



Verso Corporation
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February 15, 2017

Mr. Jeremy Howe
MDEQ
Air Quality Division
120 West Chapin Street
Cadillac, MI 49601-2158

RE: Violation Notice Letter to the Escanaba Paper Company Dated February 1, 2017.

Dear Mr. Howe,
This letter is being sent in response to the Violation Notice submitted to Escanaba Paper Company (EPC) dated February 1, 2017. On October 27, 2016 the MDEQ was sent two letters and four bound stack test reports. The first letter addressed the two reports titled *Boiler MACT TEST Report No. 9 Boiler* and *Boiler MACT Test Report No. 11 Boiler*. The second letter addressed the two reports titled *Permit (ROP) Compliance Test Report No. 9 Boiler* and *Permit (ROP) Compliance Test Report No. 11 Boiler*. This letter addresses the Violation Notice which pertains to the first letter and the Boiler MACT Test Reports for No. 9 Boiler and No. 11 Boiler.

Boiler MACT Test Report for No. 11 Boiler

The first violation refers to not meeting the quality assurance and quality control (QA/QC) requirements defined in Boiler MACT (Subpart DDDDD) for mercury on No. 11 Boiler. As described in the original submittal, the mercury spiked traps were manufactured incorrectly where the sample collection direction indicator arrow was inscribed in the wrong direction; therefore, field sampling was unknowingly conducted in the opposite direction resulting in the mercury spiked masses effectively being in the second section of the tube. Spike recoveries were assessed by adding the spike masses (40 ng) to the traps 1st section and conducting the spike recovery calculations accordingly. Breakthroughs on the unspiked traps were all determined to be within the necessary specifications. If the spike mass is added to the unspiked 1st section and the breakthrough calculations are carried out accordingly, all breakthrough specifications are met. All other QA/QC specifications including Relative Deviation and Spike Recovery were met.

As described in an email dated 1/25/17 to Joel Asher, which was forwarded to you, EPC also believes the mercury QA/QC testing should be accepted based on the following:

- Repeat performance testing is time consuming, costly, and requires significant coordination with facility operations. It is unnecessary based on fuel loading, mercury content, and previous performance test results.
- The wood/coal burned in No. 11 Boiler had a mercury content of 1.75E-06 lbs/mmbtu. The Boiler MACT (BMACT) limit is 5.7E-06 lbs/mmbtu. Assuming zero control efficiency on the electrostatic precipitator there is not enough mercury in the fuels to exceed the BMACT mercury limitation.
- This was a repeat performance test. The No. 11 Boiler 2015 BMACT results are nearly identical to the 2016 BMACT results. The 2015 BMACT mercury testing was 7.1E-07 lbs/mmbtu, 12% of the BMACT limit. The 2016 results were 7.9E-07 lbs/mmbtu, 14% of the BMACT limit. These two performance tests show little variation from one another and are well below the limit.
- EPC conducted BMACT testing under two separate conditions. As shown in Appendix G, condition 1 was run at high steaming rates while burning wood, coal, and natural gas. Condition 2 was run with no natural gas to maximize mercury concentrations entering the boiler. As shown in Appendix A, all 6 test runs were well below the BMACT limit.
- After discussing the results for No. 11 Boiler with Derek Stephens, the Technical Director at AIR, Inc, it is his belief that the calculations used to determine the mercury content are reliable and meet most of the QA/QC specifications. Derek stated "I strongly believe the No. 11 test should not be rejected. Although the tubes were sampled backwards due to incorrect flow direction indicators on the traps, the QA assessments clearly indicate sufficient Relative Deviations and Spike Recoveries. The one item that cannot be 'proven' is the breakthrough determination since the spiked content for these samples was in the 2nd section; therefore, one cannot directly quantify the breakthrough percentage (%). However, I believe that it can be clearly demonstrated that if the known spike content is subtracted from the effective 2nd section and the breakthrough % calculated, there is little breakthrough and thus the samples collected should be considered representative of source emissions."

