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

N381837568

FACILITY: Great Lakes Gas Transmission Station #13		**SRN / ID:** N3818
LOCATION: 7500 E Dodge Rd, OTISVILLE		**DISTRICT:** Lansing
CITY: OTISVILLE		**COUNTY:** GENESEE
CONTACT: Bruce Bendes , Enviromental Specialist, CS&E		**ACTIVITY DATE:** 10/18/2016
STAFF: Nathaniel Hude	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled and announced inspection as part of an FCE. Violations cited for EU-OVAPU.		
RESOLVED COMPLAINTS:		

Inspection Report
N3818- Great Lakes Gas Transmission (GLGT), Otisville #13
7500 E. Dodge Road
Otisville, MI 48463

Inspection Date:
10/18/16

Facility Contacts:
Bendes- Environmental Specialist, (284) 205-7674, bruce_bendes@transcanada.com
John Deitering- Station Manager
Tiffany Grady- Air Quality Specilaist, (832) 320-5835, tiffany_grady@transcanada.com

MDEQ AQD Personnel:
Nathan Hude – (517) 284-6779, huden@michigan.gov

Facility Description:
GLGT Station #13 is one of many natural gas (ng) compression stations along a pipeline that begins in Canada and extends down through the UP, under the straights of Mackinac, through northern lower Michigan and down through Otisville. The pipeline is easily visible when looking at aerial imagery online or in GIS. The pipeline is pressurized up to 900psi. The compressors may or may not run depending on demand and if the upstream or downstream stations are operating.

The station is located 2 miles southwest of Otisville. The area is predominantly agricultural with scattered residences surrounding the site.

Personal protective equipment (PPE) required for site entry includes: eye protection, hard hat, steel toe, and depending on the activity fire resistant clothing.

There are 5 buildings onsite; the office on the SE side of the facility, the shop where EU-OVAPU and EU-BOILER is located on the NE side and then an individual building for each turbine in the order of EU-UNIT1303, EU-UNIT1301, and EU-UNIT1302 working north to south on the west side. There is also a deck of NG cooling fans on the SW side of the property.

Applicable Regulations:
-MI-ROP-N3818-2016
-40CGR60 GG- Standards of Performance for Stationary Gas Turbines
-40CFR63 ZZZZ- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Previous Inspections:
10/3/14, Brian Culham, Compliance no issues noted
6/24/14, Dan McGeen, Compliance no issues noted
7/30/12, Dan McGeen, Compliance no issues noted
7/21/11, Michael McClellan, Compliance no issues noted

Previous Violations:

None

Past Complaints:
None

Number of Violations Found During this Inspection:
1. Failure to provide adequate oil analysis data of base sample for comparison with annual samples; reference ROP III.6.a.i. and 40CFR63 63.6625(j)
2. Failure to provide documentation of oil analysis for 2015; reference ROP III.6.a.i. and 40CFR63 63.6625(j)
3. Failure to provide deviation ROP report for lack of oil analysis during the 2015 maintenance period; reference ROP VII.1. and VII.2.
4. Failure to provide adequate documentation for maintenance procedures; reference ROP III.6.b. and III.6.c., and 40CFR63 63.6655(e)(2)

Due to the lack of oil information, I will be requesting the oil be changed and a new baseline analysis be conducted to ensure the oil analysis program is being followed as detailed in ROP III.6.a.i. and 40CFR63.6625(j).

Inspection Key Concerns:
Violations as detailed above and the receipt of records per requirements of ROP took over two weeks to be compiled and received by AQD.

MAERS Reporting
Category 1 facility due to Major Source status for nitrogen oxides (NOx) and carbon monoxide (CO).

MAERS Emission Unit List
EUAPU (EU-OVAPU in ROP)- Natural gas-fired electrical generator with a rated heat input of 8.0 MMBtu/hr. Unit is > 300 HP.
EUCLEANER- water-based aqueous solution (non-VOC) in cold cleaner
EUUNIT1301- Rolls Royce model Avon 76G stationary natural gas-fired turbine used to power a natural gas pipeline compressor. This unit is "grandfathered" and has no applicable requirements. It was installed before 1980 when the R336.1285(d) exemption was modified.
EUUNIT1302- Rolls Royce model Avon 76G stationary natural gas-fired turbine used to power a natural gas pipeline compressor. This unit is "grandfathered" and has no applicable requirements. It was installed before 1980 when the R336.1285(d) exemption was modified.
EUUNIT1303- General Electric (GE) model LM1600 stationary natural gas-fired turbine used to power a natural gas pipeline compressor.

