

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

B264757816

FACILITY: LBWL - Eckert Station & REO Town Plant		SRN / ID: B2647
LOCATION: 1201 South Washington Avenue, LANSING		DISTRICT: Lansing
CITY: LANSING		COUNTY: INGHAM
CONTACT: Nathan Hude, Environmental Services		ACTIVITY DATE: 03/17/2021
STAFF: Julie Brunner	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: As part of a Full Compliance Evaluation (FCE), AQD staff conducted a compliance inspection of Lansing Board of Water and Light (LBWL) – Eckert Power Station and REO Town Plant on March 17, 2021.		
RESOLVED COMPLAINTS:		

As part of a Full Compliance Evaluation (FCE), AQD staff conducted a compliance inspection of Lansing Board of Water and Light (LBWL) – Eckert Power Station and REO Town Plant on March 17, 2021. The last compliance inspection was on December 12 & 14, 2018.

LBWL Contacts:

Mr. Nathan Hude, Environmental Services Department, 517-702-6170, nathan.hude@lbwl.com

Facility Description:

The stationary source consists of two utility power plants that generate electricity and steam. Eckert Station has only three (3) coal-fired boilers capable of generating electric power, two of which also provide back-up steam to the Lansing Central Steam District, fly-ash handling systems and storage silo, and mechanical draft cooling towers. REO Town Plant is a combined-cycle, cogeneration facility consisting of two natural gas-fired turbines, two heat recovery steam generators (HRSG) with duct burners, steam turbines, a natural gas-fired auxiliary boiler, a natural gas-fired emergency engine, and a four cell mechanical draft cooling tower. Eckert station was co-located with Moores Park Steam Station. Moores Park Steam Station was shut down as part of the project to build the REO Town Plant. Eckert Station was scheduled to retire on December 31, 2020.

Due to delays in construction of the LBWL Delta Energy Plant (DEP), LBWL is short 55 MW for the MISO year that ends May 31, 2021. A DEP simple cycle turbine was committed to start-up in September of 2020 but due to COVID construction is behind. Eckert Station, EUBOILER4, was placed in outage with MISO instead of retired so it can be called up in an extreme emergency. The updated plan is to submit the notice of retirement for EUBOILER1, EUBOILER3, EUBOILER4, EUBOILER5 and EUBOILER6 to EGLE and EPA after May 31, 2021 when the commitment to MISO ends.

LBWL – Eckert Station and REO Town Plant are considered to be one stationary source. The REO Town Plant is located diagonally to the northeast of Eckert Station, and the two plants share a steam distribution line to GM and downtown Lansing. The stationary source is located in central Lansing and the surrounding area is a mix of residential, commercial, and industrial properties. Also, Moores Park is located directly south of Eckert Station on the other side of the Grand River.

Regulatory Overview:

The facility operates per the conditions of Renewable Operating Permit (ROP) No. MI-ROP-B2647-2018. The ROP was renewed on March 6, 2018, and the next ROP renewal application is due between September 6, 2021 and September 6, 2022. With the last renewal, the conditions for the emission units at the Moores Park Steam Station were removed from the ROP and EUBOILER2 which has been

dismantled. Also, there are no plans to operate EUBOILER1 and EUBOILER3 but they remained on the ROP at the request of LBWL.

LBWL – Eckert Station and REO Town Plant is currently a major Prevention of Significant Deterioration (PSD) source due to the potential to emit of greater than 250 tons per year (tpy) of regulated pollutants. Potential emissions of carbon monoxide (CO), nitrogen oxides (NO_x), coarse and fine particulate matter (PM), and sulfur dioxide (SO₂) at this facility are greater than 250 tpy. The facility is also major for hazardous air pollutants (HAPs) with the potential to emit (PTE) in equal or greater quantities of 10 tpy of any single HAP and 25 tpy of aggregate HAPs. The PTE of greenhouse gases (GHG) in carbon dioxide equivalents (CO₂e) is greater than 75,000 tpy. CO₂e is a calculation of the combined global warming potentials of six GHGs: carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The facility is subject to the Title V - Renewable Operating Permit Program, and also the following federal regulations for air pollutants as discussed below.

40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units - The provisions of this subpart apply to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)). The natural gas-fired auxiliary boiler (EUAUXBOILER) at the REO Town Plant is subject.

40 CFR 60, Subpart Y for Coal Preparation and Processing Plants - The coal handling system (EUACOAL) at Eckert Station has an installation date of July 1979. It was confirmed with the facility that they are subject based on the following applicability criteria:

§60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in §§60.251, 60.252(a), 60.253(a), 60.254(a), 60.255(a), and 60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction, or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems. Eckert has coal storage systems and conveying equipment that are subject. The ROP application was amended to include 40 CFR 60, Subpart Y. Notification under 40 CFR 60.7 of construction, initial startup, and performance testing (opacity) was completed.

40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines - The provisions of this subpart apply to stationary combustion turbines with a heat input at peak load equal to or greater than 10 MMBtu per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005. The two (2) natural gas-fired turbines (EUTURBINE1 and EUTURBINE2) at the REO Town Plant are subject.

40 CFR 60, Subpart JJJJ, Standards of Performance for Spark Ignition Internal Combustion Engines (SI ICE) - The provisions of this subpart apply to SI ICE that commence construction (ordered) after June 12, 2006 for the natural gas-fired emergency engine (EUNGINE) at the REO Town Plant.

40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT) – This subpart establishes emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. For the natural gas-fired engine (EUNGENINE), compliance with the RICE MACT is demonstrated through compliance with 40 CFR 63, Subpart JJJJ. For the RICE MACT, the conditions are already incorporated into the special conditions for the diesel fuel-fired emergency engines at Eckert Station.

40 CFR 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (Utility MACT) - This subpart establishes emission limitations and operating limitations for HAPs emitted from coal- and oil-fired utility boilers located at major sources of HAP emissions. The regulation is commonly referred to as MATS. The coal-fired boilers at Eckert Station are subject to this regulation.

40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT) - This subpart establishes emission limitations and operating limitations for HAPs emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP emissions. Conditions for Boiler MACT were added for EUAUXBOILER. The initial notification for Boiler MACT was submitted on July 24, 2013 for EUAUXBOILER (constructed after June 4, 2010 so new as construction was commenced on June 9, 2011 and startup was July 1, 2013).

The coal-fired boilers at Eckert Station and the natural gas-fired turbines at the REO Town Plant are subject to 40 CFR 72 Acid Rain Permit requirements which are on the ROP.

The Cross State Air Pollution Rule (CSAPR) requirements (40 CFR 97) for the coal-fired boilers at Eckert Station replaced the CAIR requirements in the ROP renewal. The requirements for the NOx Annual Trading Program, NOx Ozone Season Group 2 Trading Program, and SO₂ Group 1 Trading Program were added. The natural gas-fired turbines at the REO Town Plant are not subject to CSAPR.

