

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

B585435077

FACILITY: Romeo RIM, Inc.		SRN / ID: B5854
LOCATION: 74000 Van Dyke Avenue, ROMEO		DISTRICT: Southeast Michigan
CITY: ROMEO		COUNTY: MACOMB
CONTACT: Wade Spurlin, Environmental Coordinator		ACTIVITY DATE: 06/16/2016
STAFF: Sebastian Kallumkal	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Onsite Inspection		
RESOLVED COMPLAINTS:		

On Thursday, June 16, 2016 at about 10:45 AM, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) staff Sebastian Kallumkal conducted an annual targeted inspection at Romeo RIM, Inc. located at 74000 Van Dyke Avenue, Romeo, Michigan. The purpose of the inspection was to verify facility's compliance with requirements of Article II, Air Pollution Control, Part 55 of Act 451 of 1994 and the Renewable Operating Permit (ROP) No.: MI-ROP-B5854-2015. Recently facility had applied for a PTI and Construction waiver for the installation of a Rotary Carrier In-Mold Paint Long Fiber Technology Process (Rotary Carrier System). A signed copy of the Construction Waiver was received by AQD on June 24, 2016. The PTI application is under technical review.

The facility produces reaction injection molded (RIM) plastic parts for trucks and fleet type vehicles (bumpers), and some John Deere products. Various sized "clamps" are used to mold these plastic parts. The primary parts produced are engine covers, bumpers and storage pallets. Some parts are coated by in-mold painting (IMP) while some other parts are coated after being molded and using spray guns in paint booths. Plastics processed are polyurethane and dicyclopentadiene (DCPD). When DCPD is used no mold release agent or IMP is used. When polyurethane is processed mold release agents are used and IMP may be used. Facility's processes are subject to Rule 632 for coating of plastic parts.

The facility has two plants. Plant No. 1 has 9 RIM booths, and two paint spray booths. All the sunshade/moon roof manufacturing and assembly processes have been dismantled except for on clamp. The new High Gloss In-Mold Paint Long Fiber Injection (HGIMP-LFI) process a.k.a. Shuttle Clamp Process is performed in a new building adjacent to Plant 1. The Plant 2 has one paint spray booth and 4 RIM booths including RIM 45. AQD has not received any odor complaints against the facility for the last few years.

Facility's coating operations are also subject to 40 CFR 63, Subpart PPPP-NESHAP for Surface Coating of Plastic Parts and Products.

At the facility I met Mr. Wade Spurlin, Environmental & Safety Coordinator and Mr. Paul Barick, Director of Quality, Environmental Management & Safety. I introduced myself and stated the purpose of the inspection. The facility has made a new office space. They told me that the new office space is located where the booths 3 to 6 were located previously. Mr. Barick left us shortly.

I provided Wade the DEQ Environmental Inspections: Rights and Responsibilities Brochure. During the pre-inspection meeting, we discussed the facility's operations and changes including the removal of and Paint Coating Line 3 (EU-PLT1-LINE3), Paint Coating Line 4 (EU-PLT1-LINE4), Paint Coating Line 5 (EU-PLT1-LINE5), Paint Coating Line 6 (EU-PLT1-LINE6) and the batch oven. Carbon Adsorption Unit CA NO.1 which controlled emissions from Line 3 and Line 4 was also dismantled. The carbon is saved as backup for other carbon adsorption units in Plant 2. The facility has also dismantled and removed Clamp No. 3 (EU-PLT1-IMP3-Tyler Press), and Clamp No. 6 (EU-PLT1-IMP6-Amesbury). The staining process which was done in Plant 1 Line 6 has been moved to a stand-alone self-containing booth near the LFI (3, 4, & 5) units. The staining is performed on coated rough looking plastic parts which are used as spa liners. The air inside the booth is recirculated. The facility is also dismantling the mold splitter which was recently installed.

He informed me that the facility uses regularly about 20 coatings. They are keeping records of the

Method 24 analysis for VOC content of the coatings. In order to make the tracking of acetone usage easier in Plant 1, the plant 1 booths, LFIs and the shuttle clamps has dedicated separate acetone drums. The material handler logs the usage and physically measures using sticks on monthly basis. Same method is used for Plant 2 emission units (3 emission units and 3 acetone drums. The IPA and mineral spirits are also tracked similarly.

