DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

FCE Summary Report

Facility : TILDEN MINING COMPANY LC	SRN :	B4885
Location: 1 TILDEN MINE ROAD PO BOX 2000	District :	Marquette
	County :	MARQUETTE
	ompliance atus :	Compliance
Source Class : MAJOR	Staff : Michae	el Conklin
o <u>-</u> /= ·/ <u>-</u> o <u>-</u> /	FCE Completion Date :	5/2/2023
Comments : Full compliance evaluation for the period of 2/21/2022 through 2/21/2023. No violations were found. Improvements that could be made in recordkeeping and reporting were communicated with the facility.		

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
03/10/2023	MAERS	Compliance	2022 MAERS - Refer to MAERS for any comments.
02/21/2023	On-site Inspection	Compliance	Targeted inspection for FY 23.
02/07/2023	Excess Emissions (CEM)	Compliance	EU-KILN 1 - North & South Stacks - NOX & SO2 CEMS 4th Qtr 2022 EE & CEM DT Report (2) from 10/1/22 to 12/31/22.
02/07/2023	Excess Emissions (CEM)	Compliance	EU-BOILER4 - NOx PEMS 4th Qtr 2022 EE & PEM DT Report (1) from 10/1/22 to 12/31/22. CEM downtime was 1 hour
02/07/2023	ROP Other	Compliance	EU-BOILER4 - NOx PEMS Hourly Steam & NOx Emissions (1) from 10/1/22 to 12/31/22.
02/07/2023	ROP Other	Compliance	EU-BOILER4 - NOx PEMS 30- Day Average NOx Emissions (1) - Daily PEMS Calibration Report (1) from 10/1/22 to 12/31/22.
02/07/2023	CEM RATA	Compliance	EU-BOILER4 - NOx PEMS 4th Qtr Relative Accuracy Audit (1) from 10/1/22 to 12/31/22. RAA = 12.12%.
02/07/2023	CEM RATA	Compliance	EU-KILN 1 - North & South Stacks - NOx & SO2 4th Quarter 2022 CEMS RATA Report.
11/09/2022	Excess Emissions (CEM)	Compliance	EU-BOILER4 - NOx PEMS EE and DT report, Hourly Steam and NOx emissions, and 30-day average NOx emissions. 0 hours of excess emissions reported, 29 hours of PEMS downtime reported.

Activity Date	Activity Type	Compliance Status	Comments
11/09/2022	Stack Test	Compliance	EU-KILN 1 - North & South Stacks - NOx and SO2 CEMS 3rd Quarter 2022 EE & DT Report from 7/1/22 to 9/30/22. 0 excess emissions reported for SO2, 2 hours of downtime.
11/09/2022	CEM RATA	Compliance	EU-KILN 1 - North & South Stacks - NOx & SO2 CEMS RATA Report. For SO2, the relative accuracy was 3.3%, for NOx the relative accuracy was 2.8%, and stack flow was 1.9%.
10/17/2022	ROP Semi 1 Cert	Compliance	Semi-Annual Report Certification from 1/1/2022 to 6/30/2022.
10/17/2022	MACT (Part 63)	Compliance	Subpart RRRRR 63.9641(b) Semiannual Compliance Report Spreadsheet via CEDRI 9/13/2022 (1-1-22 to 6-30-22)
10/17/2022	Excess Emissions (CEM)	Compliance	EU-BOILER4 - NOx PEMS Excess Emission & Monitor Downtime Report (1) from 1/1/22 to 6/30/22. Total downtime was 1 hour.
10/17/2022	ROP Other	Compliance	40 CFR; Part 52; Subpart X; 52.1183(n) SSM Report from 1/1/22 to 6/30/22
10/17/2022	ROP Other	Compliance	EU-KILN 1&2 - North & South Stack - Opacity Monitor EE & Performance Reports (4), North & South Stacks - COM Quarterly Cal & Certification Audit Reports, Startup, Shutdown, and Malfunction Reports from 1/1/22 to 6/30/22.
10/17/2022	ROP Other	Compliance	EU-KILN 1&2 - Sulfur Dioxide emissions, and coal analysis results; EUDRYER 1&2 - Used Oil Burned Record and 12-month rolling emissions from oil; EUBOILER3 - Used Oil Burned Record and 12-month rolling emissions from oil; EUBOILER1 - Used Oil Burned Record and 12- month rolling emissions from oil.
10/17/2022	ROP Other	Compliance	2022 Ozone Season NOx Control Plan Report Report (1) from 05/01/2022 to 09/30/2022. 37% reduction in NOx emissions due to downtime.
09/22/2022	CEM RATA	Compliance	EU-BOILER4 - NOx PEMS RATA. The RAA for the NOx PEMS was 14.29% of the mean of the portable analyzer samples.