Emission Unit Operational Status and Compliance Determination
EU-OVAPU- not operating, Non-Compliance
EUCLEANER- not operating, Compliance
EUUNIT1301- not operating, Compliance
EUUNIT1302- not operating, Compliance
EUUNIT1303- not operating, Compliance

Inspection Summary
This was an announced and scheduled inspection.

I arrived onsite at approx. 10:00am and did not observe any visible emissions or any odors. I entered the office where I met John and provided him with a copy of my business card and the DEQ Inspection Brochure. We reviewed a safety analysis checklist that GLGT requires for onsite activities and maintenance. The pipeline pressure during my visit was 875psi. Soon thereafter, Bruce met up with us and after introductions we began the review of the ROP. A walk through of the site was performed followed by a review of some records. Due to the amount of records, I requested them to send via email.

Inspection records took quite some time to obtain. Despite a list of requested records being sent on 10/19/16, the first records were received on 11/2/16 and found to be insufficient for records in regards to EU-OVAPU. A request for more records was made on 11/3/16 with clarifying detail being emailed in regards to the request on 11/4/16. On 11/7/16, I requested the following information via email and included the following individuals, Tiffany Grady, Bruce Bendes, and Melinda Holdsworth. I informed them that failure to provide the data by COB 11/8/16 would result in a violation notice

(email attached) due to the amount of time it was taking to provide the records required by ROP and / or 40CFR63 ZZZZ. Answers from Tiffany were received on 11/8/16 and are incorporated into the report; all email traffic is attached to the hard copy of the report.

Below are the permit conditions and results from the inspection and records review.

EU-UNIT1303
This turbine was installed on 7/28/94 and is thus subject to to 40CFR60 GG-Standards of Performance for Stationary Gas Turbines per paragraph 60.330(b).

I. Emission Limits
1. SO2 0.015% by volume corrected to 15% O2
2. NOx 175.2 ppm@15%O2
3. NOx 89.0 lbs/hr
4. CO 31.9 ppm@15% O2
5. CO 22.0 lbs/hr
*These limits are the same no matter the load on the turbine.

The 3/10/11 test provided passing results, the emission results were as follows:
High Load: NOx 117.8 ppm@15%O2, NOx 67.2 lbs/hr, CO 24.5 ppm@15% O2, CO 8.8 lbs/hr
Mid-High Load: NOx 97.0 ppm@15%O2, NOx 46.7 lbs/hr, CO 20.5 ppm@15% O2, CO 6.0 lbs/hr
Low-Mid Load: NOx 78.1 ppm@15%O2, NOx 31.7 lbs/hr, CO 25.2 ppm@15% O2, CO 6.2 lbs/hr
Low Load: NOx 61.0 ppm@15%O2, NOx 20.8 lbs/hr, CO 23.0 ppm@15% O2, CO 4.8 lbs/hr

During this test SO2 was not tested. The monitoring/testing method identified in the emission limit table refers to paragraphs III.1. and III.2. for compliance. Paragraph III.1. states that the Permittee shall combust only natural gas in EU-UNIT1303 as defined in 40 CFR 60.331. This definition states that "Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot." A tariff on file with the Federal Energy Regulatory Commission that Tiffany provided states "The gas received and delivered hereunder: (c) shall not contain more than twenty (20) grains of total sulfur (including the sulfur in any hydrogen sulfide and mercaptans) per one hundred (100) cubic feet of gas. Sulfur dioxide was not tested based on GLGT Limited Partnership, FERC Gas Tariff, Docket No. RP10-892-001, paragraph 6.8.2.

