



November 29, 2016

Kaitlyn DeVries, MPH
 Environmental Quality Analyst
 Michigan Department of Environmental Quality
 Air Quality Division, Grand Rapids District Office
 350 Ottawa Avenue, N.W., Unit 10
 Grand Rapids, MI 49503-2341



Re: Response to Violation Notice
 SRN: P0374, Kent County

Dear Ms. DeVries,

The Michigan Department of Environmental Quality has sent Plasan Carbon Composites a Violation Notice dated November 2, 2016. This letter shall act as our response to that Violation Notice. Plasan Carbon Composites would like to thank MDEQ for granting a response extension until December 2, 2016. This extension allowed for the inclusion of the Tann Corporation final stack emissions test report.

The Violation Notice states:

Process Description	Rule/Permit Condition Violated	Comments
Regenerative Thermal Oxidizer on EU-PAINTLINE-1	PTI No. 130-12C, FGPAINT, Special Conditions IV.3.	Testing conducted on September 27, 2016 resulted in a destruction efficiency of 91.8%, which is below the 95% limit in the permit.

On September 27, 2016 Plasan Carbon Composites conducted a capture and destruction efficiency test of the paint system, as required by PTI #130-12C, FGPAINT, SC V.2. While the permit specifies separate limits for both capture and destruction efficiency, we believe the intent of the permit is an overall control efficiency (the product of the Destruction Efficiency and the Capture Efficiency). The table below provides a summary of the Destruction, Capture and Overall Control Efficiency for the stack test performed on September 27, 2016 and PTI No. 130-12C permit limits:

	Destruction Efficiency	Capture Efficiency	Overall Control Efficiency
Stack Test 9/27/16	91.76%	98.88%	90.73%
PTI No. 130-12C	95.0%	92.5%	87.87%

While we acknowledge that the destruction efficiency measured on the day of testing did not meet the permit limit of 95%, the overall calculated control efficiency (90.73%) of the system far exceeded the intended control requirements (87.87%) of the permit application BACT. Therefore, while the measured destruction efficiency was below the permit limit, we believe that we met the intent of BACT established within the permit.

It is our understanding that quite often the MDEQ-AQD permit unit will list an hourly emission rate along with a destruction efficiency limit in a permit to allow for a back-up permit condition in case testing demonstrates that the destruction efficiency limit cannot be met. In these cases, the MDEQ-AQD has historically not issue a violation notice when the destruction efficiency was not met if the hourly emission rate was met. We question why our situation is any different. Our permit sets both capture and destruction efficiency limits which when combined represents the intended BACT control efficiency set by the MDEQ-AQD permit unit for the paint system and should represent a back-up permit condition much like an hourly emission rate.

To address this deficiency in the permit, on November 2, 2016, Plasan Carbon Composites submitted an Air Permit Modification for FG-PAINT PTI#130-12C to replace the current capture efficiency and current destruction efficiency limits with an equivalent control efficiency limit. We believe that this action will provide a condition more representative of the Permit Unit's intent for BACT. Especially since it is the overall control efficiency that impacts our health and the environment.

Addressing Specific Items:

1. The dates the violation occurred

The date of the stack test (September 27, 2016) is the first date a violation of the destruction efficiency limit has been documented.

2. An explanation of the cause and duration of the violation

On November 12-15, 2016 the RTO manufacturer (TANN Corporation) was on site to investigate probable causes for the lower destruction efficiency. While the TANN representative could not find any physical abnormalities in the unit, they did recommend two adjustments be made to the control system. These were to increase in the combustion zone temperature set point from 1,525 °F to 1,600 °F and lengthen the bed cycle time from 90 seconds to 120 seconds. They made these adjustments while on site.

3. Whether the violation is ongoing

At this point a follow-up EPA Method 25A test has not been conducted to confirm a correction to the destruction efficiency. However, while on site, the TANN representative was able to measure inlet and outlet concentrations following the above describe adjustments using a flame ionization detector (FID) similar to EPA method 25A. Based on the TANN results, the destruction efficiency appears to have been increased to approximately 97%.

