Bodycote THERMAL PROCESSING

BODYCOTE THERMAL PROCESSING · 12750 Park Merit Drive, Suite 1400 · DALLAS · TX-75251 · TEXAS · TEL 214.904.2420 · FAX 214.904.2424 · www.bodycote.com

May 27, 2020

Ms. Michelle Luplow, Environmental Quality Analyst
EGLE, AQD Lansing District
Constitution Hall, 1st Floor South
525 W Allegan Street
Lansing, MI 48909

Re: SRN PO101, Ingham County

Dear Ms. Luplow,

I am writing in response to the recent inspection of the soil vapor extraction (SVE) environmental remediation system we operate at the former Lindberg Heat Treating, Inc. site located at 2127 W. Willow St., Lansing and the Violation Notice received at our office dated May 6, 2020.

Bodycote is committed to operating its facilities and related activities in full compliance with federal, state and local regulations and looks forward to working with you to resolve this current situation.
As requested in the violation notice, I am submitting this written response within 21 days (by May 27, 2020) with the intent to provide an overview of the actions initiated to correct the alleged violations as well as, where applicable, the dates the alleged violations occurred, an explanation of the causes and duration of the alleged violations; whether the alleged violations are ongoing; and a summary of the actions that have been taken in response to the alleged violations.

Process Description	**Rule/Permit Condition Violated**	**Comments**
V#1: EUSOIL	PTI 28-10 Reporting Special Condition VII.1(a) – (d)	Required reports were not submitted from May 2013 – December 2019
V#1 Response: The SVE system commenced operation in April 2010. Testing/Sampling, Monitoring/Recordkeeping and Reporting were submitted in accordance with the PTI for the first 3 years of operation with the last report being submitted in April of 2014. The non-filed reports were available, however had not been submitted; they were supplied at the conclusion of the inspection. This alleged violation is not ongoing as monthly reports for 2020 have been submitted to the department on schedule and monthly reporting will continue until the permit is modified or voided .		

V#2: EUSOIL	PTI 28-10 Reporting Special Condition VII.1	VOC emissions were not calculated according to Appendix 1
V#2 Response: The uncontrolled influent mass of VOC and VC has consistently been an order of magnitude or more below the permitted emission limits. Therefore, based on his professional judgment, our environmental consultant did not believe it was necessary to calculate the 95% control efficiency to determine that the emissions were in compliance with the permitted emission limits. However, the table used for reporting the monthly VOC and VC emissions has now been modified to be consistent with using a 95% control efficiency as indicated in the example formula referenced in Appendix 1. To ensure ongoing compliance in the future, all reports to be submitted will use this formula for calculating the emissions.		
V#3: 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
V#3 Response: As previously noted in the V#1 Response, the SVE system commenced operation in April 2010. Testing/Sampling, Monitoring/Recordkeeping and Reporting were completed in accordance with the PTI for the first 3 years of operation. With almost 10 years of accumulated data on the maximum possible concentration levels, flow rates and mass influents from the SVE system; our environmental consultant has a thorough understanding of the operations. Because of the distance of travel from the consultant's location to our site, and professional judgment based on the extensive collection of data already compiled, it was impractical to continue conducting the breakthrough testing every two weeks for a potential emission that, even if completely uncontrolled, could only be a mere fraction of the permits allowable emissions. Unfortunately a formal request to change the testing frequency was not made. To ensure ongoing compliance in the future, such a request to the AQD District Supervisor has since been drafted and testing for breakthrough every two weeks will now occur until the request is granted or the permit is modified or voided.		
V#4: 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
V#4 Response: Similar to our response to V#3 above, the extensive accumulation of data on the maximum possible concentration levels, flow rates and mass influents from the SVE system has provided our environmental consultant with a thorough understanding of the potential quantity of mass removed by the carbon canisters. While a PID meter capable of VOC detection down to 0.1 PPM is utilized and is a good field screening tool, it has been observed that due to fluctuations in humidity, temperature and other variables that the repeatability of measurements at that level have a high degree of variability. Based on experience with several other dual-stage activated carbon treatment systems, it was assumed that the 20% calculation requirement was based on influent/midfluent/effluent concentrations expected as estimated in the initial design and shown in the Application for PTI. Therefore; while the permit stipulates a 20% threshold of influent vs midfluent concentration be used to signify breakthrough and carbon change out, in this situation with actual uncontrolled influent concentration less than 5 PPM that practice would result in a significant waste of usable carbon. Being knowledgeable of the actual low influent stream concentration, flow rate and the overall low mass of total VOCs available for capture clearly indicates the carbon is nowhere near spent and a premature change out indicated by the 20% measurement would be extremely conservative and wasteful. However, to ensure compliance with emission effluent limits, we have initiated arrangements for exchange of the first stage contactor and rotation of the second vessel. Additionally, to ensure compliance going forward, we will be in discussion with the permit engineer on options to modify the existing permit requirements to a more feasible and less wasteful solution.		

V#5: 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
V#5 Response: As this alleged violation was cited in result of the issues raised in V#3 & V#4 above, it is our understanding the actions initiated to resolve those issues will also be effective in resolving V#5.		
V#6: 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
V#6 Response: To address this concern, sampling of the influent flow rate, VOC and VC concentration was initiated in January 2020 immediately following the inspection. To ensure ongoing compliance in the future quarterly monitoring will continue however, a letter to the AQD District Supervisor has since been drafted to request a change in sampling frequency. For now quarterly monitoring will continue to occur until the request is granted or the permit is modified or voided .		

In summary, we are in the process of identifying the root cause for each of the issues raised and putting corrective action in place to prevent this from happening in the future. Our team is currently assessing the feasibility of operating the SVE system under the exceptions offered under Rule 290 or 291, for sources with limited or de minimis emissions, respectively. In the interim until that determination of using an exemption is made, we have drafted a letter to the AQD District Supervisor requesting changes to the various testing/sampling, monitoring/recordkeeping and reporting frequencies stipulated in the current permit in the hopes of establishing more feasible requirements.

Thank you for your assistance as we work to resolve these alleged violations.

Sincerely,

Thomas Anderson
Environmental Manager, N America
Bodycote Thermal Processing, Inc.
tom.anderson@bodycote.com

cc: Ms. Jenine Camilleri – EGLE AQD
Mr. Dave Warner – ASI Environmental Technologies, Inc.