The following is a list of emission units (EU) on ROP No. MI-ROP-B2647-2018.

Eckert Station:

EU	Description (Install Date/Mod Date)	Notes /
		Standards
EUBOILER1	Babcock and Wilcox pulverized coal-fired boiler with No. 2 fuel oil for startup and flame stabilization. Rated at 509 MMBtu/hr. Controlled with Low NOx Burners (LNB), Overfire Air (OFA) and Electrostatic Precipitator (ESP). Production of steam is used for electric power generation and for	Not operational / 40 CFR 63, Subpart UUUUU / 40 CFR 72 Acid Rain / 40 CFR 97 CSAPR

EU	Description (Install Date/Mod Date)	Notes /
		Standards
	providing backup steam for sale to customers. (January 1954/January 1986)	
EUBOILER3	Combustion Engineering pulverized coal-fired boiler with No. 2 fuel oil for startup and flame stabilization. Rated at 522 MMBtu/hr. Controlled with LNB, OFA, and ESP. Production of steam is used for electric power generation and for providing backup steam for sale to customers. (January 1961/January 1986)	Not operational / 40 CFR 63, Subpart UUUUU / 40 CFR 72 Acid Rain / 40 CFR 97 CSAPR
EUBOILER4	Babcock and Wilcox pulverized coal-fired boiler with No. 2 fuel oil for startup and flame stabilization. Rated at 807 MMBtu/hr. Controlled with LNB, OFA and ESP. Production of steam for electric power generation. (January 1964/January 1982)	A backup steam line was installed on February 8, 2016. ACI system installed on February 26, 2016. / 40 CFR 63, Subpart UUUUU / 40 CFR 72 Acid Rain / 40 CFR 97 CSAPR
EUBOILER5	Babcock and Wilcox pulverized coal-fired boiler with No. 2 fuel oil for startup and flame stabilization. Rated at 807 MMBtu/hr. Controlled with LNB, OFA and ESP. Production of steam for electric power generation. (January 1968/January 1982)	A backup steam line was installed on February 8, 2016. ACI system installed on February 26, 2016. / 40 CFR 63, Subpart UUUUU / 40 CFR 72 Acid Rain / 40 CFR 97 CSAPR
EUBOILER6	Babcock and Wilcox pulverized coal-fired boiler with No. 2 fuel oil for startup and flame stabilization. Rated at 807 MMBtu/hr. Controlled with LNB, OFA and ESP. Production of steam for electric power generation. (January 1970/January 1982)	ACI system installed on February 26, 2016. / 40 CFR 63, Subpart UUUUU / 40 CFR 97 CSAPR
EUASHECKERT	Two fly ash handling systems for Eckert Station including a 1,000 ton ash silo, two (2) fabric filters, two (2) mechanical vacuum producers, one (1) wetted ash rotary unloader, and two (2) telescopic discharge chutes. (April 1981)	Serves EUBOILER4, 5, & 6
EUACOAL		

EU	Description (Install Date/Mod Date)	Notes /
		Standards
	The process is a coal handling system that serves Eckert Station. It includes coal conveyors, coal bunkers, coal pile, and equipment to apply dust suppressant to the coal. (July 1979)	Serves EUBOILER4, 5, & 6 / 40 CFR 60, Subpart Y
EUENGINE1	Compression ignition diesel fuel fired 2628 hp emergency engine (RICE). Engine drives a standby 1,825 kW electric generator. (June 2006)	Not operational / 40 CFR 63, Subpart ZZZZ, PTI void and will be removed from the ROP at the next renewal
EUENGINE2	Compression ignition diesel fuel fired 2628 hp emergency engine (RICE). Engine drives a standby 1,825 kW electric generator. (June 2006)	Not operational / 40 CFR 63, Subpart ZZZZ, PTI void and will be removed from the ROP at the next renewal
EUENGINE3	Compression ignition diesel fuel fired 2628 hp emergency engine (RICE). Engine drives a standby 1,825 kW electric generator. (June 2006)	Not operational / 40 CFR 63, Subpart ZZZZ, PTI void and will be removed from the ROP at the next renewal
EUENGINE4	Compression ignition diesel fuel fired 2628 hp emergency engine (RICE). Engine drives a standby 1,825 kW electric generator. (June 2006)	Not operational / 40 CFR 63, Subpart ZZZZ, PTI void and will be removed from the ROP at the next renewal
EUPARTSWASHER	Thirty gallon parts washer for cleaning/degreasing parts using Stoddard solvent/mineral spirits	Rule 281(2)(h) or Rule 285(2)(r)(iv)

REO Town Plant:

EU	Description (Install Date/Mod Date)	Notes /
		Standards
EUCOOLTWR	A four-cell, mechanical draft cooling tower. (4/11/2013)	NA

EU	Description (Install Date/Mod Date)	Notes / Standards
EUNGINE	A nominally rated 12.8 MMBtu/hr (1,365 kW) natural gas-fired spark ignition internal combustion engine for emergency use. (5/8/2013)	40 CFR 60, Subpart JJJJ / 40 CFR 63, Subpart ZZZZ
EUAUXBOILER	A nominally rated 245 MMBtu/hr natural gas-fired auxiliary boiler. (7/1/2013)	40 CFR 60, Subpart Db / 40 CFR 63, Subpart DDDDD
EUTURBINE1	A 430 MMBtu/hr natural gas-fired turbine with an electrical generator. (4/11/2013)	40 CFR 60, Subpart KKKK / 40 CFR 72 Acid Rain
EUTURBINE2	A 430 MMBtu/hr natural gas-fired turbine with an electrical generator. (4/15/2013)	40 CFR 60, Subpart KKKK / 40 CFR 72 Acid Rain
EUHRSG1	A heat recovery steam generator (HRSG) with a 71.4 MMBtu/hr natural gas-fired duct burner. (6/20/2013)	NA
EUHRSG2	A heat recovery steam generator (HRSG) with 71.4 MMBtu/hr natural gas-fired duct burner. (6/16/2013)	NA

PTIs not in the ROP:

PTI 36-20 – Rental Boilers located at the REO Town Plant, PTI issued 06/23/2020

EUSBBOILER1	Standby natural gas-fired boiler with a maximum rating of 99 MMBtu/hr and equipped with Low-NOx burners	40 CFR 60, Subpart Dc / 40 CFR 63, Subpart DDDDD
EUSBBOILER2	Standby natural gas-fired boiler with a maximum rating of 99 MMBtu/hr and equipped with Low-NOx burners	40 CFR 60, Subpart Dc / 40 CFR 63, Subpart DDDDD

PTI 42-20 – Incorporates the Consent Agreement and Final Order (CAFO) Docket No. CAA-05-2019-0040 requirements into a PTI for Eckert Station. The PTI was issued 10/08/2020. A minor modification (MM) application to incorporate the PTI into ROP No. MI-ROP-B2647-2018 is due no later than 12-months after issuance. If Eckert Station is officially retired before September of 2021, the plan is to void PTI 42-20. The MM application to incorporate the PTI into the ROP will not be needed.