The electronic Work Center has all the product information (by serial numbers) for each coating mix. The coatings and catalysts are automatically pumped based on the mix ratio input into the system. The VOC and HAP calculated based on the information input into the system based on the serial number.

I advised Wade that updating the current ROP after the new PTI is issued to incorporate all the changes at the facility may be a good idea to have the ROP matches the facility's operations. He agreed to look into it. The facility operates 7 days, mostly two shifts and employs about 150 people.

INSPECTION:

After the pre-inspection meeting, he accompanied me for an inspection of the facility. Initially I inspected paint booths 1 & 2. No painting was done in these booths at the time of the inspection. The booth filters appeared to in place. Mr. Spurlin told me that the first stage filters are replaced on a daily basis and the second stage filters are replaced on a weekly basis. The samples were not collected for analysis at the time of the inspection.

Next, I inspected the RIMs in the Plant 1. The RIMs were not being operated due to lunch break.

Emission Unit ID	Emission Unit Description	Filter Conditions	Comments
EU-PLT2-LINE1	Plant 2, Paint Line 1	Volvo Paint. Good & In-Place	Operating
EU-PLT2-RIM45	Plant 2- RIM 45 (11x14)	Good & in-Place	Not Operating
EU-PLT1-IMP2	Plant 1 - Clamp No.2 (Cinci-1)	Good & in-Place	Not Operating
EU-PLT1-IMP5	Plant 1 - Clamp No. 5 (Ford 90)	Good & in-Place	Not Operating
EU-PLT1-IMP6	Plant 1 - Clamp No. 6 (Amesbury)	Clamp Dismantled	NA
EU-PLT1-IMP12	Plant 1 - Clamp No. 12 (LFI-3)	Good & in-Place	Not Operating
EU-PLT1-IMP24	Plant 1 - Clamp No. 24 (LFI-5)	Good & in-Place	Not Operating
EU-PLT1-IMP26	Plant 1 - Clamp No. 26 (LFI-1)	Good & in-Place	Not Operating
EU-PLT1-IMP28	Plant 1 - Clamp No. 28 (LFI-2)	Good & in-Place	Not Operating
EU-PLT1-IMP29	Plant 1 - Clamp No. 29 (LFI-4)	Good & in-Place	Not Operating
EU-PLT1-IMP50	Plant 1 - Clamp No. 50 (Cinci-2)	Good & in-Place	Not Operating
EU-PLT1-LINE1	Plant 1, Paint Line 1- Includes spray booth #1	Good & in-Place Stage 1 replaced daily	Not Operating
EU-PLT1-LINE2	Plant 1, Paint Line 2- Includes spray booth #2	Good & in-Place Stage 1 replaced daily	Not operating
EU-PLT1-LINE3	Plant 1, Paint Line 3	Dismantled	NA
EU-PLT1-LINE4	Plant 1, Paint Line 4	Dismantled	NA
EU-PLT1-LINE5	Plant 1, Paint Line 5	Dismantled	NA
EU-PLT1-LINE6	Plant 1, Paint Line 6	Dismantled	NA

EU-PLT2-RIM42	Plant 2-RIM 42 (5x7)-A	Good & in-Place	Running DCPD. Carbon adsorber running. Not operating at the time of the inspection.
EU-PLT2-RIM43	Plant 2- RIM 43 (11x6)-A	Good & in-Place	Running DCPD. Carbon adsorber running. Not operating at the time of the inspection.
EU-PLT2-RIM44	Plant 2- RIM 44 (10x12)	Good & in-Place VOC IN = 62.8 ppm VOC OUT =15.3 ppm dP = 0.8 "WC	Running DCPD. Carbon adsorber running
EUCLAMPBOOTH1	Paint/catalyst mixture and barrier coat will be applied to a mold inside this booth. .	Good & in-Place	Not Operating
EUCLAMPBOOTH2	Paint/catalyst mixture and barrier coat will be applied to a mold inside this booth. .	Good & in-Place	Not Operating
EUSPACOATING	Manually applied (sprayed) coating to spas (molded parts).	Stain applied manually (wiping)	Molded parts from LFT3, LFT4 & LFT5

I also inspected the staining area. The stain is water based coating which is applied to plastic parts after in-mold painting.

