

January 25, 2022

Mr. Robert Byrnes MDEQ - Air Quality Division Lansing District Office 525 W. Allegan St. – Constitution Hall Lansing, MI 48913

Dear Robert L. Byrnes,

VIOLATION NOTICE

This letter is in response to the Violation Notice dated January 6, 2022. Below is our response to the notice of violation.

- FG-COATING: Destruction Efficiency testing for the Regenerative Thermal Oxidizer (RTO), Rule 336.1910, SC IV.4 – Control device has not been properly operated and maintained.
 - a. On February 18, 2021 a pre-test on the RTO was performed by Network Environmental showing RTO Destruction Efficiency at 97.12% (results sheet attached).
 - b. On March 8-9, 2021 Hal Cowles (Environmental Consulting and Characterization) recommended Jim Starek to conduct a full inspection of the RTO (see attached report).
 - c. The RTO was officially tested on August 5, 2021 and showed a destruction efficiency of 82.4%.
 - d. Two RTO contractors were called to perform a full comprehensive inspection and repair of the RTO. Neither company was able to provide a date to perform these operations until "sometime next year".
 - e. Albar's maintenance department then worked with the fabricator of the valves to try and find the issues with the unit. It was found that one valve was not sealing properly (while it cannot be confirmed, we believe the inspector from March 2021 inadvertently stepped on the valve during his inspection causing the issue). Maintenance was able to reseat the valve and used a feeler gauge to ensure the valve was within the 0.006 inch tolerance, which it was.

- f. The unit was then tested on November 23, 2022 and the results showed 85.4% DE. During the testing, there was a repeating spike in the data indicating that one of the valves was not operating correctly.
- g. On December 2, 2021, Albar ordered a valve bearing and packing kit and asked for a quote on a replacement valve.
- h. The bearing and packing kit arrived January 4, 2022.
- i. On January 22, 2022, Albar Maintenance replaced the bearings and packings on Valve #1. During the repair, the valve had about a 0.25 inch gap when fully closed. Once the repair was completed, a feeler gauge of 0.005 inches was used to verify sealing. The 0.005 inch gauge would not go between the valve. The remaining 5 valves were then inspected with the same feeler gauge and no issues were found. Albar believes that the valve slowly worked its way out of position between the time of the repair and the test. Albar will allow the valve to run for a period of 1 week and re-check the seal of the valve with the feeler gauge.
- j. On January 24, 2022, Albar maintenance developed a new yearly check where each valve will be inspected for damage around the shaft, body, bearings/packings, and a feeler gauge used to verify the seal of each gauge. The first completed form is attached.
- k. On January 29, 2022, Albar will re-inspect the repaired valve to determine if the repair corrected the condition. If the repair indicates the issue is fixed, Albar will schedule an RTO DE test as soon as possible. If the issue is not resolved, a new valve will need to be ordered and installed. Lead time on the new valve is 12-16 weeks.
- FG-COATING: Removal Efficiency testing for the Fluidized Bed Concentrator, Rule 336.1910, SC IV.4, Control device has not been properly operated and maintained.
 - a. Albar does not believe we are in violation of this rule.
 - b. The Capture and Control of emissions through the Fluidized Carbon Concentrator for the last few years have been:
 - i. 2008 47.92%
 - ii. 2013 75.67%
 - iii. 2016 56.10%
 - iv. 2017 77.50%

v. 2021 – 69.50%

- c. The results of 2021 are within the range that the unit has been controlling for the past several years.
- d. Albar cannot find a specific efficiency number that has been identified by any government agency as "acceptable" for our fluidized carbon concentrator.
- 3. FG-Coating: RTO operational parameters were not available during operation, Rule 336.1912, SC IV.2, GC 25, Failure to report an RTO malfunction/abnormal condition (no temperature data) and failure to provide a 10 day follow up report.
 - a. On Monday November 29, 2021, the environmental manager (EM) noticed missing data from the RECORDING equipment used to record the temperature and pressure of the RTO and Carbon Adsorber.
 - b. The IT team were asked to retrieve the missing data and the EM was notified that the computer that collects the data had malfunctioned on Monday November 22, 2021 around noon due to a brown out, and that they did not discover the issue until the morning of November 24, 2021. The normal individual that checks the system daily was required to run production parts due to staffing issues during this time frame.
 - c. The IT team had already begun implementing a corrective action that was signed off by the IT Manager on November 29 and the Quality Manager on November 30.
 - d. The Root cause of the issue was due to a required software update on the computer system that records the temperature and pressure data. The update caused the system not to record the temperature and pressure readings once the brown out caused a system reboot. The brown out also caused the alert system to stop working. The IT team has instituted a new email alert system (see attached Problem Solving Documentation, example of email alerts, and email regarding the corrections).
 - e. The violation letter indicates that Albar did not notify EGLE AQD until December 12, 2021, but the email was sent on December 1, 2021 (copy of email attached). Albar did not feel that the 10-day reporting was required due to only the temperature and pressure RECORDING was at fault. The actual RTO and Carbon Adsorber were still in full operation. Albar does have a separate analog recorder for the RTO temperature which shows that temperature was never lost during actual paint spraying operations (see attached chart). The control equipment also has audible alarms if the equipment ever drops below established operating

parameters as set forth in the most recent performance test. If necessary, in the future Albar will provide a 10-day report if the RECORDING equipment fails.

Please feel free to contact me at 810-667-0150 x 312 if you should have any questions.

Sincerely,

Andrew L. Woodruff Director of Program Management Albar Industries, Inc.