PTI 88-19 – EUNGINE, MM Application No. 202100031 to incorporate PTI 88-19 which modified special conditions for EUNGINE was submitted February 8, 2021. Specifically, the emission limits for NOx, CO, VOC, PM10, and PM2.5 were increased. The emission limit for PM was removed. The proposed MM is undergoing 45-day EPA review ending May 1, 2021.

Exempt Equipment:

The cooling towers at Eckert Station are exempt per Rule 280(2)(d).

Cold Cleaner: Thirty gallon parts washer for cleaning/degreasing parts using Stoddard solvent/mineral spirits per Rule 281(2)(h) or Rule 285(2)(r)(iv) at Eckert Station.

Michigan Air Emission Reporting System (MAERS) - 2020 Reporting Year:

Report submitted March 8, 2021 and will be audited.

Inspection – REO Town Plant:

I inspected the REO Town Plant on March 17, 2021. There were no odors from operations and no visible emissions from the stacks. Upon arrival at 9:10 am, the weather was 32°F, wind SSE@4 MPH, and UV Index 0 Low.

Upon my arrival, Nathan notified me that EUTURBINE2 (OSTG2) had exceeded the NOx emission limit of 39.6 pph based on a 24-hour rolling average on March 15, 2021. According to the Rule 912 report (email received March 23, 2021, hard copy received April 2, 2021), the exceedance was from 03:00 to 08:59 am. During this time, the highest emissions rate was 40.6 pph (24-hour rolling average). The actions taken to minimize emissions was to reduce the turbine load from 43 megawatts to 38 megawatts. The probable cause was believed to be related to the winter tuning (mapping) of the turbine. General Electric mapping technicians were scheduled to remap the turbine. When I was on-site for the CEMS RATA on April 14, 2021, Nathan informed me that the malfunction was due to ~70% of the fuel nozzles on the turbine were plugged with oil. LBWL suspects that the oil is coming from the natural gas provided by Consumers Energy via pipeline. LBWL has been investigating this issue since 2018 and GC analysis of gas samples have shown random oil spikes.

EUTURBINE1 and EUTURBINE2:

Both EUTURBINE1 and EUTURBINE2 were operating in combined-cycle, and producing steam and electricity (co-generation mode) during the inspection. The duct burners were not operating on the HRSGs (which the operators refer to as boilers). The turbines operate as baseload units and are not load following. The turbines actually can only operate in combined-cycle due to operating in bypass mode for the HRSG would actually stress the unit.

The following is operations at 9:00 am (hour average):

EUTURBINE1 – 40 MW of electricity, 3490.6 hscf of gas flow, 348.3 MMBtu of heat input, 107,082.3 lb/hr of steam

EUTURBINE2 – 39 MW of electricity, 3372.1 hscf of gas flow, 335.1 MMBtu of heat input, 101,736.9 lb/hr of steam

The following snapshot information was collected from the CEMS readouts at approximately 9:00 am (8:00 am CEMS time) in the CEMS room:

EUTURBINE1:

NO uncorrected – 9.54 ppm

NO₂ uncorrected – 2.13 ppm

NO_x uncorrected – 11.67 ppm

O₂ – 15.2070%

CO – 9.789 ppm

Gas Flow - 3602 hscf

GASGCV – 9.976E+04 lb/hr of steam

Unit Load – 41.5 MW

Heat-In – 359.3 MMBtu

EUTURBINE2:

NO uncorrected – 17.1 ppm

NO₂ uncorrected – 4.2 ppm

Nox uncorrected – 21.4 ppm

O₂ – 15.232%

CO – 25.3 ppm

Total operating hours on the turbines at 4/14/2021 were as follows:

EUTURBINE1 – 50,069 hours

EUTURBINE2 – 48,419 hours

The total sulfur content of the pipeline quality natural gas is verified through gas sampling but the facility can also use a purchase contract or tariff sheet. (Natural Gas Tariff Sheet effective for service render on and after May 18, 2010 provided.) The results of gas sampling done in March 2020 showed that the sulfur content of the fuel does not exceed 0.060 lb SO₂/MMBtu heat input in the gas. Records of pipeline quality natural gas (SC III.1) are kept as required by SC VI.5.c for EUTURBINE1 and EUTURBINE2, and demonstrate compliance with the total sulfur limit in 40 CFR 60.4365(a).

A preventative maintenance program and malfunction abatement plan is implemented per the requirements in Special Condition (SC) III.1 for each turbine and duct burner. EUTURBINE1 and EUTURBINE2 have gone through one major overhaul. A major overhaul is completed per

manufacturer specifications, and is based on operating hours on the turbine (around 36,000 hours) or if performance of the turbine degrades. The major overhaul on EUTURBINE1 was completed in September of 2018 and the hot section of the turbine was removed for an overhaul and exchanged for another in the exchange program. This is considered a like-kind replacement under a normal (preventative) maintenance program meeting the requirements of Rule 285(2)(a). The major overhaul on EUTURBINE2 was completed in May of 2019. The "OUTAGE PROJECT DESCRIPTION AND AIR PERMIT DOCUMENTATION" for the 36,000 Hr Inspection and Hot-Section Replacement was provided for EUTURBINE2. The maintenance is listed as preventative and the like-kind replacement was "Hot Section that was removed from EUTURBINE1 in September of 2018 was overhauled and will be placed into EUTURBINE2 as part of an exchange program." Post-project unit % availability was listed as 100%, and post project maximum heat input was 430 MMBTU/hr which was the same as pre-project. No emissions increase was expected.

FGTURB/HRSG1 and FGTURB/HRSG2 were last tested for CO, PM, PM10, and PM2.5 in February of 2019. This meets the testing requirements in Section V for performance testing every 5 years.

The permittee is required to properly measure fuel flow to each turbine, duct burner, and the auxiliary boiler on a continuous basis per SC VI.3. The devices to monitor fuel flow are properly installed and operated. The fuel meters are calibrated annually per the requirements of Part 75 and this information is logged in StackVision (database). Pictures of the calibration tags were taken and are in the electronic file (S:\@District Facilities\B2647\Site Pictures\B2647 Inspection 3-17-2021). The fuel monitors on the turbines and duct burners were calibrated in November of 2020.

