

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: CEMS Test Observation

N392949166

FACILITY: RESOLUTE FOREST PRODUCTS - MENOMINEE	SRN / ID: N3929
LOCATION: 701 FOURTH AVE, MENOMINEE	DISTRICT: Upper Peninsula
CITY: MENOMINEE	COUNTY: MENOMINEE
CONTACT: Emily Lang , Environmental Engineer	ACTIVITY DATE: 06/12/2019
STAFF: Michael Conklin	COMPLIANCE STATUS: Unknown
SUBJECT: RATA on CEMS for EUBOILER	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

Resolute Forest Products RATA
June 12, 2019

Background

On April 18, 2019, the UP District Office received a test protocol from Resolute Forest Products for Relative Accuracy Test Audits (RATAs) on EUBOILER to satisfy requirements and show compliance with Permit To Install (PTI) 635-93B and 40 CFR Part 60, Subpart Db. A copy of the test protocol was also submitted to the Technical Programs Unit (TPU). TPU approved of the test protocol on May 20, 2019, and testing was scheduled for June 12, 2019.

EUBOILER is a Nebraska natural gas-fired boiler equipped with low NOx burners and fluegas recirculation for NOx control. The nameplate capacity of boiler is 136,000 pounds of steam per hour and a heat input rate of 170 MMBtu/hr. PTI No. 635-93B restricted the heat input rate to 162 MMBtu/hr. EUBOILER is subject to 40 CFR Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. To comply with the NOx emission limits under 40 CFR 60.44b, the boiler utilizes a Continuous Emission Monitoring System (CEMS). A RATA is required annually, as defined in 40 CFR Part 60 Appendix F, that ensures the CEMS data being reported is accurate. TRC Environmental Corporation (TRC), based out of Burr Ridge, Illinois, provided the testing services.

Observation

Testing began at 7:30 AM on June 12 for 10 test runs, with each lasting 21 minutes. TRC provided the Reference Method (RM) instrumentation and data acquisition system. Test data was collected for O₂ and NOx from the Reference Method and Resolute's CEMS to determine the relative accuracy of the system for each pollutant/diluent component. During the test runs, the steam load (process data) was being recorded and was staying consistent around 85,000 lb/hr. The NOx (ppm) and O₂ percentage were also being recorded during each test run. The NOx on the CEMS was staying consistent at 42.4 ppm and for the RM, 46 ppm. Both the O₂ percentage from the CEMS and the RM were staying at 3%.

The NOx relative accuracy is compared by calculating the emissions in pound per million BTU (lbs/MMBtu) and then calculating the relative accuracy of the CEMS to the RM measured emissions. The NOx lb/MMBtu from the CEMS was consistent at 0.052 and the RM was 0.056. From my observations, testing was performed in accordance with all protocols and process data was continually monitored and recorded.

NAME Michael Conklin

DATE 6/19/2019 SUPERVISOR EJL