

April 18, 2024

Lauren Luce

Michigan Department of Environment, Great Lakes, and Energy – Air Quality Division  
Marquette District Office  
1504 West Washington Street  
Marquette, Michigan 49855

**Response to the Letter Dated April 8, 2024**  
**Mativ (SRN B1470)**  
**Marquette, Michigan**

Dear Lauren:

On April 8, 2024, EGLE-AQD issued a Violation Notice (VN) to Mativ alleging violations of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Source (NESHAP). The specific allegations cited in the VN are as follows:

Process Description	Rule/Permit Condition Violated	Comments
FGJJJJJ-EU05	40 CFR 63.11224(a)(7), Table 3.8 and Table 6.3 of 40 CFR Part 63 Subpart JJJJJ, Special Condition (SC) VI.8	Operating limit for oxygen level (oxygen analyzer system) was not established during previous stack testing.
FGJJJJJ-EU05	40 CFR 63.11212(c), Table 3.7 and Table 6.4 of 40 CFR Part 63, Subpart JJJJJ, SC V.3	Operating limit for boiler load was not established during previous stack testing.

As requested, this letter provides information regarding the referenced citation, including: the date the alleged violation occurred; an explanation of the cause(s) and duration of the alleged violation; whether the violation is ongoing; a summary of the action(s) that have been taken and are proposed to be taken to correct the violation; the date(s) by which these action(s) will take place; and what steps are being taken to prevent a reoccurrence.

## Oxygen Trim System

Mativ operates a coal-fired boiler (EU05) equipped with an oxygen trim system. Table 3 Item 8 of Subpart JJJJJ of Part 63—Operating Limits for Boilers With Emission Limits includes the following information on oxygen trim systems:

<b>If you demonstrate compliance with applicable emission limits using. . .</b>	<b>You must meet these operating limits except during periods of startup and shutdown. . .</b>
8. Oxygen analyzer system	For boilers subject to a CO emission limit that demonstrate compliance with an oxygen analyzer system as specified in <a href="#">§ 63.11224(a)</a> , maintain the 30-day rolling average oxygen level at or above the minimum oxygen level as defined in <a href="#">§ 63.11237</a> . This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in <a href="#">§ 63.11224(a)(7)</a> .

Note: the load and minimum oxygen level is a 30-day rolling average for oxygen analyzer systems.

Mativ operates an oxygen trim system, and therefore must comply with 63.11224(a)(7):

*(7) You must operate the oxygen analyzer system at or above the minimum oxygen level that is established as the operating limit according to Table 6 to this subpart when firing the fuel or fuel mixture utilized during the most recent CO performance stack test. Operation of oxygen trim systems to meet these requirements shall not be done in a manner which compromises furnace safety.*

It should be noted that the load and minimum oxygen level is a 30-day rolling average.

An oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen monitor that automatically provides a feedback signal to the combustion air controller. This system maintains an optimum air-to-fuel ratio in the boiler. An excerpt from the USEPA’s Boiler MACT Q&A document<sup>1</sup> is included in Attachment 1. Facilities operating an oxygen trim system on their boiler do not operate with a specific oxygen limit, but the minimum oxygen level permissible is programmed in the control system.

During the 2021 stack test, a minimum level of 5% was established where it is measured for the oxygen trim system. Boiler Monitoring Data from the December 2021 stack testing shows the Mativ (formerly Neenah) site-specific limits for oxygen and boiler load.

<b>Data from 2021 Stack Testing</b>	Boiler Load (KPPH)	Oxygen Analyzer
12/7/21	114.01	5.16
12/7/21	113.21	4.84
12/8/21	113.39	4.96
Averages for three tests	113.5	5.0
Regulatory Site Limits	124.9	5.0

<sup>1</sup> [https://www.epa.gov/sites/default/files/2017-03/documents/boiler\\_mact\\_major\\_source\\_qa\\_3.23.pdf](https://www.epa.gov/sites/default/files/2017-03/documents/boiler_mact_major_source_qa_3.23.pdf)

This information was programmed into the oxygen trim system. Operators at Mativ monitor boiler performance and are required to operate the oxygen trim system, but they do not adjust dampers, etc. to change the oxygen level as this is automatically done by the oxygen trim system. This is why your question was confusing for plant personnel; the plant does not comply with a minimum oxygen level in the boiler, it complies with the requirement to properly operate an oxygen trim system which has a minimum allowable oxygen level of 5%<sup>2</sup>.