Nox emissions for each turbine are required per SC VI.2 to be measured using a CEMS. (CO is also measured using an uncertified CEMS as the data is used by the manufacturer and it is not a compliance tool.) The Nox CEMS annual RATA was completed on FGTURB/HRSG1 in March of 2021 and on FGTURB/HRSG2 in April of 2021. The CEMS on FGTURB/HRSG2 is a "new CEMS". The CEMS on the unit was replaced after the NO₂ converter malfunctioned and the CEMS was still reading low after the converter was replaced. The new CEMS is the latest model of ThermoFisher and was the spare on-site. The following is the tag information on the CEMS:

FGTURB/HRSG1 CEMS Serial No. 1207552009, Model Code: 42ILS-ASSSPCB

FGTURB/HRSG2 CEMS Serial No. 1200416212, Model Code: 42IALS-ABBNA

EUAUXBOILER:

The REO Town Plant auxiliary boiler is a Victory packaged boiler (3-SHP-BO-001) steam generator with ultra low Nox burners and a continuous oxygen trim system. The tags on the boiler have the year built of 2012, MFGS Serial/Job # 11340, and a maximum steaming capacity 175,000 lb/hr. EUAUXBOILER was operating on the day of the inspection. The auxiliary boiler does not operate very often due to cost, but with Eckert Station going to zero generation, it operates more.

The following snapshot information was collected from the CEMS readouts at approximately 9:00 am (8:00 am CEMS time) in the CEMS room:

EUAUXBOILER:

NO uncorrected – 5.46 ppm

NO₂ uncorrected – 2.81 ppm

NO_x uncorrected – 8.27 ppm

O₂ – 5.8721%

CO – 45.85 ppm

Gas Flow – 551.6 hscf

GASGCV – 9.958E+04 lb/hr of steam

Heat-In – 54.93 MMBtu

NO_x emissions for EUAUXBOILER are required per SC VI.2 to be measured using a CEMS. The NO_x CEMS annual RATA was completed in March of 2021. The following is the tag information on the CEMS:

CEMS Serial No. 1207552010, Model Code: 42ILS-ASSPCB

A preventative maintenance program and malfunction abatement plan is implemented per the requirements in SC III.1 for EUAUXBOILER and FGMACTDDDDD. EUAUXBOILER was last tested for CO, PM, PM₁₀, and PM_{2.5} in February 2019. This meets the testing requirements in Section V for performance testing every 5 years.

The last tune-up of the boiler was completed on April 28, 2018 and is required every 5 years per the requirements of the Boiler MACT (listed in FGMACTDDDDD), specifically 40 CFR 63.7515(d). A copy of the Aux Boiler Report was obtained at the inspection completed in December of 2018. The findings which demonstrate compliance with SC IX.1 included the following:

- 1. The single burner boiler operates reliably over the load range.**
- 2. The boiler efficiency was 84.1% which matches the design criteria.**
- 3. The burner design provides optimum combustion control.**
- 4. The boiler and burner components are maintained properly and function per the design specifications.**

LBWL missed reporting the completion of the 5 year tune-up for EUAUXBOILER on the 1st semi-annual Boiler MACT report in 2019. They reported the tune-up on the 2nd semi-annual Boiler MACT report and listed the late notification as a deviation in the ROP 2nd semi-annual and annual report for 2019.

EUNGENINE:

The emergency non-certified engine at the REO Town Plant is part of a CAT generator set with the following tag information:

Engine Model: G3516B

Manufacture Year: 2012

Engine Output: 1,625 kVA, 1,300 kW*

Make: SR4B

Serial No. 4FN03092

* The engine tag indicates that the engine is a little smaller than maximum design capacity of 1,356 kW (SC IV. 1) that was permitted.

The engine has 179 hours on the clock. The engine is restricted to less than 500 hours per 12-month rolling time period per SC III.1, and no more than 100 hours for maintenance checks and readiness testing per SC III.2. There was no emergency operations during 2019 to the date of the inspection. The engine was not operated at all in 2019 and 2020. The engine was operated for approximately 2 hours in March of 2021 for maintenance checks and readiness testing. The engine operation was tested, at a minimum, monthly with the engine loaded and unloaded but has not been operated since the stack testing in December of 2018 when the PM10/2.5 emission limits were exceeded. Copies of the operating and maintenance logs were obtained as part of the inspection. The logs show regular testing, reason for operation, and maintenance (oil tests or oil changes) on the engine is being performed meeting the NSPS and MACT requirements.

Emission testing is required every 3 years or 8,760 hours for a non-certified engine. Emission testing performed on 9/13/2018 measured NOx, CO, PM, and VOC below the emission limits in ROP No. MI-ROP-B2647-2018 and 40 CFR 60, Subpart JJJJ. PM10 and PM2.5 emissions exceeded the permit limits and retesting was performed on 12/12&13/2018. PM10 and PM2.5 emissions still exceeded the permit limits on the retest. An application to modify the emission limits for EUNGINE to resolve the violation was made and PTI 88-19 was issued. An MM Application No. 202100031 to incorporate PTI 88-19 was submitted February 8, 2021. Specifically, the emission limits for NOx, CO, VOC, PM10, and PM2.5 were increased. The emission limit for PM was removed.

Emission testing on the engine for emissions of NOx, CO, and VOC per 40 CFR 60, Subpart JJJJ requirements was completed in March 2021. Results are pending. This meets the testing requirements in Section V for performance testing every 3 years for a non-certified engine.

EUCOOLTWR:

The four-celled mechanical draft cooling tower is vender certified for maximum drift rate of 0.001% or less as required by SC IV.1. Water samples are collected weekly and analyzed for total dissolved solids (TDS) content, and average monthly TDS is calculated from the weekly samples. Records including TDS content of the water and water recirculation rates used to calculate the average monthly particulate matter emission rates are all kept in a satisfactory manner as required by SC VI.3.

EUSBBOILER1 and EUSBBOILER2 (PTI 36-20 – Rental Boilers):

Two (2) rental boilers (FGSBBOILERS) have been installed as allowed under PTI 36-20. FGSBBOILERS are two (2) stand-by nominally rated 92.1 MMBtu/hr boilers with Low NOx burners used for back-up steam for the downtown heating district. The boilers are semi-truck mounted (each sit on a skid), and a pole barn type shed with a stack has been built covering half of each boiler. Actual start-up date for

EUSBBOILER1 and EUSBBOILER2 was December 28, 2020. They are rented from Nationwide Boiler Inc.