Next I inspected the shuttle clamp process. This process is also called "double shuttle" process which means that two part can be manufactured during each cycle. The process has one top clamp (fixed in the middle room) and two bottom clamps located inside each of the two spray booths. Initially mold release is manually sprayed to the mold. Next, paint mixed with catalyst is applied to the interior of the mold using robotic HVLP applicators. The mold is moved to the top clamp where the two part resin mixture mixed with long fibers is injected into the mold. The injection of the two part resin and fiber is called a "shot". After this, mold is opened, and moved back to the booth where the part is removed, undergo finishing operations such as sanding, trimming, drilling, etc. The process was not in operation at the time of the inspection.

Next I inspected Plant 2. The RIM 42 (Clamp 5x7) was used on that day even though it was not used during the inspection, RIM 43 (clamp 11x6), RIM 44 (10 x12) and RIM45 (11x14) was also running at the time of the inspection. The filters appeared to be in good shape and in place. DCPD was running in RIM 42, RIM 43 and RIM 44. The clamp emissions were diverted to carbon adsorption units.

I also inspected EU-PLT2-LINE1. Only Volvo parts are coated in this booth. The booth was not being used at the time of the inspection. The operator told me that the filters in both stages are changed on a weekly basis.

I inspected carbon adsorption unit CA No. 2 which controls the exhausts from RIM 42 and 43. Wade told me that CA No. 2 is being used at the time because DCPD is used. However at the time of Inspection the clamps were not used because of mechanical issues. The vent switches showed that the exhaust is vented to the adsorption unit. He monitors the VOC readings every day they run DCPD. He provided me that reading he took in the morning. CA No. 3 which controls emissions from RIM 44 was located in an elevated platform, so I could not inspect it. He told me that VOC emissions are monitored using the portable analyzer as required.

During the post inspection meeting, we discussed the records for the facility. All records are kept electronically. Facility keeps check lists for filter conditions for each clamp. The electronic records were received the next week in a flash drive. Discussions of the requirements are given below under each emission group and flexible group.

Compliance Evaluation:

EU-PLT2-LINE1:

Plant No. 2 Spray Coating Line 1 consisting of one paint spray booth, one flash-off area, one bake oven, and parts-wiping (done prior to coating). This line was using acetone for purge and had post-mold paint storage and mixing room. The exhaust filters control particulate matter emissions from the booth.

Wade told us that the booth is used more frequently than before. The booth was not being used at the time of the inspection. The filters were in place and in good condition.

Volatile Organic Compounds (VOC) emission rates:

The facility keeps monthly records of type of coating, coating usage, VOC content in pounds per gallon of coating (minus water), as applied, hours of operation, VOC emissions per hour, month and annual, etc. The 12-month records from May 2015- April 2016, show that the hourly VOC emission rates were below 6.0 lb/hr (permit limit) and were in compliance. The highest hourly emission rate was 0.71 lb which occurred in April 2016.

The total annual VOC emission rate was 0.30 tons per year (tpy) which in compliance with 18.7 tpy (permit limit).

The records show that the VOC content of the coating was in compliance with the ROP limit 3.9 lb VOC/gal of coating-water. The facility only coats same type of parts (Volvo parts) in this booth and uses the same coatings (T01610001XXA-Polane P, Conductive Primer, Black, E67BC1704, Volvo and T01620001XXX-Solvent Blend-Compliance Thinner, Reducer). The VOC content of the mix is set to 3.51 pounds per gallons (minus water).

Acetone: The records show that the hourly acetone emissions from the line purge process were 0.22 lb/hr and are below the permit limit of 0.6 lb/hr during May 2015 to April 2016. Highest Acetone lb/hr = 0.45 lb/hr in August 2015.

The records show that the 12-month rolling time period acetone emissions from Line Purging Process during May 2015 to April 2016 were 0.1 tpy which is in compliance with the permit limit (1.7 tpy).

Monitoring & Recordkeeping:

The exhaust filters are installed in the booth properly. The facility is using HVLP or equivalent spray guns to apply coatings. The Facility is keeping adequate monthly records for each coating sprayed, the total hours of operation, the parts-wipe process, the monthly VOC emission calculations, acetone used and reclaimed, and acetone emission rates. He informed me that the facility is keeping a current listing of the chemical composition of each coating used. Facility is currently using the information from Material Safety Data Sheet and other manufacturer's information to calculate VOC emissions.

