

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

P037444605

FACILITY: PLASAN CARBON COMPOSITES	SRN / ID: P0374
LOCATION: 3195 WILSON DRIVE, WALKER	DISTRICT: Grand Rapids
CITY: WALKER	COUNTY: KENT
CONTACT: Brenda Wisniewski , Environmental Health and Safety Specialist	ACTIVITY DATE: 05/23/2018
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance
	SOURCE CLASS: MAJOR
SUBJECT: The purpose of this inspection was to determine compliance with MI-ROP-P0374-2017, consent order AQD15-2016, and all other applicable air quality rules and regulations.	
RESOLVED COMPLAINTS:	

On Wednesday May 23, 2018 AQD Staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of Plasan Carbon Composites and Plasan North America (combined – Plasan) located at 3195 and 3236 Wilson Drive and 3111 N. Wilson Court Walker, Michigan. The purpose of this inspection was to determine compliance with MI-ROP-P0374-2017, consent order AQD15-2016, and all other applicable air quality rules and regulations.

KD arrived at the facility at approximately 9:30 am. Prior to entry, KD observed the perimeter of the facility for any odors, fugitive emissions, or opacity. None were noted. KD met with Ms. Brenda Wisniewski, EHS Manager, and Mr. Wayne DeGroot Paint Manager, whom accompanied KD on much of the tour of Plasan Carbon Composites, and Ms. Amy Uppleger, who accompanied KD on the tour of Plasan North America.

Facility Description

Plasan Carbon Composites (PCC) is a manufacturer of high-end carbon composite automotive parts, primarily hood and roofs. The parts are manufactured by heat molding carbon composite into the desired shape and then finished via sanding, bonding, and coating. The thermoforming of the carbon composite sheets takes place in plant 1 (3195 Wilson Dr) along with the primary coating line (EUPAINTLINE-1). EUPAINTLINE-2 is housed in plant 2 (3236 Wilson Drive Suite A).

Plasan North America (PNA) designs and manufactures a broad range of composite products for military and industrial applications.

PCC and PNA are considered to be one stationary source (Plasan) and are subject to the Title V program, which is discussed below, in the regulatory analysis section of this report. Please note, that this report is separated into two (2) sections, PCC and PNA. Compliance, however, will be determined by evaluating both sections as one.

Regulatory Analysis

Plasan is currently subject to the Title V program and holds MI-ROP-P0374-2017. Plasan is also subject to 40 CFR Part 63 Subpart PPPP (4P) for surface coating of plastic parts and products due to EPA's "once in always in" policy and the exceedance of the major source threshold for Hazardous Air Pollutants (HAP's) in 2015. Due to the exceedance, Plasan is subject to AQD consent order AQD 15-2016. The consent order requirements have been incorporated into the ROP.

Plasan is also subject to 40 CFR Part 63 Subpart ZZZZ for stationary reciprocating internal combustion engines and 40 CFR Part 60 Subpart JJJJ for Stationary spark ignition internal combustion engines. Details of these Federal regulations will be discussed below in the compliance evaluation section of this report.

Compliance Evaluation

Section 1: Plasan Carbon Composites

A previously mentioned, KD met with Ms. Brenda Wisniewski, EHS Manager, and Mr. Wayne DeGroot, Paint Manager. Previously, PCC has operated 6, sometimes 7 days per week, and operates 24 hours per day, but has more recently only been operating 1-2 shifts per day, and only operates EU-PAINTLINE-1 for a couple of hours into the second shift. EU-PAINTLINE-2 has not been running since March. Prior to the inspection, KD discussed the current PTI application that is currently with AQD's permit section. The current application is

requesting to remove the 4P requirements and void the ROP after Opt-out limits are taken, amongst other requests. KD reminded Plasan staff that the Consent Order is still in effect, which requires compliance with the 4P, which subsequently requires the ROP. KD explained to Ms. Wisniewski and Mr. DeGroot that some of the requests within the PTI application are likely not going to be approved, however, AQD's permit section is still evaluating the application in its entirety. KD also explained that while EPA has published a recession of the "once in always in" policy, there is a possibility that the recession of the policy is overturned in court. The regulation in question, 4P, is a Federal regulation, therefore the final stance on the status of the regulation will come from EPA and the federal government. KD advised Plasan to seek legal advice in the decision-making process, and to make sure that Plasan understands any ramifications of a decision they make.