EUSBBOILER1 (West Boiler) – Tags show the boiler was built in 2014, Mfg. Serial No. RT4303G, Ohio Boiler Number 293847, Michigan Boiler Serial Number 453697

EUSBBOILER2 (East Boiler) – Tags show the boiler was built in 2014, Mfg. Serial No. RT4302G

The technical information with predicted boiler emission data provided shows the following:

NATURAL GAS BOILER MFG AND MODEL NEBRASKA NOS-2A/S-64

BOILER CAPACITY, LB/HR 71,000

DESIGN PRESSURE, PSIG 350

BURNER MFG AND MODEL FABER WB-1-30

FUEL FLOW, SCFH 92,100

FUEL HEAT INPUT, MMBTU 92.1

FLUE GAS OUTLET TEMP, DEG F 545

FLUE GAS FLOW, LB/HR 81,350

FLUE GAS SPECIFIC VOLUME, CF/LB 25.1

STACK OUTLET SIZE 56" diameter

STACK OUTLET FLOW AREA, SQ FT 17.10

STACK GAS EXIT VELOCITY, FPM 1,990

STACK GAS EXIT FLOW, ACFM 34,050

PPMVD

#/MMBTU

NOx @ 3% O ₂	30	0.036
CO @ 3% O ₂	50	0.037
VOC @ 3% O ₂	10	0.004
PM10 @ 3% O ₂		0.005
EXCESS AIR, %	15 %	

Special Condition (SC) I.1 and SC VI.6 – Compliance with the NOx emission limit of 30 ppmvd at 3% O₂ is predicted based on the technical information from Nationwide Boiler Inc.

SC II.1 and SC VI.2 – Only natural gas fuel is combusted in FGSBBOILERS.

SC III.1 and SC VI.3 – Limits EUSBBOILER1 and EUSBBOILER2 for more than 13,400 hours combined per 12-month rolling time period. As of February-2021, EUSBBOILER1 and EUSBBOILER2 had operated a combined 109.57 hours since start-up in late December of 2020.

SC III.2 and SC VI.4 – A MAP is required to be developed and submitted within 90 days of equipment installation. A MAP was provided dated February 18, 2021 (initial draft) and is approved as noted in this inspection report.

SC IV.1 and SC VI.6 – EUSBBOILER1 or EUSBBOILER2 unless its Low-NOx Burner (LNB) is installed and operated in a satisfactory manner. LNB is installed on the boilers and the MAP assures that they are maintained in a satisfactory manner.

SC IV.2 and SC VI.6 – EUSBBOILER1 and EUSBBOILER2 have an individual heat input capacity of 92.1 MMBtu/hr according to the technical information (vender data) from Nationwide Boiler Inc., not in excess of 99.9 MMBtu/hr.

SC V.1 and SC VI.6 – Verification of the NOx emission rate from any boiler in FGSBBOILERS is upon request. Compliance with the NOx emission limit is demonstrated though vendor data and the MAP assures that they are maintained in a satisfactory manner in order to meet the NOx emission limit.

SC VI.5 - Maintain records of the total amount of each steam generating unit fuel delivered to the property during each calendar month per 40 CFR 60.48c(g)(3). For FGSBBOILERS, since start-up 3.4 MMSCF of natural gas has been used in the boilers according to records.

SC VII.1 and 2 – Written notification of the date of initial startup of each boiler in FGSBBOILERS including the information specified in 40 CFR 60.48c, and completion of installation was provided January 7, 2021, meeting the requirements in 40 CFR 60.7 and Rule 201(7).

SC VIII.1 and 2 – The stacks on EUSBBOILER1 and EUSBBOILER2 are limited to a maximum exhaust diameter of 54 inches and a minimum height above ground of 65 feet. According to the technical information from Nationwide Boiler Inc. the stack outlet size on the boilers is 56 inches. The exhaust diameter of the stacks needs to be verified because based on information provided by the vendor, the stacks could have a larger diameter than allowed by the PTI. The height of the stacks was not verified, and needs to be confirmed along with the outlet diameter. Nathan provided construction information on the stack diameter and height to confirm the stack diameter was not greater than 54 inches and the stack height was at a minimum of 65 feet. The exhausted gases from EUSBBOILER1 and EUSBBOILER2 are discharged unobstructed vertically upwards to the ambient air.

EUSBBOILER1 and EUSBBOILER2 are subject to 40 CFR Part 63, Subpart DDDDD, and the applicable requirements are included in FGSBBOILERMACT. The initial notification of the actual date of startup (December 28, 2020) was provided January 7, 2021, meeting the requirements in 40 CFR 63.7545(c) and 40 CFR 63.9(b)(4)(v)(i).

A notification of an off-permit change per Rule 215(3) using an M-001 Form needs to be made now that EUSBBOILER1 and EUSBBOILER2 are installed. The requirements of PTI 36-20 will be incorporated when ROP No. MI-ROP-B2647-2018 is renewed as allowed under the Rule 215(3) notification.

Records Review:

The following records (operating information kept in StackVision) were received for the inspection:

1. EUNGINE – CAT Inspection and Preventative Maintenance documents for 9/19/2018, 8/16/2019, 8/6/2020, and 3/11/2021; Operating Hours for Dec-2018 to Mar-2021 with description of reason/type of operation. The emergency engine was not operated in 2020.

NO_x (tpy) = 0 tpy (2020 MAERS)

CO (tpy) = 0 tpy (2020 MAERS)

PM_{10/2.5} (tpy) = 0 tpy (2020 MAERS)

SO₂ (tpy) = 0 tpy (2020 MAERS)

VOC (tpy) = 0 tpy (2020 MAERS)

2. EUTURBINE1 (OSTG1) and EUTURBINE2 (OSTG2) - NO_x CEMS data in ppm (30-day rolling average, 24-hour rolling average) report period 03/15/2020 through 03/14/2021, and pph (24-hour rolling average) 02/14/2021 through 03/16/2021; fuel use in gasflow (HSCFH) and heat-in MMBTU per month for 2020 and January to March 2021, and operating date for 3/17/2021 including steam flow, unit load, gas flow, and heat-in; and 2020 MAERS as summarized below.

EUTURBINE1 (OSTG1):

NOx ppmv (30-day rolling average) on 03/14/2021 = 11.1 ppm at 15% O₂ < 25 ppm at 15% O₂

NOx pph (24-hour rolling average) = max 16.8 pph < 39.6 pph and 42.5 pph (combined w/ duct burners)

NOx (tpy) = 53.8 tpy (2020 MAERS)

CO (tpy) = 105.1 tpy (2020 MAERS)

PM10/2.5 (tpy) = 7.1 tpy (2020 MAERS)

SO₂ (tpy) = 0.8 tpy (2020 MAERS)

VOC (tpy) = 2.8 tpy (2020 MAERS)

EUTURBINE2 (OSTG2):

NOx ppmv (30-day rolling average) on 03/14/2021 = 19.8 ppm at 15% O₂ < 25 ppm at 15% O₂

NOx pph (24-hour rolling average) = max 40.6 pph > 39.6 pph (on 03/15/2021 at 6:00 am) and 42.5 pph (combined w/ duct burners)

NOx (tpy) = 68.6 tpy (2020 MAERS)

CO (tpy) = 54.9 tpy (2020 MAERS)

PM10/2.5 (tpy) = 5.9 tpy (2020 MAERS)