II. Material Limits
1. None

III. Process / Operational Restrictions
1. Permittee shall combust only natural gas in EU-UNIT1303 as defined in 40 CFR 60.331. (R 336.1213(3))

III.2. The turbine shall be operated at all times within the range of % load/fuel consumption, which is established to assure compliance with respective limits. This range of % load/fuel consumption shall be established by testing in accordance with Section V of EU-UNIT1303. (R 336.1213(3))
-According to records received from Tiffany on 11/3/16, this unit did not operate in 2015 or this portion of 2016. The 3/10/11 test passed emission limits at the following settings/ranges:
High Load: PT% 82.5; PT RPM 6060.7; CT RPM 15,659; HP 19,133.7; Fuel SCFM 2546
Mid-High Load: PT% 76.8; PT RPM 5641.7; CT RPM 15,224; HP 15,789.0; Fuel SCFM 2149
Low-Mid Load: PT% 71.1; PT RPM 5223.3; CT RPM 14,889; HP 12,257.3; Fuel SCFM 1807
Low Load: PT% 65.4; PT RPM 4808.0; CT RPM 14,538; HP 9,419.7; Fuel SCFM 1525

IV. Design / Equipment Parameters
1. None

V. Testing and Sampling.
1. All testing, sampling, analytical and calibration procedures used for the NOx and CO test programs shall be performed in accordance with 40 CFR Part 60, Subpart GG and Appendix A, Methods 10 and 20 or other acceptable reference methods approved by the AQD. (R 336.1213(3))
The turbine is to be tested once during the permit term. The last test was conducted on 3/10/11 using the appropriate methods and the permit was issued on 1/5/16. 2. Permittee shall conduct emission testing for NOx and CO from EU-UNIT1303 to establish range of % load/fuel consumption within which the turbine can operate in compliance with the NOx and CO limits once during the term of the RO Permit. (R 336.1213(3)(a))
The 3/10/11 test passed emission limits at the following settings/ranges:
High Load: PT% 82.5; PT RPM 6060.7; CT RPM 15,659; HP 19,133.7; Fuel SCFM 2546
Mid-High Load: PT% 76.8; PT RPM 5641.7; CT RPM 15,224; HP 15,789.0; Fuel SCFM 2149
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Low Load: PT% 65.4; PT RPM 4808.0; CT RPM 14,538; HP 9,419.7; Fuel SCFM 1525

V. 3-5 are paragraphs with standard language regarding the process of notification regarding testing and when the results are due.

VI Monitoring / Recordkeeping
1. TVIII. Stack/Vent Restrictions
1. Maximum inches 70, Minimum Height Above Ground 40 feet
-The stack for this turbine appeared to meet the requirements as required. The stack is square and unobstructed.

IX. Other Requirements
1. None

EU-OVAPU
While onsite, I provided Bruce a copy of the EPA's memorandum "Guidance on Vacatur of RICE NESHAP and NSPS Provisions for Emergency Engines" dated April 15, 2016. This was provided due to language in the ROP that includes vacated paragraphs of 40CFR63 ZZZZ. The specific vacated paragraph is 63.6640(f)(2)(ii)-(iii). The ROP references the vacated language in paragraphs III.3, III.4., and III.5. I informed Bruce that use of the engine under the following circumstances would require the engine to conform to non-emergency engine standards:
(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

and

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

I. Emission Limits
1. None

II. Material Limits
1. None

III. Process / Operational Restrictions
1. At all times the permittee will operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.6605(b))
-Inspection Result: there is no air pollution control equipment or monitoring equipment installed other than the hour meter. Operating with good air pollution control practices for minimizing emissions is completed by the required maintenance referenced in III.6.

III.2. There is no time limit on the use of emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
-Inspection Result: total hours for the year (12 month rolling 10/12/15-10/10/16) was 27.2 hours of which 10.9 hours were during an emergency situation due to a loss of commercial power and the remaining 16.3 hours was for monthly maintenance checks which ran the engine 0.5-1.9 hours per month.

III.3.The permittee shall not allow the engine(s) to exceed 100 hours for maintenance checks and readiness testing and emergency demand response. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. (40 CFR 63.6640(f)(2)(ii))
-Inspection Result: total hours for the year (12 month rolling 10/12/15-10/10/16) was 27.2 hours. Due to the vacatur "emergency demand response" is no longer allowed unless the engine conforms to non-emergency engine standards.

III.4.The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
d. The power is provided only to the facility itself or to support the local transmission and distribution system.
e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

III.5. EU-OVAPU may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph III.3. of this section. Except as provided in paragraphs 5.a-e of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(4)
a. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
d. The power is provided only to the facility itself or to support the local transmission and distribution system.
e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
-Inspection Result: Both Bruce and John stated that GLGT does not operate this engine in the manner identified in a-e.

