

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

FCE Summary Report

Facility : ANR Pipeline Co - Woolfolk Compressor Station	SRN : B7220
Location : 11039 150th Ave.	District : Grand Rapids
	County : MECOSTA
City : BIG RAPIDS State: MI Zip Code : 49307	Compliance Status : Compliance
Source Class : MAJOR	Staff : Chris Robinson
FCE Begin Date : 5/16/2021	FCE Completion Date : 5/16/2022
Comments : FY '22 Inspection	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
05/04/2022	MAERS	Compliance	MAERS report certification received 3/14/22. Supplemental Control Template submittal certification received 3/28/22. The facility is using MAERS, EPA emission factors and stack test data. Documentation has been provided. No changes were made to database as submitted.
05/04/2022	Stack Test	Compliance	Catalyst replacement for Unit EUWL004 per 40CFR Part 63 Subpart ZZZ (40CFR 63.6640(b)). Formaldehyde reduction was 86.90% with a minimum limit of 76%.
05/03/2022	Stack Test Observation	Compliance	Observation of Part 8 NOx Compliance testing for Units 1 - 9
04/20/2022	ROP SEMI 2 CERT	Compliance	Semi-Annual ROP Report Certification for the period of 7/1/2021 through 12/31/2021 was received on 3/14/2021 indicating no deviations. However, A deviation form was included indicating that 2 deviations occurred in 2021. One for failure to conduct ozone testing on unit 6, which resulted in a VN and the second for having a high DP alarm on unit 4 which occurred on December 5, 2021. A revised form EQP5736 was received on 4/1/2022 with the correct box checked for deviations.

Activity Date	Activity Type	Compliance Status	Comments
04/05/2022	On-site Inspection	Compliance	FY '22 on-site inspection to determine the facility's compliance status with MI-ROP-B7220-2017.
04/05/2022	Stack Test Observation	Compliance	Unit 17 NOx Testing Observations
03/30/2022	MACT (Part 63)	Compliance	Received Notification of compliance status for Subpart DDDDD on 3/14/2022 properly certified. The Tune-up for unit EUWLBOILER001 was conducted on 9/9/2021.
03/30/2022	MACT (Part 63)	Compliance	Semi-Annual RICE MACT (Subpart ZZZZ) compliance report for the period of 7/1/2021 through 12/31/2021. Includes EPA-approved Alternative Monitoring Report identifying hours of operation at low engine loads. Hard copy received timely and properly certified on 3/14/2021.
03/30/2022	ROP Annual Cert	Compliance	2021 Annual Compliance Certification received timely and properly certified on 3/14/2021 indicating deviations occurred. A deviation form was included for not conducting annual NOx testing on unit 6 during the ozone control period and for having a high DP on unit 4 on 12/5/2021. A violation Notice was previously issued for failure to test unit 6.

Activity Date	Activity Type	Compliance Status	Comments
02/24/2022	Stack Test	Compliance	<p>NSPS JJJJ test report received (1/11/22) within 60 days after testing (11/23/21) for Emergency Generator EUWLGGEN004. Report was properly certified. Process data requested to be provided in TPU's approval letter was not provided, however since a portable load bank was necessary for testing loads were monitored directly from the load bank not calculated. This information was provided which indicated that the generator was operating within the 10% max load requirement. Testing confirmed that the unit could operate at that load and still meet emission limits specified in NSPS JJJJ for NOx (160 ppmvd@15% O2), CO (540 ppmvd @ 15% Oz), and VOCs (86 ppmvd @ 15% O2). Results were as follows: NOx = 131.63, CO = 158.98, and VOC's were 23.35. EUWLGGEN004 is rated to 800 kw and the average load during testing was 752.7 kw.</p>
11/23/2021	Stack Test Observation	Compliance	<p>Observation of Initial emissions testing of emergency generator EUWLGGEN004 required by 40 CFR, Part 60, Subpart JJJJ.</p>