SO₂ (tpy) = 0.8 tpy (2020 MAERS)

VOC (tpy) = 2.7 tpy (2020 MAERS)

The permit limits for NOx in combined-cycle mode are 25 ppmv dry at 15% oxygen, and 39.6/42.5 lb/hr on a 24-hour rolling basis and 179.6 tpy on a 12-month rolling time period. EUTURBINE1 (OSTG1) and EUTURBINE2 (OSTG2) are operating in compliance with the permitted emission limits. Also, for simple -cycle operation the NOx permit limit of 25 ppmv dry at 15% oxygen is on a 4-hour rolling average basis per 40 CFR 60.4350(g). This is currently not in the ROP, but the turbines actually never operate in simple cycle. Based on data reviewed during the inspection, EUTURBINE1 (OSTG1) and EUTURBINE2 (OSTG2) are operated in compliance with the 40 CFR 60, Subpart KKKK and ROP No. MI-ROP-B2647-2018 with one exception. EUTURBINE2 (OSTG2) exceeded the NOx emission limit of 39.6 pph based on a 24-hour rolling average on March 15, 2021. A violation notice will be sent.

3. EUAUXBOILER - NOx CEMS hourly data in pph (24-hr rolling average), ppmv, and lb/MMBtu for 03/15/2020 through 03/14/2021 is summarized below along with the 2020 emissions reported to MAERS.

NOx ppmv (30-day rolling average) on 03/14/2021 = 11.8 ppm at 3% O₂ < 30 ppm at 3% O₂

NOx pph (24-hour rolling average) on 03/14/2021 = 0.7 pph < 10.2 pph

NOx lb/MMBtu (30-day rolling average) on 03/14/2021 = 0.014 lb/MMBtu < 0.20 lb/MMBtu

NOx (tpy) = 4.1 tpy (2020 MAERS)

CO (tpy) = 5.7 tpy (2020 MAERS)

PM10/2.5 (tpy) = 0.67 tpy (2020 MAERS)

SO₂ (tpy) = 0.09 tpy (2020 MAERS)

VOC (tpy) = 0.86 tpy (2020 MAERS)

Fuel use in gasflow (HSCF) and heat-in (MMBTU) per month from March 2020 through February 2021 showed that the highest operating month was February March 2021. EUAUXBOILER is operating in compliance with the permitted emission limits.

4. EUCOOLTWR – Acceptable monthly records for 2019 to Feb-2021, and the average particulate matter emission rate estimated in pph. The highest hourly emission of particulate matter for 2019 was 0.0228 pph in May-2019, and for 2020 it was 0.0221 pph in Dec-2020. EUCOOLTWR is in compliance with the PM/PM10/PM2.5 emission limits of 0.77 pph. But, PM/PM10/PM2.5 emissions reporting needs to be added to MAERS for EUCOOLTWR.

Inspection – Eckert Station:

I inspected the Eckert Station on March 17, 2021.

Arrived: 2:25 pm

Weather: 57 degrees F, Wind ESE 5 mph, UV index 4

Departed: 4:30 pm

The plant was not operating as Eckert Station is now at what LBWL staff describe as “zero generation”. On May 31, 2021, the MISO commitment will end and Eckert Station can be officially retired. The last time a boiler operated was EUBOILER4 on 07/07/2020 through 07/15/2020 when it was called into service by MISO.

FGECKERT (EUBOILER1, EUBOILER3, EUBOILER4, EUBOILER5, EUBOILER6):

In the boiler control room, the control panels for all boilers are taped and tagged off. EUBOILER4, EUBOILER5, and EUBOILER6 have been drained of water with no nitrogen caps. There is no coal on-site, and EUBOILER4, EUBOILER5, and EUBOILER6 would be very difficult to re-start. EUBOILER1 and EUBOILER3 are not operational. They went off line when MATS became effective. These boilers have been cleaned out, and the control panel for them is dark (and taped off).

NO_x, CO₂ and SO₂ are monitored per 40 CFR Part 75 for the Acid Rain Program and CSAPR using continuous emission monitoring systems (CEMS). The shed for the CEMS is on the roof of the facility. Opacity is monitored using a continuous opacity monitor (COM) per 40 CFR Part 60 and for Compliance Assurance Monitoring (CAM) per 40 CFR Part 64 for PM. The last Relative Accuracy Test Audit (RATA) of the NO_x, SO₂, and CO₂ CEMS on EUBOILER4 and EUBOILER5 was completed in July 2019, and in early August 2019 for EUBOILER6. There is power to the CEMS shed but they are basically shutdown (no linearity checks or daily calcs). There is a grace period for the 2019 RATA if a boiler does have to be started.

CAM - Opacity is monitored continuously as a surrogate for PM per 40 CFR 64. The COM system is used to indicate proper operation of the ESPs. While deviations of the opacity limits have reported mainly during startup and shutdown, an excursion which is defined as any 2 or more consecutive 1-hour blocks of greater than 20% opacity has not been reported.

A preventative maintenance program and malfunction abatement plan (SC III.1) for specified emission units at Eckert Station is implemented per Rule 911 and in compliance with the requirements in the special conditions of ROP No. MI-ROP-B2647-2018.

FGMATS (40 CFR 63, Subpart UUUUU):

EUBOILER4, EUBOILER5, and EUBOILER6 are subject to MATS as existing coal-fired electric utility steam generating units (EGUs) designed to burn not low rank coal. Mercury (Hg) control was added to comply with this regulation. An activated carbon injection (ACI) system is used to control emissions of Hg. Powdered activated carbon is injected at a rate to keep below the Hg limit in 40 CFR 63, Subpart UUUUU of 1.2 lb/Tbtu (based on a 30-day rolling average). The ACI system is computer controlled but an operator checks the system every two hours (when operating) and notes system operation, silo levels, and other operating parameters to assure that the system is operating properly.

Hg emission monitoring is done using sorbent traps. The Hg sorbent trap mercury monitoring system is located in a shed on the roof. LBWL staff used to process the sorbent traps in the on-site Lumex monitor and traps were sent off to APEX for analysis. Sorbent traps collect Hg for seven (7) days during normal operation and 3 to 4 days for startup. There are two traps – one for the A Train and one for the B Train. RATAs for the Hg monitoring systems were completed in July 2019 for EUBOILER4, EUBOILER5, and EUBOILER6. There have been problems with Hg monitor downtime and this was referred to EPA as Michigan did not have delegation for this MACT at the time. EPA issued a Finding of Violation (FOV) on September 28, 2018. LBWL has taken steps to address the monitor downtime by sending the sorbent traps to a qualified lab for analysis and discontinuing on-site analysis. The status of the FOV is not known by LBWL staff.

