



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
LANSING DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

May 6, 2020

Mr. Thomas Anderson, Environmental Manager, North America  
Bodycote Thermal Processing, Inc.  
12750 Merit Drive, Suite 1400  
Dallas, Texas 75251

SRN: P0101, Ingham County

Dear Mr. Anderson:

**VIOLATION NOTICE**

On December 20, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an inspection of Bodycote Thermal Processing Inc's (Bodycote) soil vapor extraction (SVE) remediation system located at 2127 W. Willow St., Lansing, Michigan. The purpose of this inspection was to determine Bodycote Thermal Processing's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and the conditions of Permit to Install (PTI) number 28-10.

During the inspection, staff observed the following:

| Process Description                | Rule/Permit Condition Violated                       | Comments  |
|------------------------------------|--|---|
| EUSOIL                             | PTI 28-10 Reporting Special Condition VII.1(a) – (d) | Required reports were not submitted from May 2013 – December 2019                             |
| EUSOIL                             | PTI 28-10 Reporting Special Condition VII.1          | VOC emissions were not calculated according to Appendix 1                                     |
| Dual-stage activated carbon system | PTI 28-10 Testing/Sampling Special Condition V.1     | Testing for breakthrough of the first canister was not consistently conducted every two weeks |
| Dual-stage activated carbon system | PTI 28-10 Testing/Sampling Special Condition V.1     | Carbon in first canister not replaced after detecting breakthrough for various dates          |

|                                    |   |  |
|------------------------------------|---|--|
| Dual-stage activated carbon system | PTI 28-10 Design/Equipment Parameter Special Condition IV.1 | Carbon system not maintained and operated in a satisfactory manner   |
| EUSOIL                             | PTI 28-10 Monitoring/Recordkeeping Special Condition VI.2   | Flow rate and VOC concentration of influent stream to EUSOIL not monitored on a quarterly or more frequent basis |

PTI 28-10 Reporting Special Condition VII.1(a) – (d) requires that the flow rate, total VOC and vinyl chloride concentrations, and calculations of VOC and vinyl chloride emissions rates, be submitted within 30 days following the end of the month in which the data was collected. The last report the AQD received was in April 2013 for the March 2013 data. Reports were not submitted from May 2013 through December 2019. For the purposes of the December 20, 2019 inspection compliance check, the 2014 – 2019 reports were supplied however, a violation still exists for failure to submit these reports according to the timelines specified in PTI 28-10 over the past 6+ years. The AQD acknowledges that monthly reports have been submitted in January and February for December 2019 and January 2020 emissions, respectively.

PTI 28-10 Monitoring/Recordkeeping Special Condition VI.2 requires that flow rate and the VOC and vinyl chloride concentrations of the influent stream to EUSOIL be monitored on a quarterly basis by sampling and testing the influent gas stream. Review of records found that these 2 parameters were monitored less frequently than quarterly. This is a violation of Special Condition VI.2

PTI 28-10 Reporting Special Condition VII.1 requires that the monthly reports be submitted using Appendix 1 of the PTI, which establishes an equation that uses a 95% control efficiency for the dual-stage carbon absorption system. Records review showed that emissions were not calculated according to Appendix 1 of PTI 28-10. All VOC emissions reported were assumed to be 0, with 100% control efficiency. Additionally, the “Daily Operations & Maintenance Log” reviews showed that the effluent, as determined by PID, had detectable ppm concentrations of VOC. Failure to calculate emissions according to Appendix 1 of PTI 28-10 is a violation of Special Condition VII.1.

PTI 28-10 Testing/Sampling Special Condition V.1 requires that testing for breakthrough of the first canister be conducted at least once every two weeks. Review of 2017 – 2019 “Operations & Maintenance Log” records (where influent, midfluent and carbon changeout records are kept for this source) showed that testing for breakthrough of the first canister was not consistently conducted every two weeks. Additionally, Testing/Sampling Special Condition V.1 requires that the carbon in the first canister be

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changed if breakthrough is detected. Breakthrough is defined by PTI 28-10 as a reading at the point between the first and second canisters that is 20% or more of the influent concentration into the first canister. Detection of breakthrough events, according to PTI 28-10, can be done using a hand-held instrument capable of detecting concentrations at the levels expected. ASI staff indicated that a PID is used with a detection limit of 100 ppb, which is within the levels they expect to see from this system. Review of "Daily Operations and Maintenance Log" 2017 - 2019 records showed that on September 26, 2017; October 15, 2018; May 29, 2019; September 24, 2019; November 15, 2019; and December 27, 2019 breakthrough of the first carbon canister was detected, based on the influent and midfluent concentrations reported via PID readings. The records indicate (by circling "No" to "SVE Carbon Changeout?") that the carbon was not changed out on these days when breakthrough was detected. These are violations of Special Condition V.1.

PTI 28-10 Design/Equipment Parameter Special Condition IV.1 requires that EUSOIL not be operated unless the dual-stage activated carbon system is maintained and operated in a satisfactory manner. Because the carbon was not changed out during breakthrough events, the carbon system was not maintained and operated in a satisfactory manner and therefore this is a violation of Special Condition IV.1.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by May 27, 2020, (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; and a summary of the actions that have been taken to correct the violations.

The response shall also include proposed actions to be taken to correct the violations and the dates by which these actions will take place. If Bodycote plans to proceed with operating EUSOIL under Rule 290, a Rule 290 exemption demonstration should accompany your response and include all required items specified under this Rule for the period of January – April 2020. Please note that if the company chooses to operate under Rule 290 as their compliance plan, they will need to conduct monthly testing of the influent to the remediation system, as well as monthly breakthrough checks on the first stage contactor carbon canister. Monthly influent test results as well as monthly breakthrough check records will be required to be kept, as well as monthly emissions records based on the sampling method of choice (sampling and lab analysis or PID) and the requirements under Rule 290. Emissions reported as "0" will not be acceptable based on the detection limits of the sampling and analytical methods currently used.

An alternative option to operating under the Rule 290 exemption would be to apply for a modification to PTI 28-10, in an effort to create a PTI that the company can comply with in the future, and that would be based on current influent data. An application form is

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available by request, or at the following website: [www.michigan.gov/air](http://www.michigan.gov/air) (in the shaded box on the upper right-hand side of the page).

Please submit the written response to EGLE, AQD, Lansing District, at Constitution Hall, First Floor South, 525 W. Allegan, P.O. Box 30242, Lansing, Michigan 48909 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760. Please also submit an email copy of the written response to Michelle Luplow at [luplowm1@michigan.gov](mailto:luplowm1@michigan.gov).

If Bodycote believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above and for the cooperation that was extended to me during my inspection of Bodycote. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Michelle Luplow  
Environmental Quality Analyst  
Air Quality Division  
[luplowm1@michigan.gov](mailto:luplowm1@michigan.gov)

cc/email: Mr. Dave Warner, ASI Environmental  
cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Ms. Jenine Camilleri, EGLE  
Mr. Christopher Ethridge, EGLE  
Mr. Brad Myott, EGLE