Activity Date	Activity Type	Compliance Status	Comments
08/17/2022	Excess Emissions (CEM)	Compliance	EU-KILN 1 - North & South Stacks - NOx and SO2 CEMS 2nd quarter 2022 excess emissions & CEM downtime report from 4/1/22 to 6/30/22. No excess emissions reported.
08/17/2022	Excess Emissions (CEM)	Compliance	EU-BOILER4 - NOx PEMS 2nd Quarter 2022 EE & PEM DT Report from 4/1/22 to 6/30/22. No excess emissions reported.
08/17/2022	CEM RATA	Compliance	EU-BOILER4 - NOx PEMS Relative Accuracy Test Audit. The relative accuracy of the NOx CEMS using lb/MMBtu was 5.62% of the mean of the reference method samples.
05/26/2022	Excess Emissions (CEM)	Compliance	EU-KILN 1 - North & South Stacks - NOx and SO2 CEMS 1st Quarter 2022 EE & CEM DT Report from 1/1/22 to 3/31/22.
05/26/2022	Excess Emissions (CEM)	Compliance	EU-BOILER4 - NOx PEMS 1st Quarter 2022 EE & PEM DT Report (1) from 1/1/22 to 3/31/22.
05/26/2022	CEM RATA	Compliance	EU-BOILER4 - NOx PEMS 1st Quarter Relative Accuracy Audit (1) from 1/1/22 to 3/31/22. The RAA for the NOx PEMS was 7.14%.
04/05/2022	ROP Other	Compliance	MACT RRRR semiannual compliance report for the period 07/01/2021 through 12/31/2021. Opacity exceedances documented for EUKILN1 and EUKILN2.
04/05/2022	Excess Emissions (CEM)	Compliance	EU-KILN 1&2 - North & South Stacks - Opacity Monitor EE & Performance Report from 7/1/21 to 12/31/21. EUKILN1 North stack had a total of 0.03% of excess emissions and monitor downtime, EUKILN2 South stack had a total of 0.06% excess opacity, EUKILN2 North stack had a total of 0.02% excess opacity and 0.08% monitor downtime, EUKILN2 South stack had a total of 0.03% excess opacity and 0.11% monitor downtime
04/05/2022	ROP Other	Compliance	EU-KILN1&2 - North & South Stacks - COM Quarterly Cal & Certification Audit Reports from 7/1/21 to 12/31/21
04/05/2022	ROP Other	Compliance	40 CFR; art 52; Subpart X; 52.1183 SSM Report from 7/1/21 to 12/31/21

