solution, diluents, or reducers determined as specified in SC V.1.
 - d. The daily usage rate of each coating, catalyst, conductive prep solution, diluents and reducers.
 - e. The daily hours of operation, and a log of the EUWETCOAT hours of operation per month and per 12-month rolling time period as determined at the end of each calendar month.
 - f. The amount of waste paint captured and disposed of in an acceptable manner.

Based on records reviewed and discussions with facility personnel, records associated with the conditions in 2.a. – 2.f. are being kept as required and in a format that is satisfactory.

3. For each coating sprayed, individual records and calculations shall be kept in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request:
 - a. The calculations for the prime, base, and clearcoat booths shall account for the capture and destruction efficiency of each RTO.
 - b. The facility mix sheet and manufacturer's technical data sheet for in-use and stand-by (open but not fully consumed) coating batches.
 - c. The VOC content as determined through Facility Mix Sheets and manufacturer's technical data sheets, shall be deemed equivalent to Method 24 data without foreclosing permittee's opportunity to actually perform its own Method 24.
 - d. If an applied coating is tested by a federal reference Method 24 analysis and determined by the Facility Mix Sheets, and the results are different, then the Method 24 analysis results shall be used for determining compliance with the emission limit.

Based on records reviewed and discussions with facility personnel, records associated with the conditions in 3.a. – 3.d. are being kept as required and in a format that is satisfactory.

4. On a calendar month basis, the following information shall be kept in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request:
 - a. Coating free formaldehyde content shall be determined for all coatings containing free formaldehyde. Free formaldehyde content shall be determined based on manufacturer's current material safety data sheets (MSDS), environmental data sheets (EDS), and/or formulation data,

determined on an as received basis.

- b. Coating melamine resin content shall be determined for all coatings containing melamine resin. Melamine resin content shall be determined based on manufacturer's current material safety data sheets (MSDS), environmental data sheets (EDS), and/or formulation data, determined on an as received basis.
- c. The monthly and annual coating usage totals for basecoats, clearcoats, and primers containing melamine resin in gallons per month and gallons per year based on a 12-month rolling time period as determined at the end of each month, on an as received basis.

Based on records reviewed and discussions with facility personnel, records associated with the conditions in 4.a. – 4.c. are being kept as required and in a format that is satisfactory.

5. On a calendar month basis, the following information shall be kept in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request:¹ (R 336.1225)
 - a. The monthly and annual coating usage totals for each dibasic ester [CAS # 95481-62-2], cumene [CAS # 98-82-8], and ethyl benzene [CAS # 100-41-4] containing material, determined on an as received basis.
 - b. The dibasic ester [CAS # 95481-62-2] content, cumene [CAS # 98-82-8] content, or ethyl benzene [CAS # 100-41-4] content of a coating shall be determined from the manufacturer's current material safety data sheet (MSDS), environmental data sheets (EDS), and/or formulation data, on an as received basis. Dibasic ester content shall be determined from the sum of the dimethyl glutarate [CAS # 1119-40-0], dimethyl succinate [CAS # 106-65-0], and dimethyl adipate [CAS # 627-93-0] content of a coating based on the manufacturer's current material safety data sheet (MSDS), environmental data sheets (EDS), and/or formulation data.
 - c. Dibasic ester [CAS # 95481-62-2], cumene [CAS # 98-82-8], and ethyl benzene [CAS # 100-41-4] mass emission calculations determining the monthly emission rate of each contaminant in pounds per calendar month.
 - d. Dibasic ester [CAS # 95481-62-2], cumene [CAS # 98-82-8], and ethyl benzene [CAS # 100-41-4] mass emission calculations determining the annual emission rate in pounds per 12-month rolling time period of each contaminant as determined at the end of each calendar month.

Based on records reviewed and discussions with facility personnel, records associated with the conditions in 5.a. – 5.d. are being kept as required and in a format that is satisfactory.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.