Information on the programming indicates the PLC oxygen trim curve has been set to 5.0. This information was collected on December 9, following the stack test that was completed on December 8, 2021:

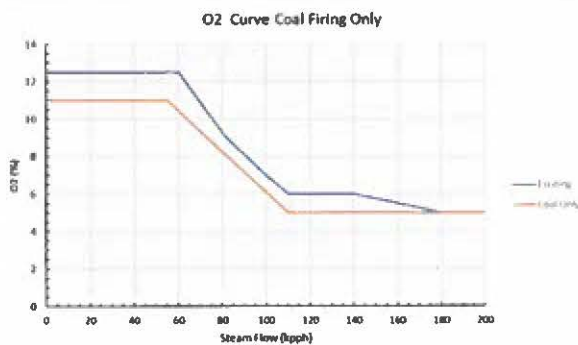


Figure 2. New Coal Firing O2 curve compared with the existing.

It should be noted that the CO stack test performed in 2021 demonstrated compliance with the 420 ppm CO (adjusted to 3% O<sub>2</sub>) with a comfortable margin of compliance (see Attachment 2). Attachment 2 also clearly indicates a maximum load of 113,000 lbs., therefore, the boiler would be limited to 124,300 lbs. steam, which is above where it is currently operating. In the past, it has been tested at higher capacities. The three prior tests averaged 85.4 ppm CO (adjusted to 3% O<sub>2</sub>). More recent CO testing in March 2024 averaged 29.3 ppm (adjusted to 3% O<sub>2</sub>) or only 7% of the limit (see Attachment 3). This would suggest that the oxygen trim system is very effective at ensuring low emissions of CO.

We would like to correct some inaccuracies about the availability of this information during the inspection on February 8, 2024. During this inspection, there was no discussion on the oxygen levels in the boiler or the operation of the oxygen trim system. While a great deal of information on the facility was requested as part of the February 8, 2024 inspection, no information on the oxygen trim system or oxygen levels in the boiler was requested. After the inspection on February 22, 2024, Mativ submitted information requested by EGLE (see Attachment 4). Information on the oxygen levels maintained by the oxygen trim system was not requested until March 20, 2024 (Attachment 5).

To demonstrate that the information was available on February 8, 2024, if it were requested, we have included the information in Attachment 6. As the data indicates, the oxygen trim system is working correctly, and oxygen is maintained well above the 5% minimum level.

In accordance with our Mativ environmental policy, the plant continually strives to operate efficiently, with a commitment to continual improvement, prevention of pollution, and compliance with all regulatory requirements. Our commitment to environmental compliance is very important and our past efforts to maintain environmental compliance and remain a good neighbor are well documented. We are concerned about this VN and feel it was unfounded. We would like to set up a meeting with your office to discuss the violation and how EGLE might update its inspection report to reflect that the facility is currently operating in compliance.

<sup>2</sup> Please note that the oxygen analyzer associated with the oxygen trim system is not located in the same part of the exhaust system as emissions are measured. The NESHAP indicates that "Oxygen monitors and oxygen trim systems must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location" as included in 63.1124(a).



If you have any questions, please contact [brian.ciupak@mativ.com](mailto:brian.ciupak@mativ.com) or 906.387.7561.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Houghton". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Brian Houghton  
Mill Manager  
Neenah Paper Michigan Inc.  
501 East Munising Ave.  
Munising, MI 49862

By email

cc: Brian Ciupak, Mativ  
Annette Switzer, EGLE-AQD  
Christopher Ethridge, EGLE-AQD  
Brad Myott, EGLE-AQD  
Jenine Camilleri, EGLE-AQD  
Michael Conklin, EGLE-AQD  
Lillian Woolley, Fishbeck