Compliance with the MATS emission limits for PM and hydrogen chloride (HCl) is demonstrated by quarterly testing of PM and HCl. Testing was last done on EUBOILER4 on 07/16/2019, EUBOILER5 on 07/22/2019, and EUBOILER6 on 07/30/2019. Testing of PM and HCl on EUBOILER4 and EUBOILER5 were less than LEE. EUBOILER6 results were less than LEE for PM, but HCl emissions were tested above the MATS emission limit. A VN was sent for the exceedance of the HCl emission limit on EUBOILER6 on October 1, 2019 but was referred to EPA as Michigan did not have delegation for this MACT and to combine it with action addressing the Hg monitor downtime. There has not been a duration of operation of EUBOILER4, EUBOILER5, and EUBOILER6 long enough to trigger testing of PM or HCl since July of 2019, and minimum grace period is one year from the last testing.

The most recent boiler tune-ups were conducted on September 18-25, 2018 for EUBOILER4, EUBOILER5, and EUBOILER6 per the MATS requirements. These boilers rely on paragraph 1 of the definition of startup in 40 CFR 63.10042.

Cooling Towers:

Eckert has a bank of five cooling towers along the Grand River. The cooling towers are exempt from permitting per Rule 280(2)(d). There have been no changes in the operation of the cooling towers since the last inspection. No chromium compounds to treat the water are used in the cooling towers,

therefore, they are not subject to 40 CFR 63, Subpart Q. Phosphate compounds are not used in the cooling tower either.

EUACOAL (Coal Handling):

The boilers were originally designed to combust bituminous coal. In 1998 to 1999, a switch was made to low sulfur subbituminous coal from the Power River Basin (PRB) in Wyoming. This coal can be dusty and can accidentally heat up and combust even when containing greater than 22% moisture. Liquid dust suppression was used (RAM3) which contained succinic acid, sulfo-1,4-Bis(2-ethylhexyl) ester, sodium salt (CAS No. 577-11-7), diethylene glycol monobutyl ether (CAS No. 112-34-5), and propylene glycol (CAS No. 57-55-6).

The coal comes via railcar and is unloaded out of the bottom of the railcar into receiving pits to a conveyor. The conveyor, which is covered, transports the coal into the plant to the coal bunkers dedicated to each boiler. Dust suppression is sprayed on the coal while it is being unloaded and conveyed. Per 40 CFR 60, Subpart Y, visible emissions testing was completed on 6/26/2018. There was 0% opacity observed during the test.

There is a very small coal pile on the east side of the plant which is mainly for emergency purposes. A stacker with a telescoping drop chute is used to build the pile. Coal that arrives at the plant via rail is moved immediately into the plant bunkers. Each bunker holds 4 railcars of coal. EUBOILER4 has 4 bunkers, EUBOILER5 has 6 bunkers, and EUBOILER6 has 6 bunkers. If coal has to be unloaded from the bunkers, it is unloaded to the east side coal pile.

EUASHECKERT (Ash Handling):

Fly ash from the ESPs is pneumatically conveyed to a 1000 ton silo located on the east side of the plant. There are two redundant fly ash handling systems with two (2) pulse jet fabric filter baghouses, two (2) mechanical vacuum producers, one (1) wetted ash rotary unloader, and two (2) telescopic discharge chutes. A two bay load out is used. One side for unloading dry ash for concrete has loadout control (it vents back into the ash silo) and one side for unloading wetted ash which is not acceptable for market.

The pressure drop on the baghouses was not checked during the inspection because the plant was not operating. The fugitive dust plan (Version 1.3, October 2015) is implemented and baghouse logs are part of the plan. The Nuvatrol bag diff. and silo vent bag diff. are monitored on a daily basis when operating. If the silo vent bag diff reaches 2.5" wc. (set point) the station shift supervisor (SSS) is to be notified. The filter discharge gas is monitored for dust loading which will automatically shut down the vacuum pump when dust exceeds 40 pico amperes. The boiler stack gas temperature is also monitored. If the stack temperature is less than 260°F, station supervisors are notified in order to take appropriate action.

Also, a small building and silo for the ACI system is located just east of the ash handling system.

Bottom Ash Handling:

Bottom ash from the boilers is sent to Hydrobins where water is decanted. The dewatered ash is dropped into trucks with open top roll off boxes in a covered bay located on the west side of the plant. The bottom ash is sent to a landfill for disposal.

FGENGINES (Emergency Engines):

Four diesel fuel-fired RICE were re-permitted on PTI 132-05C which was issued October 13, 2015. The engines are CAT 3516 (V16) with 2 MW generators, and were manufactured in the 1990s. EUENGINE1 and EUENGINE2 are located at the bottom of the combined stack housing for EUBOILER1, 2 and 3. EUENGINE3 and EUENGINE4 are located at the bottom of the combined stack housing for EUBOILER4, 5 and 6. They were installed for black start purposes but decommissioned as part of the project to build REO Town Plant. The engines had been re-permitted as emergency engines and for voltage support. The engines are still not connected, there is no power and therefore, no lights in the engine rooms. An 18-month extension on construction was granted, but has expired. The permit for the engines is effectively null and void.

Zero Generation Status:

As of December 18, 2019, Eckert Station was taken off the grid as a baseload plant. No coal is kept on-site, and the coal bunkers are empty. All fly ash and bottom ash is removed. LBWL is no longer maintaining Eckert Station in readiness mode / status in the event power is needed for any reason.

Records Review:

The following records were received for the inspection:

1. FGECKERT - COMS and operating data for EUBOILER4 from 02/12/2020 through 02/14/2020, and 07/07/2020 through 07/15/2020 and 2020 MAERS (only EUBOILER4 operated).

Average opacity from 2/12/2020 through 2/14/2020 was 3.59%.

Average opacity from 07/07/2020 through 07/15/2020 was 2.23%.

NOx (tpy) = 9.8 tpy (2020 MAERS)

CO (tpy) = 0.96 tpy (2020 MAERS)

PM10 (tpy) = 0.3 tpy (2020 MAERS)

PM2.5 (tpy) = 0.08 tpy (2020 MAERS)

SO₂ (tpy) = 25.5 tpy (2020 MAERS)

VOC (tpy) = 0.1 tpy (2020 MAERS)

The permit limits for visible emissions are 20% opacity except for one 6-minute average per hour of not more than 27%, and for SO₂ the limits are 1.67 lb/MMBtu for coal combustion and 1.11 lb/MMBtu for oil combustion. The boilers have been operating in compliance with the permitted emission limits with some deviations reported for visible emissions quarterly.

2. Lansing Board of Water & Light Semi-Annual Consent and Final Order (CAFO)

CAA-05-2019-0040 Compliance Report - System-Wide Emissions for cumulative emissions of NOx and SO₂ from 1/2020 through 6/2020, and 7/2020 through 12/2020 were below the annual tonnage limits. System-wide NOx emissions were 587.4 tons (<1800 tons limit) and SO₂ emissions were 1,829.6 tons (<4,700 tons limit).