The facility appears to be replacing the exhaust filters according to the schedule specified in Appendix 3.1. The booth filters were in good condition and in place during my inspection. The records regarding monitoring of the filter conditions as specified in Appendix 4 was provided.

During the inspection, I observed drums of solvent and wipe-rage waste kept at the facility. They were all covered.

EU-PLT2-RIM45

This emission unit is a 600 ton (11x14) Pacific Reaction Injection Molding (RIM) press which processes polyurethane-containing materials. When polyurethane materials are processed, mold release agents are used and in-mold painting (IMP) may also be used. The equipment includes vent hood enclosure with two banks of particulate filters (in series) for exhaust gases. HVLP applicators are used for the application of the in-mold painting. Acetone is used for purge and cleanup activities. At the time of my inspection, RIM 45 was in operation. DCPD is not permitted to be used in this RIM.

The combined VOC and acetone emissions are limited to 32.4 tpy calculated based on 12-month rolling time period as determined at the end of each calendar month. The submitted records show that VOC and acetone emissions are 2.4 tons as of April 2016.

The acetone emissions from purge and cleanup process) are limited to 2.4 tpy calculated based on 12-month rolling time period as determined at the end of each calendar month. The submitted records show that acetone emissions from the purge and cleanup processes are 0.09 TPY as April 2016.

Hydrocarbon naphtha (CAS No. 64742-47-8) emissions are limited to 38.4 pounds per day calculated on a calendar day basis. Facility is not using Hydrocarbon Naphtha in their process.

The VOC content of the in-mold paint is limited to 5.1 pound/gallon (minus water), as applied, on an instantaneous basis. The records show that the VOC content of the coatings, as applied, is less than 5.1 lb/gallon (minus water).

Mr. Spurlin informed me that they are not using DCPD in the RIM 45 process. They are collecting the waste materials and spent filters and disposing these properly. I observed that VOC and HAP containing materials, including coatings, reducers, mold release agents, solvents and thinners are collected and stored in closed containers.

I observed that the exhaust filters in the RIM 45 is properly placed and not excessively dirty. Facility is using HVLP equivalent applicators for the coating. They are using manufacturers' data sheet and analysis for calculating VOC content of the coatings.

Facility is keeping a listing of the chemical composition of the chemicals used in RIM 45. Facility is keeping records of gallons of VOC containing materials, VOC content, and aggregate monthly and annual VOC emissions.

They are using acetone in the purge/cleanup in the process. The stack dimensions were not verified.

This process is subject to Miscellaneous Plastic Parts Coating MACT (40 CFR 63, Subpart PPPP). This emission unit is subject to emission standards for new sources.

FG-PLT1-RIM-IMP:

This flexible group includes the Plant 1, Reaction Injection Molding processes with mold release and In-Mold Painting (Clamp No. 2, 5, 6, 12, 24, 26, 28, 29 and 50) with seven paint and mold release mix rooms and a storage room. Clamp #6 aka amesbury (EU-PLT1-IMP6) has been dismantled.

The clamps were not being used at the time of inspection due to work break time. I observed that the clamps are equipped with booth exhaust filters. They were not excessively dirty and were not out of place.

Volatile Organic Compounds:

The emission rate is limited to 42.25 lb/hr and 69.06 tpy based on a 12-month rolling time period

determined at the end of each calendar month. From the submitted records, the highest hourly emission rate (lb/hr) is 14.28 (April 2016) and annual emissions were 29.64 tons. The facility is in compliance with these limits. The records show that the VOC contents of the coatings (lb VOC/gal coating-water) are in compliance with Rule 632(20), Table 66 limits.

Monitoring & Recordkeeping:

Exhaust filters were installed in the RIM booths. Facility is keeping adequate records of material usage, chemical composition and VOC calculations. Facility is keeping number of hours of operation on a monthly basis and is calculating average hourly VOC emission rate based on the total monthly hours of operation. The facility is calculating VOC emission rates on a monthly and yearly basis.

The facility appears to be replacing the exhaust filters according to the schedule specified in Appendix 3.1. The RIM exhaust filters were in good condition and in place during my inspection. The records regarding monitoring of the filter conditions as specified in Appendix 4 was provided.

Testing/Recordkeeping: Facility's coating supplier is conducting random testing of non-water borne (solvent) coatings, as applied, for the VOC content, solid and density. Facility is allowed to use these results to show compliance with testing/sampling requirements.