4. A summary of the actions that have been taken and the dates of these actions

Below is a timeline of events to illustrate that Plasan Carbon Composites has expeditiously and effectively addressed all aspects of the Violation Notice:

Date	Event
September 27, 2016	The Stack Test Group performed a compliance stack test program at Plasan Carbon Composites
October 14, 2016	The Stack Test Group created a draft stack test report
October 17, 2016	Environmental Partners, Inc. received a go ahead from Plasan to submit an Air Permit Modification for FG-PAINT PTI#130-12C to replace the current capture efficiency (92.5%) and current destruction efficiency (95%) with a control efficiency of 87.9% (92.5% x 95%).
October 18, 2016	The Stack Test Group issued a final stack test report
October 18, 2016	Environmental Partners, Inc. submitted the Stack Test Report to MDEQ Lansing, MDEQ district office and to Plasan.
October 25, 2016	Randy Jesberg (Plasan) tentatively scheduled Tann Corporation for a RTO inspection and testing on November 13, 2016
October 31, 2016	Randy Jesberg (Plasan) confirmed with Tann Corporation a RTO inspection and testing on November 13, 2016
November 2, 2016	An Air Permit Modification was submitted for FG-PAINT PTI#130-12C to replace the current capture efficiency (92.5%) and current destruction efficiency (95%) with a control efficiency of 87.9% (92.5% x 95%). This is currently under review by the MDEQ-AQD
November 12, 2016	Tann Corporation inspected regenerative thermal oxidizer. Inspection report is attached as Attachment A.
November 13, 2016	All items from the Tann Corporation inspection have been completed.
November 15, 2016	Tann Corporation conducted informal stack emissions monitoring of inlet and outlet concentrations. The results of their evaluation report is attached as Attachment B.
November 15, 2016	Based on the results of Tann Corporation's evaluation, the destruction efficiency of the RTO after making the set point changes, was measured at an average value of 97.2%
November 17, 2016	Plasan Carbon Composites requested an extension until December 2, 2016 for the written response. The purpose of the extension was to allow the Tann Corporation to complete their final stack emissions test report.
November 21, 2016	The response extension was approved.

5. A summary of the actions that are proposed to be taken to correct the violation and the dates by which these actions will take place

On November 12, 2016, Tann Corporation inspected the regenerative thermal oxidizer. The inspection report is attached as Attachment A.

On November 13, 2016, the following inspection items were completed:

- Changed Gland Pack on Tank 2 Cylinder
- Replaced Burner Actuator Motor
- Changed PLC Burner logic, Rung 3, Burner PID T3.1 to T3 Average

- Changed HMI RTO Setup Screen. Brought in logic to HMI to correct the Poppet Cycle time current value. Soak Time setpoint and current Value, Burner Maximum setpoint and current value. HMI / removed Self-Sustain and FAD offset value
- Verified the poppet blade and sealing flange to ensure there was no gap. No gap found on any blades.

On November 15, 2016, TANN Corporation made several measurements of the inlet and outlet concentration while making several optimization adjustments. We now believe that all of the necessary adjustments have been incorporated.

6. What steps are being taken to prevent a reoccurrence

Since November 15, 2016, the regenerative thermal oxidizer has a combustion chamber setpoint temperature of 1,600F and a cycle time of 120 seconds. These parameters are constantly being visually monitored and recorded. Further if the regenerative thermal oxidizer fails, the paint process has a failsafe mechanism to stop paint flow which will shutdown the paint line.

It should be noted that Plasan Carbon Composites has made many significant paint process improvements. As a result, emissions associated with EUPAINTLINE-1 are currently operating at levels less than 10% of where they were just six months ago.

In conclusion, we want to re-assert the position that the while the destruction efficiency measured on September 27, 2016 was low, the overall VOC control system was operating at or above the permit intent of 87.87% control efficiency. Since this date, adjustments have been made that we believe demonstrate an increase in the destruction efficiency. However, with the impending permit application requesting to change special condition IV.3 from separate capture and destruction efficiency limits to an overall control efficiency limit, we believe that the results of the September 27, 2016 test satisfy both the intent of BACT and this proposed language change. Therefore, we ask that the Department use it's discretion to accept the previously submitted results as a demonstration of compliance.

If you have any questions or need any more information, please feel free to contact me any time.

Sincerely,
PLASAN CARBON COMPOSITES



Paul DeHart
Chief Operating Officer

CC:

Ms. Heidi Hollenbach, MDEQ-AQD
Ms. Lynn Fiedler, MDEQ-AQD
Ms. Mary Ann Dolehanty, MDEQ-AQD
Mr. Chris Ethridge, MDEQ-AQD
Mr. Thomas Hess, MDEQ-AQD
Mr. Dan Hartzler, Plasan Carbon Composites

Mr. Chuck Czarnecki, Plasan Carbon Composites
Mr. Wayne DeGroot, Plasan Carbon Composites
Mr. Randy Jesberg, Plasan Carbon Composites
Mr. Craig Giesseman, Plasan Carbon Composites
Ms. Courtney Draveling, Plasan Carbon Composites