Boiler MACT Test Report for No. 9 Boiler

The second violation refers to not meeting the QA/QC requirements defined in BMACT for mercury on No. 9 Boiler. As described in an email dated 1/25/17 to Joel Asher, which was forwarded to you, EPC believes the mercury QA/QC testing should be accepted based on the following:

- Repeat performance testing is time consuming, costly, and requires significant coordination with facility operations. It is unnecessary based on fuel loading, mercury content, and previous performance test results. The No. 9 Boiler is often out of service based on operational and economic needs. When it is running, it is often run exclusively on natural gas for extended periods because the wood residuals generated on site are generally combusted in the No. 11 Boiler.
- No. 9 Boiler combusts only clean wood residuals and natural gas. The wood burned in No. 9 Boiler had a mercury content of 9.77E-07 lbs/mmbtu. The BMACT limit is 5.7E-06 lbs/mmbtu. Assuming zero control efficiency from the scrubbers there is not enough mercury in the fuels to exceed the BMACT mercury limitation.
- This was repeat performance testing. The 2015 BMACT mercury testing was 8.8E-07 lbs/mmbtu, 15% of the BMACT limit. The 2016 results were 1.3E-06 lbs/mmbtu, 22% of the BMACT limit. These two performance tests are very consistent and are both well below the emission limit.
- Condition 1 consisted of three test runs (runs 1 through 3) and was run at a very high steaming rate and high wood burning rate as shown in Appendix G of the report. Condition 2 consisted of four test runs (runs 4 through 7) while only burning

wood to maximize the mercury concentrations entering No. 9 Boiler. Although only runs 5 and 6 technically met all the QA/QC requirements, all six runs where mercury emissions were able to be calculated (runs 2 through 7) of both conditions were well below the BMACT mercury limit as shown in the first table in Appendix A. Runs 5 & 6 were used to determine compliance with BMACT performance testing. Under Rule 336.2003(2), shown below, it is within the DEQ's discretion to accept a performance test based on two successful samples.

Rule 336.2003(2), Performance Test Criteria

A performance test shall consist of a minimum of 3 separate samples of a specific air contaminant conducted within a 36-hour period, unless otherwise authorized by the department. Each of the 3 separate samples shall be obtained while the source is operating at a similar production level. For the purpose of determining compliance with an applicable emission limit, rule, or permit condition, the arithmetic mean of results of the 3 samples shall apply. If a sample is accidentally lost or conditions occur in which 1 of the 3 samples must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions, or other circumstances beyond the owner's or operator's control, then compliance may, upon the approval of the department, be determined using the arithmetic mean of the results of 2 samples.

Summary

EPC made a good faith effort to conduct all BMACT testing in a timely manner. As you noted during your onsite observation of this testing along with Joel Asher, the test crew from Advanced Industrial Resources encountered several issues and obstacles during the testing, but worked diligently to overcome these to the extent possible. EPC had no control over the QA/QC parameters for the mercury testing. Although not all of the QA/QC parameters were met for mercury, EPC and AIR believe there is more than sufficient evidence in the BMACT Reports that were submitted, along with the information contained in this letter to safely demonstrate that EPC is in full compliance with the spirit of the BMACT regulations. For these reasons, EPC is requesting the violation notice be rescinded and the BMACT testing be accepted as reported.

EPC and Verso take environmental compliance very seriously. EPC values an open, honest relationship with the DEQ and would look forward to discuss this or any concern you may have. This response is being submitted electronically, along with a single hard copy to you at the address above. Thank you for your consideration in this matter and please contact me with any questions.

Sincerely,



William R. Racine, P.E.
Environmental Manager

CC: Matt Archambeau, Jeff Maule, Adam Becker, Paula LaFleur, Brian Rayback (Pierce Atwood), Lynn Fielder (MDEQ), Mary Ann Dolehanty (DEQ), Chris Ethridge (DEQ), Thomas Hess (DEQ), Karen Kajiya-Mills (DEQ), Janis Ransom (DEQ), Joel Asher (DEQ)

File 8.3.6