Activity Date	Activity Type	Compliance Status	Comments
04/05/2022	Excess Emissions (CEM)	Compliance	EU-BOILER4 - NOx PEMS EE & Downtime Report (1) from 7/1/21 to 12/31/21.
04/05/2022	ROP Other	Compliance	EUKILN 1 & 2 - Sulfur Dioxide Emission and Coal Analysis Results from 7/1/21 to 12/31/21.
04/05/2022	ROP Other	Compliance	EUDRYER 1 & 2 - Used Oil Burned Record, & Rolling 12- Calendar Month Emissions from Oil from 7/1/21 to 12/31/21. No oil burned.
04/05/2022	ROP Other	Compliance	EUBOILER3 - Used Oil Burned Record, & Rolling 12-Calendar Month Emissions from Oil from 7/1/21 to 12/31/21. No used oil burned.
04/05/2022	ROP Other	Compliance	EUBOILER1 - Used Oil Burned Record, & Rolling 12-Calendar Month Emissions from Oil from 7/1/21 to 12/31/21. No used oil burned.
03/29/2022	Complaint Investigation	Unknown	Investigate fugitive dust incident from tailings basin on 3/27/2022.
03/24/2022	ROP Annual Cert	Compliance	Annual Report Certification from 1/1/21 to 12/31/21 for MI-ROP- B4885-2017b. Certified by RO, Ryan Korpela. Deviations reported for EU-KILN1 and EU-KILN 2 North and South stacks for opacity greater than 20%, less than 0.05% of operating time during period. Also, inspections and activities not properly documented, such as work orders written and recorded to the wrong piece of equipment.
03/24/2022	ROP SEMI 2 CERT	Compliance	Semi-Annual Report Certification from 7/1/21 to 12/31/21 for MI- ROP-B4885-2017b. Certified by RO, Ryan Korpela. Deviations reported for EU-KILN1 and EU- KILN 2 North and South stacks for opacity greater than 20%, less than 0.05% of operating time during period. Also, inspections and activities not properly documented, such as work orders written and recorded to the wrong piece of equipment.
03/16/2022	MAERS	Compliance	2021 MAERS - Refer to MAERS for any comments

Activity Date	Activity Type	Compliance Status	Comments
02/24/2022	Stack Test	Compliance	Taconite MACT test results for EU -CONV16.1-17.1, EUCONV17.1- 17.2, EU-CONVEYOR1, EU- CONVEYOR12A-13, EU- CONVEYOR12B-13, EU- CONVEYOR4A-4A1, EU- CONVEYOR4B-4C, EU- CONVEYOR4C-4D, EU- PRIMARYCRUSHER, EUCONV13-17.1, EU-CONV15.8- 15.9, EUFEEDMIXER1, EU- PRODCONV2, EU-COOLER2, EU -UNIT2LHF, EUOREDRYER1, EUOREDRYER2.
02/24/2022	Excess Emissions (CEM)	Compliance	EU-BOILER4 - NOx PEMS 4th Quarter 2021 EE & PEM DT Report (1) from 10/1/2021 to 12/31/2021
02/24/2022	ROP Other	Compliance	EU-BOILER4 - NOx PEMS Hourly Steam & NOx Emissions (1) from 10/1/2021 to 12/31/2021
02/24/2022	ROP Other	Compliance	EU-BOILER4 - NOx PEMS 30- Day Average NOx Emissions (1) from 10/1/2021 to 12/31/2021
02/24/2022	CEM RATA	Compliance	EU-BOILER4 - NOx PEMS 4th Quarter Relative Accuracy Audit (1) from 10/1/2021 to 12/031/2021
02/24/2022	Excess Emissions (CEM)	Compliance	EU-KILN 1 - North & South Stacks - NOx CEMS 4th Quarter 2021 EE & CEM DT Report from 10/1/2021 to 12/31/2021.
02/24/2022	Excess Emissions (CEM)	Compliance	EU0KILN 1 - North & South Stacks - NOx & SO2 4th Quarter 2021 CEMS Audit Report from 10/1/2021 to 12/31/2021.
02/24/2022	Excess Emissions (CEM)	Compliance	EU-KILN 1 - North & South Stacks - SO2 CEMS 4th Quarter 2021 EE & CEM DT Report from 10/1/2021 to 12/31/2021.

Name: Millaud Inflan Date: 5/31/2023 Supervisor: Millaud Inflan