The reporting required by condition VII.1. – VII.3 has been completed in a timely manner as required.

4. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, because this classification was relied upon to demonstrate compliance with Rule 225(1) for formaldehyde. The permittee shall submit the notification to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal.

As of the time of the inspection, no changes of this sort have been made.

VIII. STACK/VENT RESTRICTION(S)

The stack dimensions are restricted to a maximum diameters and a minimum heights. The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air.

Based on visual observations, the stacks appear to meet the limitations in this condition. The stacks were not physically measured.

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement and maintain the Malfunction Abatement Plan (MAP) for EUWETCOAT.

This has been completed and implemented as required.

2. Records of all elements in the MAP verifying the date procedures specified in the plan are performed must be kept and made available for inspection.

This has been completed and implemented as required.

3. The MAP shall be reviewed and updated by the permittee on an as needed basis. Any changes to the plan shall be submitted to the AQD District Supervisor for approval.

This has been completed and implemented as required.

EUCLEANUP/PURGE

VOC emissions from the use of purge and cleanup solvents in the paint kitchen, paint recirculation lines, paint booth line and applicator purge, and paint booth cleanup. This EU is controlled by RTO No. 1 and RTO No. 2. The system also has a waterwash system, RTO No. 2 for the prime coat spray booth, recirculation/RTO No. 1 for the basecoat and clearcoat spray booths.

I. EMISSION LIMIT(S)

1. VOC emissions are limited to 11.25 pounds per hour based on a calendar month averaging time period.

The highest hourly VOC emissions from EUCLEANUP/PURGE were for the time period of November 2013 through October 2014 was October 2014 at 2.96 pounds per hour. This is well below the permitted limit.

2. VOC emissions are limited to 22.5 tons per year based on a 12-month rolling time period as determined at the end of each calendar month

The 12-month rolling time period emissions for October 2014 was 6.51 tons. This is well below the permitted limit.

II. - NAMATERIAL LIMIT(S)**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall capture all waste (purge, waste coatings and cleanup solvents) and shall store them in closed containers. The permittee shall dispose of all waste (purge, waste coatings and cleanup solvents) in an acceptable manner in compliance with all applicable state rules and federal regulations.

This is done as required by the permit.

2. The permittee shall handle all VOC containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep

containers covered at all times except when operator access is necessary.

This is done as required by the permit.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUCLEANUP/PURGE unless the gun tip purge emissions released within the prime booth are controlled by the EUWETCOAT RTO No. 2 and the basecoat / clearcoat spray booths emissions are controlled by the EUWETCOAT recirculation / RTO No. 1 control system.

Based on observations made at the time of the inspection, this is done as required by the permit.

V. TESTING/SAMPLING - NA

VI. MONITORING/RECORDKEEPING

1. The permittee shall calculate and maintain records for:
 - a. The monthly cleanup/purge VOC emission rate in pounds per hour based on a calendar month averaging time period and tons per year based on a 12-month rolling time period as determined at the end of each calendar month.
 - b. The amounts in gallons of cleanup and purge solvents used.
 - c. The amounts in gallons of cleanup and purge solvents captured (reclaimed).

Based on a records review, the records for 1a-c are being kept as required by the permit.

2. The VOC content in pounds per gallon, as received for each purge and cleanup solvent as determined from material safety data sheets.

Based on a records review, these records are being kept as required by the permit.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.

The reports required by conditions VII.1. – VII.3. have been completed and submitted accurately and in a timely manner as required.

VIII. STACK/VENT RESTRICTION(S)

The stack dimensions are restricted to a maximum diameters and a minimum heights. The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air.

Based on visual observations, the stacks appear to meet the limitations in this condition. The stacks were not physically measured.

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement and maintain the Malfunction Abatement Plan (MAP) for EUCLEANUP/PURGE.

This has been done as required by the permit.