FG-PLT1-SCL1256 and SCL34:

Plant No. 1: Post-Applied Paint. Plastic parts coating operations currently consists of two coating lines (Lines 1 and 2), 1 bake curing oven and parts wiping prior to coating. These booths have two stage exhaust filters for particulate control. The carbon adsorption system which controlled VOC emissions from booths 3 & 4 was removed. The flexible group also consists of post mold paint storage and mixing room. See discussion above.

Volatile Organic Compounds (VOC) and Acetone (from paints):

The total combined VOC and Acetone emission rate from this flexible group is limited to 31.7 tons based on a 12-month rolling time period as determined at the end of each calendar month. The records show that the annual combined VOC and Acetone emission rate is 7.83 tons as of April 2016. Annual combined VOC and Acetone emissions were 10.66 TPY as of April 2016.

The records show that VOC content of the coatings is below the limit specified in Rule 632, Table 66 (Base, Red/black/other, high bake) for January 2015 through April 2016, except for February 27, 2015 when the actual VOC content less exempt solvent was 5.60 and allowed was 5.45 (lb/gal-water). The coatings were in compliance with the limit afterwards. Mr. Spurlin was informed of this deviation. On July 25, 2016, he explained that he verified that the MAK usage of 3.9 gal on February 27, 2015 was indeed a data entry error. The correct amount was 0.96 gal. He corrected the data and recalculated the lbs VOC/gal and this paint/solvent combination is compliant. He emailed the corrected data. (See emails dated 7/15/2016 and 7/25/2016).

VOC and Acetone (Clean up & Purge only):

The total combined VOC and Acetone emission rate from the clean up and purge solvent usage generated from this flexible group is limited to 8.3 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. The records show the calculated emission rate is 0.44 tons for May 2015 through April 2016. The records show that the recovery rate is about 90% of the purge solvents.

Monitoring & Recordkeeping:

Facility is keeping adequate records of coating identification, gallons of coating materials used, monthly &

12-month rolling VOC and Acetone emission rates for all coating lines combined, hours of operation, and VOC emission limit calculations pursuant to Rule 632. Mr. Wade informed me that the facility use mostly solvent based coatings. But they calculate with and without water VOC calculations, when applicable.

The facility is keeping adequate records for the purge and clean up solvents. The facility is maintaining a list of material safety data sheets for the materials used in coating. Facility has not analyzed the VOC content of the materials. The information is provided to the facility by the supplier.

The facility is required to keep records of the condition of the exhaust filters in the booths on a daily basis using an approved format in Appendix 4. Facility is keeping electronic records for each regarding the condition, stage 1 and Stage 2 filter replacements, etc. Electronic records were provided.

They informed us that the facility is replacing the booth exhaust filters as outlined in Appendix 3.1. Facility had developed and implemented the periodic monitoring program for each carbon adsorption system. However Plant 1 Carbon system was not used for many years and thus the carbon has not been replaced for long time. Currently the carbon system has been dismantled. The attached records show filter change for paint booth.

Testing/Recordkeeping: Facility's coating supplier is conducting random testing of non-water borne (solvent) coatings, as applied, for the VOC content, solid and density. Facility is allowed to use these results to show compliance with testing/sampling requirements. Records of the coating analyses and list of coating analyzed were provided.

During the inspection, I observed drums of solvent and wipe-rage waste kept at the facility. They were all covered.

FG-RIMPROCESS:

Located in Plant 2-three reaction injection molding (RIM) presses 100 ton (clamp 5x7, RIM42), 120 ton (clamp 11x6, RIM43) , and 300 tons (Clamp 10x12, RIM44) which process dicyclopentadiene (DCPD) and polyurethane containing materials. When DCPD containing materials are processed, no mold release agent and in-mold coating (IMP) are used. When polyurethane containing materials are processed, mold release agents are used and in-mold coatings may also be used. When DCPD containing materials are processed, the VOC emissions are controlled by carbon adsorption systems which include two banks of particulate filters (in series) followed by two banks of carbon filter banks (in series). Electrostatic applicators are used for the application of the in-mold coatings. Acetone and/or VOC containing solvents are used for purge and cleanup (EU-CLEANUP). No acetone/VOC purge and cleanup activities take place within the three press enclosures. Carbon adsorber No.2 (CA No.2) controls exhaust from EU-PLT2-RIM42 and EU-PLT2-RIM43. Carbon adsorber No.3 (CA No.3) controls exhaust from EU-PLT2-RIM44.

