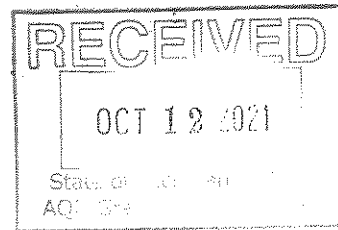




Worthen Industries
1125 41st StSE
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616-742-8990
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September 30, 2021

Ms. April Lazzaro
EGLE - Air Quality Division
Grand Rapids District Office
350 Ottawa Avenue NW, Unit 10
Grand Rapids, MI 49503

RE: Worthen Coated Fabrics (SRN P0634) Violation Notice dated September 20, 2021

Dear April:

Worthen Coated Fabrics (Worthen) is in receipt of the Violation Notice dated September 20, 2021 alleging violation to MI-ROP-P0634-2017 Special Condition IV.1, Rule 910, and 40 CFR 63.4291(a) contained in Flexible Group (FG) Condition I and Part 63 Subpart OOOO.

Part 63 Subpart OOOO allows a facility to choose any one of five compliance options under 63.4291(a). Worthen's permit identifies two of the five options in FG Condition I.1 and I.2 and indicates "the permittee shall comply with one of the options listed above". Worthen is complying with Subpart OOOO using the emission rate with add-on controls option as identified in 63.4291(a)(3), Table 1, item 1 and FG Condition I.1. This option allows the facility to use an add-on control device to meet the emission limit of 0.08 kilogram (kg) organic HAP per kg of solids applied as specified in Table 1 of Subpart OOOO. If complying with the emission rate with add-on controls option, a control efficiency limit is not specified. Therefore, based on testing conducted on September 9 and 16, 2021 with the RTO achieving a control efficiency of 96.5%, Worthen is not in violation of Part 63 Subpart OOOO as supported by the attached calculations and data demonstrating compliance with the emission limit of 0.08 kg HAP per kg solids applied. As a result, this response letter only addresses failure to maintain the RTO VOC control efficiency at 98% as specified by Condition IV.1 of Worthen's permit.

As requested, a written response herein is being provided by October 11, 2021 and actions have been taken to correct the violation. As requested in the Violation Notice, Worthen's response outlined below includes the dates that the violation occurred, an explanation of the causes and duration of the violation, whether the violation is ongoing, a summary of the actions that have been taken and are proposed to be taken to correct the violation, the dates by which these actions will take place and what steps are being taken to prevent a reoccurrence.

Dates and Duration

As indicated in the Violation Notice, Worthen Coated Fabrics conducted emission testing during operation of the coating line and RTO on September 9, 2021 and again on September 16, 2021. The RTO did not achieve a 98% destruction efficiency as required by condition IV.1 of the permit. Worthen did not operate the coating line with solvent based coating between the two testing dates, nor was solvent based coating used after testing on September 16th until compliance was demonstrated with a successful emissions test on September 28th.

Explanation of Cause and Completed Actions

On July 27, 2021, Worthen hired Durr Systems to conduct an internal inspection of the RTO. The inspector observed a crack in the poppet valve disc, however confirmed by inspection that it was achieving the necessary seal when seated. Worthen ordered a new poppet valve disc, however it did not arrive prior to the

September 9th test due to supply chain delays related to the COVID pandemic. The Durr inspector was consulted and, in his opinion, thought the disc would provide an acceptable seal for the scheduled test. In addition, Worthen wanted to stay on schedule with the testing firm and EGLE to meet the October 11th deadline. However, the RTO did not achieve the required destruction efficiency during the September 9th stack test. The cracked poppet valve disc was replaced, and the RTO was tested again on September 16th which unexpectedly did not achieve a 98% destruction efficiency. Further inspection revealed that the poppet valve in the other chamber was not sealing well due to failure of a “tack weld” that holds the piston arm in place which resulted in the piston shaft travel being out of line creating a gap between the poppet disc and valve seat. This issue was not identified by the Durr specialist who performed the inspection on July 27th. The president and service technician from NESTEC were on site on September 20th to replace the valve disc, reset the stroke length of the piston and tack weld it in place. Stack testing conducted on September 28, 2021 demonstrated compliance with Worthen’s permit requirement to operate the RTO at a minimum VOC destruction efficiency of 98%. The average of three 1-hour test runs was 98.37%.

Proposed Actions and Action Dates

Beginning on October 4, 2021, Worthen proposes to inspect the threading of the piston arm on each poppet valve on a weekly basis. If the piston shows signs of unthreading it is an indication that the tack weld may be broken and the piston arm may need to be rewelded. If unthreading is observed, Worthen will switch to water-based coatings and make necessary repairs to ensure the poppet valve system is functioning properly. The poppet valve is inspected quarterly and a complete internal inspection of the RTO is conducted annually.

April, please contact me if you have any questions or require further information.

Sincerely,



Tony Harb
Plant Manager
Worthen Industries, Inc.

c: Ms. Jenine Camilleri
Enforcement Unit Supervisor
EGLE, Air Quality Division
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