2. Records of all elements in the MAP verifying the date procedures specified in the Plan are performed must be kept and made available for inspection.

This has been done as required by the permit.

3. The MAP shall be reviewed and updated by the permittee on an as needed basis. Any changes to the plan shall be submitted to the AQD District Supervisor for approval.

This has been completed and implemented as required.

FGCAMPLAN

FGCAMPLAN contains the primecoat portion of EUWETCOAT is controlled by RTO No. 2. The basecoat and clearcoat portion of EUWETCOAT and EUCLEANUP/PURGE are controlled by RTO No. 1. EUWETCOAT and EUCLEANUP/PURGE are subject to CAM. The two control systems subject to CAM regulations are Regenerative Thermal Oxidizer (RTO) No. 1 and No. 2 and associated capture system.

The CAM Plan is a plan that is put in place to ensure that the control equipment is operating properly and within specifications.

I. EMISSION LIMIT(S) - NA

II. MATERIAL LIMIT(S) - NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. An excursion will occur if:
 - a. The temperature of the combustion chamber of either RTO No. 1 or RTO No. 2 is less than 1400° F during process operation.
 - b. The capture systems for either RTO No. 1 or RTO No. 2 are not operating under a negative operating pressure.

Compliance with conditions III.1a-b will be determined later in this section. This section simply defines an excursion.

2. Upon detecting an excursion or exceedance, the permittee shall restore operation of FGCAMPLAN to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

This is being done as required.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. RTO No. 1 and RTO No. 2 shall be equipped with a thermocouple in the combustion chamber to monitor operating temperature of the unit.

The RTO's are equipped with a thermocouple as required.

2. RTO No. 1 and RTO No. 2 shall be equipped with an instantaneous LCD temperature monitor.

The RTO's are equipped with an instantaneous LCD Temperature monitor as required.

3. RTO No. 1 and RTO No. 2 shall be equipped with a continuous chart recorder that records the temperature of the combustion chamber.

The RTO's are equipped with a continuous chart recorder as required.

V. TESTING/SAMPLING - NA

VI. MONITORING/RECORDKEEPING**A. CAPTURE SYSTEMS**

1. The permittee shall monitor and record, at least twice per operating shift, in a satisfactory manner, the air current direction, using smoke tubes, at the entrance and exit to the capture systems (e.g. entrance and exit to the primecoat booth and entrance to the base booth and exit of the clear booth).
2. The permittee shall conduct monitoring and fulfill the other applicable obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
3. On a monthly or more frequent basis, the permittee shall conduct and document an inspection of valves, piping, control valves, motors, and linkages in each capture system for signs of leaks, deterioration, or damage.
4. On a monthly or more frequent basis, the permittee shall conduct and document an inspection and lubrication of the damper and fan bearings in each capture system.

B. RTO No. 1 and RTO No. 2

1. The permittee shall conduct monitoring and fulfill the other applicable obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
2. On a once per shift, or more frequent basis, the temperature on the LCD temperature monitor associated with RTO No. 1 and RTO No. 2 shall be recorded and compared to the temperature on the continuous chart recorder.
3. On a weekly basis or more frequently, the permittee shall review the temperature printed on the continuous chart recordings for RTO No. 1 and RTO No. 2.
4. On a semiannual basis, or more frequently, the permittee shall conduct an external inspection of RTO No. 1 and RTO No. 2 to determine structural integrity and document the findings.
5. On an annual basis, or more frequently, the permittee shall conduct and document the following for RTO No. 1 and RTO No. 2 to verify proper operation:
 - a. An internal inspection (including the burner) to determine structural integrity.
 - b. An internal inspection to determine the operational condition of all interlocks, including oven flow damper and control device bypass damper and the integrity of the exhaust system (including dryer fan) from the process to the control devices.
 - c. An internal inspection to verify calibration of the combustion chamber thermocouple.
 - d. An internal inspection of all valves for leakage and/or damage.