During the inspection, the Plant 2 RIMs were in operation, and DCPD was used. So the exhaust was vented to CA No. 2 and CA No. 3. The CA No. 3 was raised from the ground and was not easily accessible for inspection. The CA system No. 2 and CA No.3 are equipped with pressure drop measuring gauges. Mr. Spurlin told me that they perform VOC measurement using the portable analyzer every time they run DCPD and measured earlier. He provided me the readings.

The records show that the DCPD usage is less than 1770 lb/hr (the highest usage was 369.16 in November 2015. I observed that the exhaust filters installed and maintained properly.

Volatile Organic Compounds (VOC)

The VOC emissions from each RIM process EU-PLT2-RIM42 and EU-PLT2-RIM 43 is limited to 15 TPY based upon a 12-month rolling period as determined at the end of each calendar month. VOC emission from RIM 42 and RIM 43 were 0.85 TPY and 1.60 TPY respectively as of April 2016. VOC emissions from RIM 44 were 0.18 TPY as of April 2016 which is in compliance with the limit of 20 TPY.

The VOC content of the coating is limited to 4.80 lb/gal (minus water), as applied, in RIM 42, RIM 43, and RIM 44. The records show the facility was in compliance with this limit.

The combined VOC emissions from FG-RIMPROCESS including purge and cleanup solvent were 4.44 tpy, as of April 2016, which is in compliance with the VOC limit of 37.3 TPY based on a 12-month rolling time period as determined at the end of each calendar month.

VOC/Acetone emissions from EU-CLEANUP were 0.35 TPY as of April 2016, which is in compliance with the limit of 7.0 tpy based on 12-month rolling time period as determined at the end of each calendar month.

Process and Operational Restrictions:

The Two carbon systems for RIM42, RIM 43 and RIM44 are installed. The CA systems are equipped with pressure differential monitors. The RIM clamps are properly equipped with exhaust filters.

Testing, Monitoring & Recordkeeping:

Facility is keeping a current listing of chemicals used as required by the ROP. Facility is keeping records for the chemical identification, VOC content, usage, mixing ratio, VOC emissions calculations on a monthly basis, for the coating, cleanup and purge solvents. Facility has not analyzed the VOC content of the materials; however, the information is provided to the facility by the supplier.

The facility is calculating and keeping records of the DCPD containing materials processed in the RIMs, on an hourly basis and number of monthly hours when DCPD is used in FG-RIMPROCESS. The records show that the facility is keeping DCPD usage for the whole month as the usage for the last day of the month. The facility is requested to keep records of the days DCPD is used in each RIM, so VOC monitoring can be tracked. In an email dated 7/15/2016, facility provided daily DCPD usage records.

The facility is keeping all records of required data and completing all required calculations for the RIM process as required in the ROP.

Mr. Spurlin informed me that the facility is monitoring each carbon adsorption system as outlined in Appendix 5B. He told me that they did not experience any carbon breakthrough in either of their carbon systems during the last two years.

The facility is monitoring and keeping pressure drop data and other parameters for CA No. 2 system and for CA No. 3 system. The Carbon filters in both booths were replaced in February 27 and July 30 of 2015 and February 8, 2016.

The RIM Booth exhaust filters appears to be replaced as outlined in Appendix 3.2. The filters appeared to be in good condition and in place. The facility is keeping records of the condition of the RIM booth exhaust filters on a daily basis as outlined in Appendix 4.

FG-SHUTTLECLAMP

The operations started on October 13, 2011. This flexible group includes Reaction Injection Molding and In-Mold paint operations associated with the shuttle clamp process. The included emission units are EUMOLDRELEASE, EUCLAMPBOOTH1, EUCLAMPBOOTH2, EURESIN, EUPAINTKITCHEN, EUFINISHING, EUPARTSWIPE, and EULINECLEANING. The High Gloss In-Mold Paint Long Fiber Injection Process (HGIMP LFI process) is a reaction injection molding (RIM) process similar to other RIM processes at the facility; however, in this process long glass fibers are injected into the molds with resin in order to add strength to the plastic. This process makes coated plastic parts for agricultural or transportation equipment.

Condition I.1 limits the VOC emission rates to 40 TPY based on a 12-month rolling time period as determined at the end of each calendar month. The submitted records show that the VOC emissions were 8.04 TPY as of April 2016.