10/27/2021	Stack Test	Compliance	<p>Catalyst replacement (per 40CFR 63.6640(b)) and 2020 Ozone Season Monitoring Test Results (per Michigan Part 8 Rules for Large NOx SIP Call Engines) for Engines 1-5 & 7-9. Report received 9/17/2021 properly Certified and 1 day late. Sixty (60) days from the end of testing was 9/21/2021. Unit 6 was down for repairs and could not be tested. Based on discussions with staff this unit did operate in 2021, therefore required to be tested in order to demonstrate compliance with applicable ozone season emission limits as well as catalyst testing since this unit's catalyst was also replaced.</p> <p>Catalyst testing was conducted because all of the stacks were replaced requiring a new and different style of catalyst. Both eth Catalyst testing and Ozone season testing was conducted simultaneously. Testing was conducted from July 20, 2021, through July 23, 2021. Ozone Season test results (NOx) indicate compliance with Part 8 and ROP NOx emission limits OF 20.5 g/bhp-hr. Formaldehyde results from catalyst testing indicate compliance with the minimum 76% reduction requirement. The Engines were tested at >90% load with the following results:</p> <p>Unit 1: Avg Load of 96.6% and NOx emissions of 4.42 g/bhp-hr. (~22% of limit) Formaldehyde Reduction = 88.11%</p> <p>Unit 2: Avg Load of 95.2% and NOx emissions of 9.23 g/bhp-hr. (~45% of limit) Formaldehyde Reduction = 86.73%</p> <p>Unit 3: Avg Load of 95.8% and NOx emissions of 8.18 g/bhp-hr. (~40% of limit) Formaldehyde Reduction = 89.57%</p> <p>Unit 4: Avg Load of 95.9% and NOx emissions of 16.33 g/bhp-hr. (~80% of limit)</p>
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10/27/2021	Stack Test	Compliance	<p>Formaldehyde Reduction = 90.78%</p> <p>Unit 5: Avg Load of 92.4% and NOx emissions of 9.32 g/bhp-hr. (~45% of limit) Formaldehyde Reduction = 93.16%</p> <p>Unit 7: Avg Load of 95.6% and NOx emissions of 4.63 g/bhp-hr. (~23% of limit) Formaldehyde Reduction = 90.73%</p> <p>Unit 8: Avg Load of 96.0% and NOx emissions of 4.12 g/bhp-hr. (~20% of limit) Formaldehyde Reduction = 91.96%</p> <p>Unit 9: Avg Load of 93.4% and NOx emissions of 12.32 g/bhp-hr. (~60% of limit) Formaldehyde Reduction = 91.34%</p> <p>The report appears to be accurate and acceptable however not testing Unit 6 for NOx within the Ozone Season (June 1 – Sept. 1) demonstrates non-compliance with testing requirements specified in the facility's ROP (SC VI.6 of FG-RICE-818-WLENGINES) for which a violation Noticed (VN) will be issued. At this time a VN will not be issued for not testing Formaldehyde reduction since the unit is inoperable. However, this must be addressed once the unit becomes operational.</p>
09/16/2021	ROP Semi 1 Cert	Compliance	<p>Semi-Annual ROP Report Certification for the period of 1/1/2021 through 6/30/2021 was received via email on 9/7/2021. Hard copy received timely and properly certified on 9/8/2021. No deviations were noted.</p>
09/16/2021	MACT (Part 63)	Compliance	<p>Semi-Annual RICE MACT (Subpart ZZZZ) compliance report for the period of 1/1/2021 through 6/30/2021. Includes EPA-approved Alternative Monitoring Report identifying hours of operation at low engine loads. Received via email on 9/7/2021. Hard copy received timely and properly certified on 9/8/2021.</p>

Activity Date	Activity Type	Compliance Status	Comments
07/20/2021	Stack Test Observation	Compliance	Observations of formaldehyde reduction verification for units 1-9, due to Catalyst replacement as required per 40CFR Part 63 Subpart ZZZ (40CFR 63.6640(b)) and Part 8 NOx testing.
05/27/2021	Stack Test	Compliance	Catalyst replacement for Unit EUWL001 per 40CFR Part 63 Subpart ZZZ (40CFR 63.6640(b)). Formaldehyde reduction was 94.12% with a minimum limit of 76%.
05/17/2021	MAERS	Compliance	ROP certification form for MAERS received 2-26-21 Stack heights were changed at the request of the facility's environmental specialist Chris Waltman. No other changes were made to the database (CRobinson 5/17/2021).

Name:


Chris Waltman

Date:

5/16/2022

Supervisor:
