

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

B372138295

FACILITY: ANR Pipeline - Reed City Compressor Station		SRN / ID: B3721
LOCATION: 7677 230th Ave., REED CITY		DISTRICT: Cadillac
CITY: REED CITY		COUNTY: OSCEOLA
CONTACT: Brad Stermer, Sr. Environmental Specialist		ACTIVITY DATE: 12/19/2016
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Field Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Monday, December 19, 2016, Caryn Owens of the Department of Environmental Quality (DEQ) – Air Quality Division (AQD) conducted a scheduled field inspection of ANR Pipeline (ANR) – Reed City Compressor Station (SRN: B3721) located at 7677 230th Avenue, Reed City, Osceola County, Michigan. Majority of the site is located on the west side of 230th Road, and one of the glycol dehydrators and associated equipment is located on the east side of 230th Avenue. The entrance to the facility is approximately 2.25 miles north of US-10 and 230th Avenue (Norman Road) intersection. The site was covered in snow during the field inspection.

The field inspection and records review were to determine compliance with the Renewable Operating Permit (ROP) MI-ROP-B3721-2014a. The site is a major source for hazardous air pollutants (HAPs), and is subject to the following National Emissions Standards for Hazardous Air Pollutants (NESHAPs) under 40 CFR Part 63: NESHAP from Natural Gas Transmission and Storage Facilities (40 CFR Part 63, Subpart HHH); NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD); and NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ).

Summary:

The activities covered during the field inspection and records review for the facility indicates the facility was in compliance with ROP MI-ROP-B3721-2014a and no additional actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

On-site Inspection:

At the time of the inspection, I met with Matt Feltman of ANR TransCanada who accompanied me throughout the facility and provided onsite records.

The Reed City Compressor Station is a natural gas transmission and compression station which operates two natural gas storage fields, the Loreed and the Reed City (RC) Stray Storage Fields. The Reed City Compressor Station operates under varying conditions. The pipeline transports natural gas to and from the storage reservoirs and typically operates between 400 and 2000 psig. During injection, natural gas free flows into the reservoir until the field pressure approaches pipeline pressure. At this point one or more internal combustion engines will be used to compress the natural gas into the reservoir. Compression injection usually continues until the field reaches its maximum rated pressure. Two of the engines at the site are equipped with catalytic converters to control NOx emissions. The station utilizes nine natural gas-fired engines in total for transmission and processing. Depending on storage and delivery, gas availability, and demand, the engines may operate simultaneously, independently or not at all. During the field inspection, only one of the compressor engines (EURC011) was operating.

Gas withdrawn from the RC Stray Storage Field, that is conditioned through the RC Stray glycol dehydration system to remove liquids that are transported out of the reservoir with the gas. After conditioning the natural gas is fed into a separator to further remove liquids that remain in the stream before it is compressed and transported into the pipeline downstream. The emissions from the glycol dehydrator are controlled by a condenser or thermal oxidizer. The thermal oxidizer was operating during the field inspection, and the condenser was idle.

Each well site in the Loreed Storage Field has a small gas-liquid separator that is used to separate the hydrocarbons from the gas at the well head. Gas is routed to the compressor station, while liquids are routed to one of the three condensate tank battery areas. Prior to entering the pipeline from the Loreed Storage Field, the natural gas is conditioned through the Loreed glycol dehydration system to remove liquids from the gas before it is compressed or transported into the pipeline downstream. The emissions from the glycol dehydrator are controlled by a condenser or thermal oxidizer. At the time of the inspection, the Loreed glycol dehydrator was controlled by a thermal oxidizer and the condenser was idle.

During the inspection I observed the raw data from the RC Stray and Loreed glycol dehydrators, and raw data from the Compressor engine (EURC011), since it was the only engine operating at the time of the inspection. Since it is the winter season, the facility ceased injecting natural gas into the formation and is currently withdrawing the gas from the formation for pipeline distribution.

EURC011	Readings
Catalyst Differential Pressure:	1.91 inches water column
Catalyst Inlet Temperature	1,104°F
Catalyst Outlet Temperature	1,123°F
Engine Horsepower:	461 Hp
Torque:	85.3%

Loreed Dehydrator (EURC015)	Reading
Thermal Oxidizer Temperature	1,588°F
Condenser Temperature:	20°F (ambient)

Reed City Stray Dehydrator (EURC024)	Reading
Thermal Oxidizer Temperature	1,504°F
Condenser Temperature:	13°F (ambient)

Records Review:

EURC015: Loreed glycol dehydration system. System includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank. The system is controlled by either a thermal oxidizer or condenser. At the time of the inspection, only the thermal oxidizer was operating.

I. Emission Limits:

Below is the table showing the emission limits permitted limits versus the highest reported emission limit from December 1, 2015 through November 30, 2016:

Pollutant	Permitted limit	Reported limit
VOC (lb/day):	295 lb/day	37.2 lb/day
VOC (tpy):	19 tons per year (tpy)	0.467 tpy
Benzene (tpy):	Less than 1 ton per year	0.022 tpy

The reported emission limits were within the permitted limits.

II. Material Limits:

Material Limits are not applicable for EURC015.

III. Process/Operational Restrictions:

At the time of the inspection EURC015 was equipped with a thermal oxidizer and a condenser as back-up. An hours

meter was installed, and the glycol dehydrator had operated for a total of 802.8 hours per 12-month rolling time period, and during the inspection the thermal oxidizer was at 1,588 degrees Fahrenheit, which is above the permitted limits of 1,400 degrees Fahrenheit permitted limits to show proper operation.

The condenser was not operating during the inspection. The glycol dehydrator is installed with a flash tank, which routes the emissions from the flash tank to the reboiler, and the excess emissions are routed through the thermal oxidizer (or condenser if the thermal oxidizer is not in operation).

Additionally, based on the records reviewed, ANR stated that stripping gas is not used at the facility.

IV. Design/Equipment Parameters:

As previously stated, the Loreed glycol dehydrator is equipped with a thermal oxidizer and a condenser, which is used for back-up if the thermal oxidizer is not operating.

V. Testing/Sampling:

The processed natural gas stream of the Loreed glycol dehydrator system shall be analyzed for VOC and benzene content in the natural gas at least once every five years. The most recent analysis was conducted January 6, 2017, using GRI-GLYCalc Version 4.0. The GRI-GLYCalc analyses for the condenser and thermal oxidizer are attached.

VI. Monitoring/Recordkeeping:

The facility continuously monitors the temperature of the thermal oxidizer and condenser, and has an alarm installed if the thermal oxidizer falls below 1,400 degrees Fahrenheit when operating, and an alarm on the condenser that activates if the condenser goes above 120 degrees Fahrenheit. The temperature of the thermal oxidizer and condenser is recorded on a daily basis.

The facility monitors the natural gas usage processed through the Loreed Glycol Dehydrator on a continuous basis and records the daily fuel use. The facility records monthly and 12-month rolling time period calculations for VOC and benzene and the hours of operation. The 12-month rolling time period emissions are discussed above under emission limits. The natural gas usage, monthly and 12-month rolling time period emissions records are attached.

VII. Reporting:

The semi-annual reports and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

VIII. Stack/Vent Restrictions:

Stack parameters for the Loreed Glycol Dehydrator have not changed from the previous inspection and appear to meet the specifications in the ROP.

IX. Other Requirements:

No Other Requirements are not applicable for EURC015.

EURC024: Reed City glycol dehydration system removes water from the natural gas. System includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank. The system is controlled by either a thermal oxidizer or condenser. At the time of the inspection, only the thermal oxidizer was operating.

I. Emission Limits:

Below is the table showing the emission limits permitted limits versus the highest reported emission limit from December 1, 2015 through November 30, 2016:

Pollutant	Permitted limit	Reported limit
VOC (lb/day):	90 lb/day	9.6 lb/day
VOC (tpy):	15.4 tons per year (tpy)	0.131 tpy
Benzene (tpy):	Less than 1 ton per year	0.015 tpy

The reported emission limits were within the permitted limits.

II. Material Limits:

Material Limits are not applicable for EURC024.

III. Process/Operational Restrictions:

At the time of the inspection EURC024 was equipped with a thermal oxidizer and a condenser as back-up. An hours meter was installed, and the glycol dehydrator had operated for a total of 1,149.0 hours per 12-month rolling time period, and during the inspection the thermal oxidizer was at 1,504 degrees Fahrenheit, which is above the permitted 1,400 degrees Fahrenheit to show proper operation.

The condenser was not operating during the inspection. The glycol dehydrator is installed with a flash tank, which routes the emissions from the flash tank to the reboiler, and the excess emissions are routed through the thermal oxidizer (or condenser if the thermal oxidizer is not in operation).

Additionally, based on the records reviewed, ANR stated that stripping gas is not used at the facility.

IV. Design/Equipment Parameters:

As previously stated, the RC Stray glycol dehydrator is equipped with a thermal oxidizer and a condenser, which is used for back-up if the thermal oxidizer is not operating.

V. Testing/Sampling:

The processed natural gas stream of the RC Stray glycol dehydrator system shall be analyzed for VOC and benzene content in the natural gas at least once every five years. The most recent analysis was conducted January 6, 2017, using GRI-GLYCalc Version 4.0. The GRI-GLYCalc analyses for the condenser and thermal oxidizer are attached.

VI. Monitoring/Recordkeeping:

The facility continuously monitors the temperature of the thermal oxidizer and condenser, and has an alarm installed if the thermal oxidizer falls below 1,400 degrees Fahrenheit when operating, and an alarm on the condenser that activates if the condenser goes above 90 degrees Fahrenheit. The temperature of the thermal oxidizer and condenser is recorded on a daily basis.

The facility monitors the natural gas usage processed through the RC Stray glycol dehydrator on a continuous basis and records the daily fuel use. The facility records monthly and 12-month rolling time period calculations for VOC and benzene and the hours of operation. The 12-month rolling time period emissions are discussed above under emission limits. The natural gas usage, monthly and 12-month rolling time period emissions records are attached.

VII. Reporting:

The semi-annual reports and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

VIII. Stack/Vent Restrictions:

Stack parameters for the RC Stray glycol dehydrator have not changed from the previous inspection and appear to meet the specifications in the ROP.

IX. Other Requirements:

No Other Requirements are applicable for the RC Stray glycol dehydrator system.

FGRC001: Four white Superior 8GT825 1,000 hp natural gas fired 4-stroke lean burn (4SLB) reciprocating internal combustion engines (RICE), Two Ingersol-Rand KVS 2,000 hp natural gas fired 4SLB RICE, One Clark TCVD 16M 8,600 hp natural gas fired 2SLB RICE, Two white Superior 8G825 660 hp natural gas fired 4-stroke rich burn (4SRB) RICE.

I. Emission Limits:

Emission Limits are not applicable for FGRC001.

II. Material Limits:

Material Limits are not applicable for FGRC001.

III. Process/Operational Restrictions:

The gas analysis provided did not show presence of sulfur in the natural gas stream, and previous gas analysis indicated the natural gas fuel contained less than 2 grains of total sulfur per 100 cubic feet of natural gas.

IV. Design/Equipment Parameters:

Design/Equipment Parameters are not applicable for FGRC001.

V. Testing/Sampling:

Testing/Sampling are not applicable for FGRC001.

VI. Monitoring/Recordkeeping:

Monitoring/Recordkeeping are not applicable for FGRC001.

VII. Reporting:

The semi-annual reports and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

VIII. Stack/Vent Restrictions:

Stack/Vent Restrictions are not applicable for FGRC001.

IX. Other Requirements:

Other Requirements are not applicable for FGRC001.

FGMACTZZZZ: The facility uses two, 4-stroke, rich burn, natural gas-fired RICE (EURC011 and EURC012) with a site-rating of 660 hp each to compress natural gas to recycle gas captured from the storage field liquid handling system. These MACT subject engines are used as needed to regulate flow to and from the storage field.

I. Emission Limits:

FGMACTZZZZ has an emission limit of 75 percent reduction of formaldehyde. Compliance with this limit is demonstrated through Testing which is further discussed below, and the continuous parameter monitoring system (CPMS) described in Monitoring and Recordkeeping below.

II. Material Limits:

Material Limits are not applicable for FGMACTZZZZ.

III. Process/Operational Restrictions:

Based on the design of the engines, EURC011 and EURC012 are online at the time of ignition, there is no bypass for the engines, so there isn't a start-up period, and the engine speed responds to the load.

A new catalyst was installed and tested February 26, 2015. The testing data indicated a new baseline pressure drop of 2.37 for EURC011 which ranges between 0.37 to 4.37, and a new baseline pressure drop of 2.53 for EURC012 which ranges between 0.53-4.53. Additionally, The results of the test indicate formaldehyde reduction is 94 percent for EURC011 and 98 percent for EURC012., which meets the FGMACTZZZZ operating limits. During the inspection, only EURC012 was operating. The inlet temperature was 1,104 degrees Fahrenheit and the outlet temperature was 1,123 degrees Fahrenheit. The catalyst pressure drop was 1.91 inches of water column. The engine was operating within the tested operating parameters in accordance with FGMACTZZZZ.

IV. Design/Equipment Parameters:

Design/Equipment Parameters are not applicable for FGMACTZZZZ.

V. Testing/Sampling:

As previously stated, the most recent catalyst was changed and tested February 26, 2015. The testing is discussed above under Process/Operational Restrictions. The facility chooses to comply with the 76 percent reduction and completes a performance test each time the catalyst is changed.

VI. Monitoring/Recordkeeping:

EURC011 and EURC012 are equipped with CPMS, and the temperature and pressure drop of the catalysts are continuously monitored when in operation, and log data every 15 minutes as required. ANR maintains the necessary records. During the inspection I reviewed malfunction and maintenance records which were up to date. Monitoring of the catalyst parameters indicates the EURC011 and EURC012 comply with the formaldehyde reduction limits.

VII. Reporting:

The semi-annual reports and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

As previously stated, compliance testing of the catalytic converters was conducted February 26, 2015. Test plans and test results were provided within the required timeframes. The FGMACTZZZZ compliance reports were submitted along with ROP reporting. The report followed the format specified in the regulation and there were no incidents of excess emissions, malfunctions, deviations, or periods during which the CPMS were out of control.

VIII. Stack/Vent Restrictions:

Stack/Vent Restrictions are not applicable for FGMACTZZZZ.

IX. Other Requirements:

All of the requirements of the site specific monitoring plan have been addressed. Based on the Conditions in the permit, the facility complies with the applicable provisions for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ).

FGMACTEMERGENCY: One Caterpillar G379 4SRB 355hp emergency generator (EURC019) and one Waukesha L1616GSIU 4SRB 475 hp emergency generator (EURC020).

I. Emission Limits:

Emission Limits are not applicable for FGMACTEMERGENCY.

II. Material Limits:

Material Limits are not applicable for FGMACTEMERGENCY.

III. Process/Operational Restrictions:

At the time of the inspection the engines of FGMACTEMERGENCY were equipped with hour meters. Both engines for FGMACTEMERGENCY operate one hour per month to test the engines. EURC019 operated for a total of 733 hours since it was installed, and EURC020 operated for a total of 180 hours since it was installed. The usage is well below the permit limit of 500 hours per 12-month rolling time period.

During the inspection FGMACTEMERGENCY were not in operation. The facility utilizes oil analysis to determine the frequency of oil changes. Records indicate spark plugs, hoses and belts are inspected, oil changed as necessary based on the oil analysis.

IV. Design/Equipment Parameters:

As previously stated, EURC019 and EURC020 are equipped with non-resettable hour meters.

V. Testing/Sampling:

Testing/Sampling is not applicable for FGMACTEMERGENCY.

VI. Monitoring/Recordkeeping:

The FGMACTEMERGENCY operated during maintenance purposes only. I reviewed records of the maintenance and hours of operation of the engines. Records are maintained as required.

VII. Reporting:

The semi-annual reports and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

VIII. Stack/Vent Restrictions:

Stack/Vent Restrictions are not applicable for FGMACTEMERGENCY.

IX. Other Requirements:

Based on the Conditions in the permit, the facility complies with the applicable provisions for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ).

FGMACTHHH: Two affected small glycol dehydration units (EURC015 and EURC024) as defined in 40 CFR 63.1271 constructed prior to August 23, 2011 which must attain compliance with the requirements in 40 CFR, Part 63, Subpart HHH by October 15, 2015.

I. Emission Limits:

Equation 1 in Appendix 7 of the ROP was used to calculate a BTEX emission limit from each glycol dehydration system. The following BTEX limits were calculated from the stack test and Equation 1 in Appendix 7 of the ROP: 48.96 megagrams per year (Mg/yr) for EURC015 and 6.92 Mg/yr for EURC024. Actual BTEX emissions from the stack test were <0.0053 Mg/year for EURC015 and <0.0054 Mg/year for EURC024, which are far lower than the BTEX emission limits established via Equation 1 in Appendix 7 of the ROP.

II. Material Limits:

Material Limits are not applicable for FGMACTHHH.

III. Process/Operational Restrictions:

The systems appear to be a closed vent system. The process vents (reboiler still) are directed first to a condenser. From the condenser the liquid condensate and vapors travel to the condensate tank. During the inspection, the condenser was not operating, and the emissions were directed to the thermal oxidizer.

At the time of the inspection both EURC015 and EURC024 were equipped with thermal oxidizers and condensers that operate when the thermal oxidizers are not operating. Hour meters were installed, and the facility continuously monitors hours of operation and the temperatures of the thermal oxidizers and condensers which are used to show proper operation of the glycol dehydrators.

Based on the most recent stack test, February 5 and 6, 2015, indicates the BTEX emissions from the thermal oxidizer are less than the limit calculated in SC I.4. The calculated BTEX emission limits were 48.96 Mg/yr for EURC015 and 6.92 Mg/yr for EURC024.

IV. Design/Equipment Parameters:

The facility shows compliance with the emission standard by using a properly operating control device, which was already mentioned above in the Process/Operational Restrictions, and by a closed-vent system that has no detectable emissions. According to the MACT HHH Periodic Report, dated December 9, 2016, there were no periods in which the seal or closure mechanism was broken, the bypass valve position changed, or the key to unlock the bypass line valve was checked out. No leaks or defects were detected during the leak detection and repair assessment.

AQD received a 40 CFR Part 63 Subpart HHH compliance notification from ANR that certifies thermocouples are installed and maintained, calibrated and inspected in accordance with manufacturer's specifications. Additionally, as previously stated, facility continuously monitors the temperature of the thermal oxidizers and condensers, and has alarms installed if one of the thermal oxidizers falls below 1,400 degrees Fahrenheit when operating, and an alarm on the condensers that activates if the condenser of EURC024 goes above 90 degrees Fahrenheit, and the condenser of EURC015 goes above 120 degrees Fahrenheit. The temperature of the thermal oxidizers and condensers are recorded on an hourly basis.

V. Testing/Sampling:

ANR has installed a monitor to measure the natural gas flow rate to the thermal oxidizers and condensers. ANR conducted stack testing to determine BTEX emissions from each glycol dehydration system's thermal oxidizer on February 5 and 6, 2015, as required by MACT Subpart HHH. Since the temperatures within the combustion chamber were greater than 1,400 degrees Fahrenheit during the stack test, no further stack testing needs to take place on the units per MACT Subpart HHH. Actual emissions of BTEX are required to be calculated by a yearly wet gas sampling analysis and GRI-GLYCalc. The most recent analysis was conducted January 6, 2017, using GRI-GLYCalc Version 4.0. The GRI-GLYCalc analyses for the condenser and thermal oxidizer are attached.

VI. Monitoring/Recordkeeping:

As previously stated, 40 CFR Part 63 Subpart HHH requires temperature monitors for the thermal oxidizers and condensers be maintained. AQD received a Notification of Compliance Status Report, dated April 11, 2016 from ANR that certifies thermocouples are installed and maintained, calibrated and inspected in accordance with manufacturer's specifications.

ANR demonstrates compliance with BTEX emission limit for the condensers by establishing a site-specific condenser performance curve, recording the daily average condenser outlet temperatures, and determining the condensers efficiencies for the current operating day.

ANR subcontracted inspection of the Leak Detection and Repair (LDAR) of the closed-vent system to Bureau Veritas, which was completed February 6, 2015. According to the LDAR Assessment Results, no leaks were detected from the Loreed glycol dehydration system, and one leak was detected from the RC Stray glycol dehydration system during the February 6, 2015 assessment, and repaired on February 7, 2015, and retested on February 9, 2015 and no leaks were detected. The LDAR Assessment Report indicated 17 difficult areas to inspect at the Loreed glycol dehydration system (EURC015) and 16 difficult areas to inspect at the RC Stray glycol dehydration system (EURC024). The LDAR Assessment Report did not indicate any areas as unsafe to inspect.

ANR established minimum operating parameter values or maximum operating parameter values, as appropriate for the control devices, to define the conditions at which the control devices must be operated to continuously achieve the emission limits in Section I of FGMACTHHH for control devices used to comply with 40 CFR, Part 63 Subpart HHH. The minimum operating parameter of 1,400 degrees Fahrenheit for the thermal oxidizer was established by ANR through stack testing conducted on February 5 and 6, 2015. The maximum condenser operating parameter of 90 degrees Fahrenheit for the RC Stray glycol dehydrator, and 120 degrees Fahrenheit for the Loreed glycol dehydrator, were established by a condenser performance curve using the procedures in "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1) as inputs for the model GRI-GLYCalc, Version 4.0.

ANR submitted an annual and semi-annual deviation report on time March 16, 2016 and August 9, 2016. No deviations were reported in either of these reports. I reviewed records of the operating parameters and hours of operation of the glycol dehydrators. The vent stream of the glycol dehydrators was not diverted from the control devices. Records are maintained as required.

VII. Reporting:

The semi-annual reports and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

As previously stated, compliance testing of EURC015 and EURC024 was conducted February 5 and 6, 2015. Test plans and test results were provided within the required timeframes. A Notification of Compliance was submitted to the AQD April 11, 2016 and contained the required information from Condition VII.5 of the ROP. Additionally, ANR submitted Periodic Reports in accordance with Condition VII.6 of the ROP. The latest Periodic Report was submitted December 9, 2016. The report followed the format specified in the regulation and there were no incidents of excess emissions, malfunctions, deviations, or periods during which the CPMS were out of control.

The facility submitted the results of the performance testing to the EPA's CDX database in April 2015 as required by MACT Subpart HHH.

VIII. Stack/Vent Restrictions:

Stack/Vent Restrictions are not applicable for FGMACTHHH.

IX. Other Requirements:

The facility is considered a major source of HAPs, due to formaldehyde, which has the potential to emit greater than 10 tons per year. ANR has developed a site specific monitoring plan; the plan includes the CPMS which identifies the method for determining daily average values, system accuracy audits, recordkeeping and reporting requirements. ANR complied with all applicable requirements in 40 CFR Part 63, Subpart HHH by October 15, 2015.

FGMACTDDDDD-EXISTING GAS1: Unit Designed to Burn Gas 1 Subcategory requirements for Existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD with heat input values less than 50 mmbtu/hr. The equipment covered in this flexible group is EURC001 (8 MMBtu/hr) Kewanee boiler L3W-200-G, and EURC025 (0.125 MMBtu/hr) Maintenance garage boiler.

I. Emission Limits:

Emission Limits are not applicable for FGMACTDDDDD-EXISTING GAS1.

II. Material Limits:

Material Limits are not applicable for FGMACTDDDDD-EXISTING GAS1.

III. Process/Operational Restrictions:

On February 19, 2015, DEQ received a Notification of Compliance Statement indicating that the facility complies with the required initial tune-up requirements according to the procedures in 40 CFR 63.7540(a)(10), and the facility has had an energy assessment performed according to 40 CFR 63.7530(e).

IV. Design/Equipment Parameters:

Design/Equipment Parameters are not applicable for FGMACTDDDDD-EXISTING GAS1.

V. Testing/Sampling:

Testing/Sampling are not applicable for FGMACTDDDDD-EXISTING GAS1.

VI. Monitoring/Recordkeeping:

The permittee maintains all monitoring and associated recordkeeping requirements at the facility.

VII. Reporting:

Reporting of any semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. The company has until January 31, 2018 and January 31, 2021 to submit a compliance report for EURC001 and EURC025, respectively. DEQ received a NOC status on February 19, 2015. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

VIII. Stack/Vent Restrictions:

Stack/Vent Restrictions are not applicable for FGMACTDDDDD-EXISTING GAS1.

IX. Other Requirements:

Based on the Conditions in the permit, the facility complies with the applicable provisions for the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD).

FGMACTDDDDDD-NEWGAS1: Unit Designed to Burn Gas 1 Subcategory requirements for New or Reconstructed Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. New and reconstructed boilers or process heaters must comply with this subpart upon startup. The equipment covered in this flexible group is EURC016 25.5 MMBtu gas withdrawal heater, EURC017 25.5 MMBtu gas withdrawal heater.

I. Emission Limits:

Emission Limits are not applicable for FGMACTDDDDDD-NEWGAS1.

II. Material Limits:

The facility only burns natural gas in the withdraw heaters.

III. Process/Operational Restrictions:

The facility conducts annual tune-ups on EURC016 and EURC017. The most recent tune-up was conducted January 25, 2016 and the Annual Compliance Report was mailed to the DEQ February 10, 2016. DEQ received a Notification of Compliance Statement indicating that the facility complies with the required initial tune-up requirements according to the procedures in 40 CFR 63.7540(a)(10), and the facility has had an energy assessment performed according to 40 CFR 63.7530(e).

IV. Design/Equipment Parameters:

Design/Equipment Parameters are not applicable for FGMACTDDDDDD-NEWGAS1.

V. Testing/Sampling:

Testing/Sampling are not applicable for FGMACTDDDDDD-NEWGAS1.

VI. Monitoring/Recordkeeping:

The permittee maintains all monitoring and associated recordkeeping requirements at the facility.

VII. Reporting:

Reporting of any semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. DEQ received a NOC status on February 19, 2015. During the reporting period the permittee reported all monitoring and associated recordkeeping requirements.

VIII. Stack/Vent Restrictions:

Stack/Vent Restrictions are not applicable for FGMACTDDDDDD-NEWGAS1.

IX. Other Requirements:

Based on the Conditions in the permit, the facility complies with the applicable provisions for the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD).

NAME Caryn Owens DATE 12/19/16 SUPERVISOR 