Condition II.1 limits the instantaneous VOC content of the coating, as applied, to 4.5 lb/gal (minus water). The records show that the Actual VOC less exempt solvents is 4.11 lb/gal.

Condition II.2 limits the VOC from Barrier Coat to 1,111 lb/day and VOC from LFI Resin to 2933 lb/day. The records show that the facility is in compliance with these limits.

Condition III.1- During inspection I observed that all bay doors were closed.

Condition III.2 & 5-The facility collects and stores all waste materials and wiping clothes in closed containers.

Condition III.3-Mr. Spurlin told me that they are disposing the spent exhaust filters properly.

Condition III.4-The paint booths are kept closed during operation minimizing the fugitive emissions. The coating drums and other solvent containers were kept closed.

Condition IV.1 & 2- Mr. Spurlin informed me that the booths are equipped with exhaust filters and facility is using automatic or equivalent HVLP applicators. I observed that the filters are in good condition and in place.

Condition V.1- Facility is using US EPA Method 24 data provided by the supplier.

Condition V.2- Facility performed USEPA Method 24 on the LFI resin and Barrier Coat separately. AQD received the test results on January 18, 2012.

Section VI-Monitoring/Recordkeeping

Condition VI.1- Facility performs all the required calculations in acceptable format and appears to complete the calculations within the specified time.

Condition VI.2- Facility is keeping a current listing from the manufacturer of the chemical composition of each material.

Condition VI.3 – The facility is keeping records, on a monthly basis, of gallons of each material used, VOC content (minus water and with water), VOC mass emission calculations (monthly and annually).

Condition VI.4-Permittee keeps records of Barrier Coat and LFI Resin used on a monthly basis. Based on the submitted records, the facility does not appear to be keeping daily records of Barrier Coat and LFI Resin. The calculated VOC emissions from the barrier coat and LFI Resin are below 4 pounds each per month. These emissions are below daily limits for Barrier Coat (1,111 lb/day) and LFI Resin (2933 lb/day). Therefore a violation notice won't be sent.

Condition VIII.1 & 2 – The stack heights were not verified, but appear to be in compliance with the permit requirements.

Condition IX- This process is subject to Miscellaneous Plastic Parts Coating MACT (40 CFR 63, Subpart PPPP). This emission unit is subject to emission standards for new sources.

FG-RULE287(c)

This flexible group includes EUSPACOATING and EUSUNSHADES. Facility has dismantled EUSUNSHADES. The staining process (EUSPACOATING) which was done in Plant 1 Line 6 has been moved to a stand-alone self-containing booth near the LFI (3, 4, & 5) units. The staining is performed on coated rough looking plastic parts which are used as spa liners. The air inside the booth is recirculated. The records show that the facility used less than 100 gallons of coating per month in 2015 and 2016.

FG-MACT-SUBPART_PPPP: Facility's coating operations are subject to 40 CFR 63, Subpart PPPP- National Emission Standards for Surface Coating for Plastic Parts and Products. This NESHAP was

promulgated on April 19, 2004. The compliance date was April 19, 2007. The compliance period is 12 months from May 1, 2007 (since the promulgation date was not on the first of the month). The processes in FG-MACT are classified as existing sources.

The HAP emission limits for existing and new sources-General Use coating are the same (0.16 lb per lb of coating solids).

The facility provided emission calculations (lb HAP/lb coating solids) in the 2015 Annual Certification Report (January-December, 2015). The reports show that the each coating line is in compliance with the emission limit. The Plant 1 Booth has the highest emissions (0.14 lb HAP/lb Coating Solids) based on a 12-month rolling time period.

FG-COLDCLEANERS:

This flexible group includes two cold cleaners: EU-PLT1PAINTWASH located in Plant 1 and EU-PLT2MAINTWASH located in Plant 2. Both cold cleaners use acetone as the cleaning solution. The spent solvent is hauled off site as manifested waste. I inspected the EU-PLT1PAINTWASH and the cover was kept closed at the time of the inspection.

The electronic CD of the monitoring records and emissions calculations and hard copies of the 2015 and 2016 (April) reports are attached for review.

Conclusion: Based on the inspection and records review, the facility appears to be in compliance with the applicable requirements.

NAME Sebastian Kallunkal

DATE 7/25/2016

SUPERVISOR

CJE