All waste materials throughout all of the buildings appeared to be covered, and disposed of in an appropriate manner, thus minimizing fugitive emissions.

Source Wide Conditions

The source wide conditions apply to all process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment, and is applicable to both sections, combined.

Individual HAP emissions are limited to 9.9 tpy and aggregate HAP emissions are limited to 24.9 tpy, both 12-month rolling. Per the attached records, as of April 2018, aggregate HAP emissions were 5.9121 tpy, with Toluene being the highest individual HAP emitted at 4.7271 tpy. Records also indicated that PCC is properly tracking the usage of each HAP containing material, including reclaim, and HAP content of each material.

MAERS data was reviewed for reporting year 2017, and emissions were deemed acceptable.

EUCARBONMOLD

This emission unit is for twelve (12) oil-heated molding presses with a 3.22 MMBtu/Hr natural gas-fired boiler to heat the oil, two (2) electrically-heated autoclaves, and one (1) natural gas-fired autoclave. However, PCC currently only has one of the two electrically-heated autoclaves.

Volatile Organic Compounds (VOC) emissions are limited to 2.9 tons per year (tpy), 12-month rolling from this process. Per the attached records, as of April 2018 the 12-month rolling VOC emissions were 0.5502 tpy. The VOC content of the mold release used in this process is limited to 6.4 lb./gal. Per the records, the highest VOC content mold release is 6.22 lb./gallon. PCC is properly tracking the gallons of each material used per month.

EUADHESIVE

This emission unit consists of robotic bonding processes that occur in the open plant area; HVLP applicators are being used. VOC and acetone emissions are limited to 10.0 tpy, 12-month rolling, and as of April 2018 emissions were 0.401 tpy (802.30 pounds). MDI Isomer is limited to 0.34 lb./day from this process. Per the attached records, May 24, 2017 had the highest daily usage of MDI at 0.1641 lb.

The VOC content of the adhesives used for this process is limited to 0.24 lb./gal (minus water) as applied. The adhesives are applied as they are received and are not mixed with any other ingredients. Per the attached records, the highest VOC content adhesive is 0.17 lb./gallon. The VOC content of the primers is limited to 4.7 lb./gal (minus water) as applied. Per the attached records, the highest VOC content primer is 4.65 lb./gal. Additionally, the facility has requested and AQD approved the use of manufacturer's formulation data in lieu of Method 24. Per the records, the VOC content was determined by the manufacturer via EPA Method 24, as required.

PCC is properly tracking the MDI, VOC, and Acetone content of each material, as well as the gallons of each material used.

FGPAINT

This flexible group covers the two (2) conveyORIZED paint lines for the spray coating of plastic automotive parts (EU-PAINTLINE-1 and EU-PAINTLINE-2). The two (2) paint lines are essentially the same with the exception of EU-PAINTLINE-1 being controlled by the RTO and EU-PAINTLINE-2 is uncontrolled, EU-PAINTLINE-1 is robotic, and EU-PAINLINE-2 is manual spray. EU-PAINTLINE-1 is subject to the provisions of 40 CFR Part 64 for Compliance Assurance Monitoring (CAM), which will be evaluated in FGCAMPLAN, below. Currently, EU-

PAINTLINE-2 is mothballed and is not operating. Per, Mr. DeGroot, and the associated records, this line was last run on March 22, 2018.

Both paint lines use a five (5) stage wash system, are dried, and then coated. KD was able to observe both paint lines and confirmed that EU-PAINTLINE-2 is indeed mothballed with no intentions of starting it up again in the near future.

EU-PAINTLINE-1, however, was operating at the time of the inspection and filters were properly installed. Per Mr. DeGroot, PCC uses electrostatic Bells applicators, which provide a better transfer efficiency than the required HVLP applicators.

The RTO is required to be operated at a minimum temperature of 1400°F, with 95% destruction efficiency (DE) and 92.5 % capture efficiency. Testing conducted in September 2016 showed compliance with the capture efficiency limit, and DE testing conducted in January 2017 indicated compliance with the DE limit, with a DE of 98.0%. The RTO was operating at a range of 1537°F - 1602°F at the time of the inspection. Temperature records also indicate that the RTO is operating above the permitted minimum of 1500°F. Further discussion on the RTO temperature and the temperature recording device can be found in FGCAMPLAN, below. PCC has submitted a Malfunction Abatement Plan (MAP), for which they are following, including conducting inspections of the RTO and doing regular preventative maintenance. RTO inspection records are attached to this report.