All records obtained in the course of this compliance inspection are located here: S:\@District Facilities\B2647\Records\B2647 Inspection Records 3-17-2021.

All site pictures for this compliance inspection are located here: S:\@District Facilities\B2647\Site Pictures\B2647 Inspection 3-17-2021.

ROP and MACT Reporting and Testing:

LBWL submits quarterly, semi-annual, and annual ROP reports as required by ROP No. MI-ROP-B2647-2018. Semi-annual 40 CFR 63, Subpart UUUUU (MATS) and 40 CFR 63, Subpart DDDDD (Boiler MACT) reports are submitted to EPA through CEDRI and to AQD. Quarterly testing of HCl and PM shows that all three units are meeting the standard, but some PM testing is not below the LEE emission limits (50% of the standard) and the emission limit for HCl was exceeded on EUBOILER6 (07/30/2019 test). Hg emissions have been monitored continuously using sorbent tubes as below the standard, but monitor downtime has been an issue. Compliance with MATS has been an issue for Hg monitoring, an HCl test, and EPA enforcement action currently unknown.

Summary:

Instances of noncompliance as noted above with ROP No. MI-ROP-B2647-2018, and state and federal regulations have been identified since the last FCE. A VN for exceedance of the NOx emission limit of 39.6 pph based on a 24-hour rolling average on EUTURBINE2 (OSTG2) on March 15, 2021 will be sent.

Follow-up items:

EUCOOLTWR – needs to be added to MAERS.

FGSBBOILERS – Off-permit change per Rule 215(3) needs to be submitted.

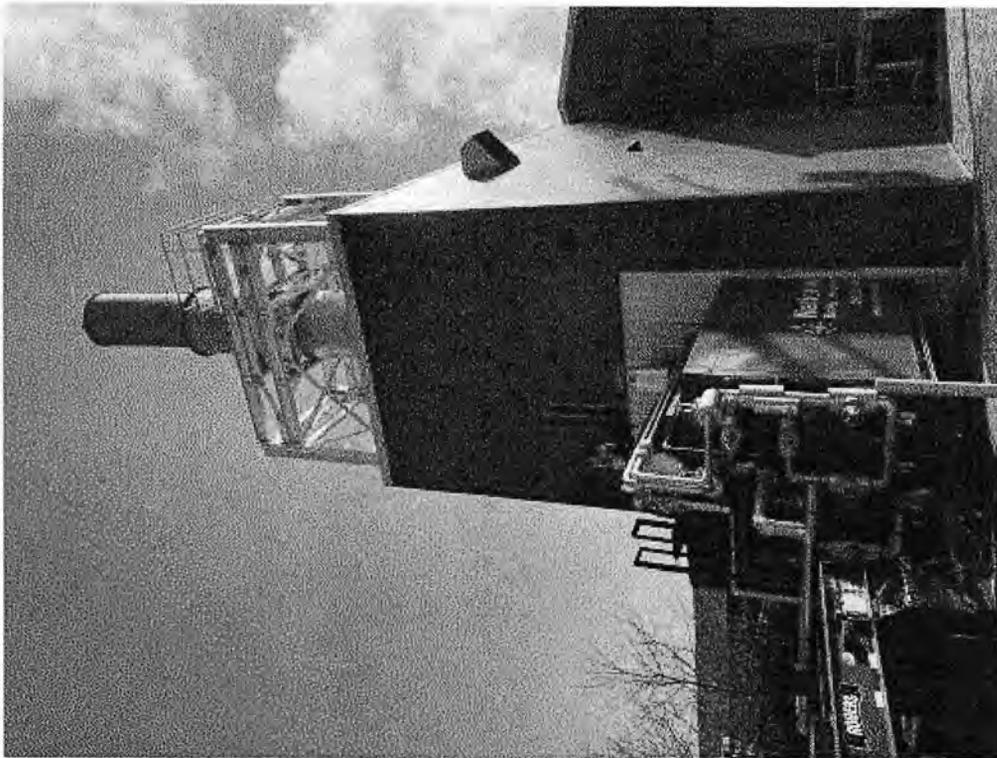


Image 1(044) : EUSBBOILER2 (east side rental boiler)

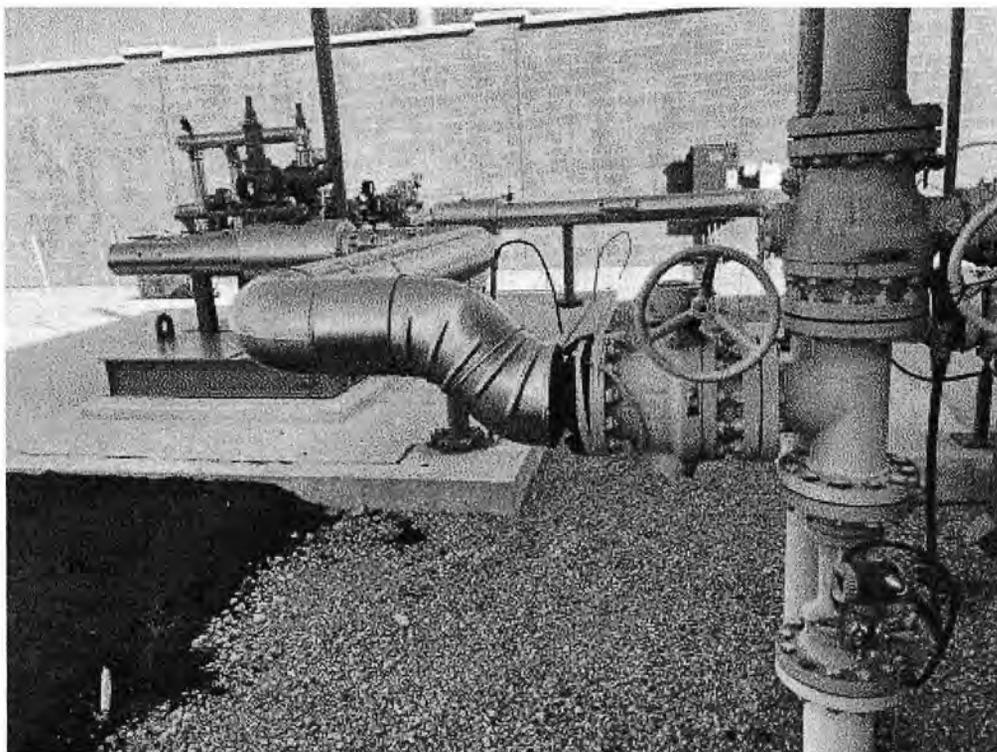


Image 2(048) : Main gas line into REO Town Plant and meter (in blue)



Image 3(056) : Locked Out/Tagged control room at Eckert Station

NAME _____

DATE _____

SUPERVISOR _____