For conditions VI.A.1 – 4 and conditions VI.B.1-5d that facility keeps very specific written records of all inspections and maintenance activities. Inspections are completed in a timely manner and follow the requirements listed above along with many additional items. There are some examples of these inspection reports attached to this report.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.
4. Each semiannual report of monitoring and deviations shall include the following:

- a. Summary information on the number, duration and cause of excursions/exceedances and the corrective actions taken. If there were no excursions/exceedances in the reporting period, then this report shall include a statement that there were no excursions/exceedances.
- b. Summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime.

The reports required by conditions VII.1. – VII.4b have been completed and submitted accurately and in a timely manner as required.

VIII. STACK/VENT RESTRICTION(S) - NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall notify the AQD of the need to modify the monitoring plan if the approved monitoring is found to be inadequate and shall submit a proposed modification to the plan if appropriate.

No changes have been made.

- 2. The permittee shall, at all times, maintain the monitoring system, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

This is being done as required.

- 3. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating.

Based on observations made at the time of the inspection and conversations with facility personnel, this is being done as required.

- 4. The permittee shall comply with all applicable requirements of 40 CFR Part 64.

This appears to be being done as required.

FGRULE287(c)

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).

At the time of the inspection there were no Rule 287c emission units in operation.

I. EMISSION LIMIT(S) - NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Underlying Applicable Requirement
1. Coatings	200 gallons	Per month, as applied, minus water, per emission unit	NA	R 336.1287(c)(i)

III. PROCESS/OPERATIONAL RESTRICTION(S) - NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Any exhaust system that serves only coating spray equipment shall be equipped with a properly installed and operating particulate control system.

V. TESTING/SAMPLING - NA

VI. MONITORING/RECORDKEEPING

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 287(c), Permit to Install Exemption Record form (EQP 3562) or an alternative format that is approved by the AQD District Supervisor.
 - a. Volume of coating used, as applied, minus water, in gallons.
 - b. Documentation of any filter replacements for exhaust systems serving coating spray equipment.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.

VIII. STACK/VENT RESTRICTION(S) - NA

IX. OTHER REQUIREMENT(S) - NA

FGRULE290

This flexible group contains any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

At the time of the inspection there were no Rule 290 emission units in operation.

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively.
2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met:
 - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively.
 - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively.
 - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively.

- d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter.
3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met:
- a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute.
 - b. The visible emissions from the emission unit are not more than five percent opacity in accordance with the methods contained in Rule 303.
 - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter.

II. MATERIAL LIMIT(S) - NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290.

IV. DESIGN/EQUIPMENT PARAMETER(S) - NA

V. TESTING/SAMPLING - NA

VI. MONITORING/RECORDKEEPING

- 1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor.
 - a. Records identifying each air contaminant that is emitted.
 - b. Records identifying if each air contaminant is controlled or uncontrolled.
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic.
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii).
 - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290.
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information.
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit.
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate.
- 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290 (a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation.

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.

VIII. STACK/VENT RESTRICTION(S) - NA

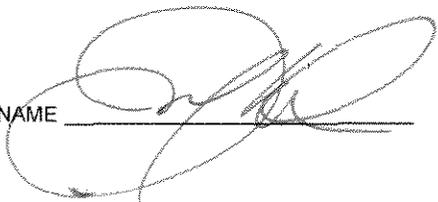
IX. OTHER REQUIREMENT(S) - NA

FGCOLDCLEANERS

This emission unit contains any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

There is one parts washer in the maintenance shop at the facility. The parts washer is in compliance with the conditions in this permit. Specific conditions are not detailed in this report.

Based on the information observed during the inspection and the records reviewed thereafter, Magna is currently in compliance with all applicable Air Quality Rules and Regulations as well as the conditions contained in ROP No. MI-ROP-N5056-2006a.

NAME 

DATE 12-18-14 SUPERVISOR PAB