PCC has previously requested, and AQD granted permission of manufacturer's formulation data in lieu of Method 24 for VOC content verification. The VOC content of air-dried primers and clear-coats for EU-PAINTLINE-2 are limited to 4.7 lb/gal and 4.5 lb./gal (minus water) as applied, respectively. The VOC content of high-bake clear-coats and high-bake non-flexible primers for EU-PAINTLINE-2 are limited to 4.0 lb./gal and 3.5 lb./gal, (minus water) as applied, respectively. According to the records, PCC is no longer using any air-dry primers, and several other coatings that had formerly been used, are no longer used at the facility. The primers and clear coats are mixed with an activator at a specified ratio. Utilizing this same ratio, the VOC content of the coatings are compliant with the specified limits.

EU-PAINTLINE-2 must only use air dried coatings at temperatures less than 194°F, but may operate at temperatures higher than 194°F for high-bake coatings. Since EU-PAINTLINE-2 is mothballed, it was not operating at the time of the inspection, and since no air-dried coatings are used, the temperature records for EU-PAINTLINE-2 are acceptable.

FGPAINT requires VOC emissions from EU-PAINTLINE-1 be limited to 35.0 tpy, 12-month rolling. As of April 2018, VOC emissions were 0.3674 tpy, 12-month rolling. VOC emissions from EU-PAINTLINE-2 are also limited to 35.0 tpy, 12-month rolling, and as of April 2018 VOC emissions were 0.4540 tpy. Emissions of p-Chlorobenzotrifluoride are limited to 8.1 tpy, 12-month rolling from EU-PAINTLINE-2 and 106.8 lb./24-hr for FGPAINT. Records indicate that June 4, 2017 had the highest p-Chlorobenzotrifluoride emission at 1.9430 lb./24 hr. As of April 2018, the 12-month rolling emissions from FGPAINT were 0.074 tpy (148 pounds). PCC is properly tracking the usage of all compounds, including all p-Chlorobenzotrifluoride containing compounds, VOC and p-Chlorobenzotrifluoride content of each compounds used and emissions data.

Stack parameters, while not explicitly measured, appeared to be correct.

FGCAMPLAN

EUPAINTLINE is currently the only emission unit that is subject to the provision of 40 CFR Part 64 for Compliance Assurance Monitoring (CAM). As mentioned in FGPAINT, the RTO was most recently tested in September 2016, where the CE limit was demonstrated, and January 2017, where the DE was demonstrated. The temperature of the RTO is recorded in a digital manner, and is recorded every few seconds, per Mr. DeGroot. The temperature data, from May 1, 2017 through the end of April 2018 indicate that the RTO is operating above the 1500°F minimum. Additionally, the semi-annual and annual certifications do not indicate any deviations, excursions, or exceedances. PCC conducts monthly, semi-annual, and annual inspections of the RTO.

FGMACT PPPP

This flexible group covers each new, reconstructed, and existing source engaged in coating of plastic parts and products. This flexible group currently includes EU-PAINTLINE-1, EU-PAINTLINE-2, EUADHESIVE, and EUSPOTPRIME. The initial compliance notification was received on April 22, 2016, and PCC has subsequently

been reporting the compliance status, as required. The most recent compliance notification was received on January 25, 2018 but was not complete. The complete form was received on February 22, 2018. The report indicated that the compliance methods selected were emission rate with add-on controls and without add-on controls. The facility used the volume weighted averaging of HAP contents for all products after considering the reduction in emissions after add-on controls to demonstrate compliance with the HAP content limit. EU-PAINTLINE-1 uses a RTO for control, while EUPAINTLINE-2, EU-SPOTPRIME, and EU-ADHESIVE are all uncontrolled, but are part of FGMACT PPPP, which includes the MACT conditions. For the compliance method of emission rate without add-on controls, Organic HAP's are limited to 0.16 lb. per lb. of coating solids, 12-month rolling. The highest monthly HAP (lb)/Solids (lb) was 0.0161 in March 2017, with a 12-month rolling quantity of 0.0118, at the end of the reporting period, which is below the Organic HAP limit of 0.16 lb. per lb. of coating solids.

FGNESHAPZZZZ

PCC also has two (2) generators that are subject to the provisions of 40 CFR Part 63 Subpart ZZZZ for Reciprocating Internal Combustion Engines, however, AQD is currently not delegated for this area source MACT. The two (2) generators are properly equipped with hour meters. The most recent preventative maintenance inspection was conducted in April 2018. The total number of hours operated for the last 12 months for the generators, 18.2 hours and 14.5 hours.

FGRULE290-1

Rule 290 recordkeeping is utilized for several small priming, touch-up, and finishing operations. All records for Rule 290 appear to be adequate.

Other Miscellaneous Exempt Emission Units

The facility currently has one (1) cold cleaners, which is exempt from Rule 201 permitting under Rule 281(2)(h). The plant has several sanding, routing, and drilling operations that are exempt from Rule 201 permitting under Rules 285(2)(l)(vi)(B) and/or Rule 285(2)(l)(vi)(C), depending on the operation and location within the facility.

Section 2: Plasan North America

Section 2 of the ROP is Plasan North America (PNA) operations and is comprised of two (2) buildings. Formerly, the second building was only used as a warehouse. However, according to Ms. Amy Uppleger, Safety Coordinator, the building is undergoing some relocation of the equipment. The welding and coating stations that were formerly in the main building are now located in the building that was just the warehouse. All waste containers appeared to be closed, properly stored, and disposed of, as appropriate.

Section 2 of the ROP has the same source-wide requirements as Section 1, but the source wide conditions were evaluated in Section 1 (above) and will not be re-evaluated here.

EUPULTRUSION

This emission unit is a single pultrusion line in which reinforcing fiber materials are pulled through a resin bath and then a series of preform plates which shape the coated fibers into the desired profile. The coated fibers are then drawn through a heated die which initiates an exothermic reaction and polymerizes the thermosetting resins to produce composite rods and tubes. The finished product is then cut to the desired length with a wet saw. This emission unit was also moved during some of the relocation of equipment, but is still housed in the main PNA building, and was not operating at the time of the inspection.

VOC emissions from this process are limited to 300 lb./yr, 12-month rolling, and as of April 2018, the 12-month rolling emissions were 28.2 lb./yr. Acetone emissions are also limited from this process. Emissions are limited to 790 lb./year, 12-month rolling. As of April 2018, acetone emissions were 13.2 lb./year. The decrease in the emissions from this process are primarily due to the equipment being shut down for relocation. Plasan is adequately tracking the materials that are used, and all recordkeeping appears adequate.

Stack parameters, while not explicitly measured, appeared to be correct.

FGNSPSJJJJ

PNA also has one (1) Certified generator that is subject to the provisions of the reciprocating internal combustion engine NSPS 40 CFR Part 60 Subpart JJJJ, the New Source Performance Standards for Stationary Reciprocating Internal Combustion Engines. The generator is equipped with an hour meter, and usage indicates it has ran 226.9 hours. Since the unit has been installed for over 2 years, the hours are acceptable. PNA conducts regular Preventative Maintenance (PM) on the unit.

FGRULE287(2)(c)

The coating area is a hand rolling coating area and PNA is properly tracking the usage. Per the attached records, the maximum monthly usage since April 2017, was 19.813 gallons.

FG-RULE290-2

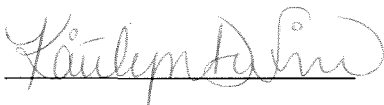
PNA is using Rule 290 for some of their processes, and records for such are attached. All of the processes are uncontrolled, and emit only non-carcinogens, per the SDS's. Thus, the allowable emissions are 1,000 lbs per month. April 2017 was the month with the highest VOC emissions at 429.6 lbs during the month.

Other operations include: welding stations, sand blasting stations, and cutting stations. The welding stations are exempt from Rule 201 permitting under Rule 285(2)(i). The sand blasting and cutting stations are exempt from Rule 201 permitting under Rule 285(2)(l)(vi)(B).

Compliance Determination

Based on the observations made during the inspection and a subsequent review of the records, it appears as if Plasan is in compliance with MI-ROP-P0374-2017 and Consent Order 15-2016.

NAME



DATE

6/5/18

SUPERVISOR