III.6. The permittee must meet the following requirements except during periods of startup:
a. Change oil and filter every 500 hours of operation or annually, whichever comes first.
i. An oil analysis program may be used to satisfy this requirement if done so in accordance with 63.6625(j). The oil analysis must be performed at the same frequency as oil changes are required.
b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
-Inspection Result: Documentation of maintenance was received on 11/2/16 from Tiffany. Another request was made due to a lack of information specifically stating b. and c. were met. On 11/3/16 Tiffany provided a document titled "RICE MACT Maintenance Record Sheet" which was completed on 3/4/15. The 3/4/15 document stated that spark plugs, belts, and hoses were inspected by Tom Wiengartz. A spot on the document labeled "Oil Sample Taken" had a hand written note in the remarks stating "N/A Taken on a regular time interval". I again made a request to provide the current year (2016) inspection record.

In response to the 2016 maintenance record request Tiffany responded with the following: "Historically, TransCanada has used a closed work order with an attached procedure (see attachment 4) as demonstration of compliance. The inspection report checklist was not used by the Technician in 2016 as this document has not been mandatory. However, TransCanada plans to roll it out as a mandatory practice going forward as advised by Nathan Hude." I informed Tiffany that the work order did not provide the specific information as proof the maintenance was completed and was insufficient for the 2016 inspection.

The RICE MACT Maintenance Procedure referred to as attachment 4 above appears to cover the requirements of the regulation, yet it is unclear if this procedure is being followed; an example of the lack of clarity is on page 4 of 12, paragraph 4.1.3. requires the oil analysis if taken to have the technician
i. verify the baseline readings are included in the analysis,
ii. Verify the parameters are within the requirements of section 4.5 and 4.6 as applicable.
These requirements are detailed as to what needs to be compared in 4.6 by the technician and fits the requirements of the regulation, yet the data provided does not allow for comparison due to missing information.
The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine."

The spreadsheet indicated the following for the 2016 sample:
Total Acid Number = appears in report as "TAN" 1.6 mg/g
Viscosity = Visc 40°C cSt 131, Visc 100°C cSt 13.36
Percent water content = 129ppm which equates to 0.013%

Documentation for the 2015 sample and the baseline sample was requested on 11/7/16 and what information available to the company was provided. Tiffany stated they were unable to validate if an oil sample was submitted for analysis in 2015. It will be reported as a permit deviation in our next semiannual compliance report.

Also included was the base sample information. The base sample was analyzed on 2/17/10. The information provided does not provide data for water to determine percent water content nor does it provide data for total acid number; thus a comparison cannot be made or determined.

Violations will be cited based on the information in the paragraphs above for lack of proof for maintenance in 2016, lack of adequate oil base sample, and lack of oil sample for 2015.

IV. Design / Equipment Parameters
1. The permittee shall equip EU-OVAPU with a non-resettable hour meter. (R 336.1213(3))
-Inspection Result: The meter is installed and read 18,106 hours

V. Testing/Sampling
1. no requirements

VII. Reporting
There are some mistakes in this paragraph, there are two number 2's. For the purpose of clarity, this report is written by how the paragraph should be numbered.

VII. 1-3. are requirements regarding standard ROP reports in regards to deviations, and certification of compliance.
-Inspection Result: Semi-annual reports are being received on time and a review back to the second half of 2013 found that since then all have been marked as "all monitoring and associated recordkeeping requirements of the ROP were met and no deviations from these requirements or any other terms or conditions occurred." Due to the lack of data for an oil sample analysis in 2015, a violation will be cited for failure to disclose a deviation.

VII.4. Discusses requirements if the unit operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in III.5.
-Inspection Result: Both Bruce and John stated that GLGT does not operate this engine in the manner

VIII. Stack/Vent Restrictions- none
IX. Other requirements-
1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subparts A-General Provisions and ZZZZ- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. (R 336.1213), (40 CFR Part 63 Subparts A and ZZZZ)
Although the vacatur language is not included in the regulation as of yet, it was explained to Bruce that it may be some time before the language shows up on the electronic / online version of the regulation.

FG-AVONS
These turbines were installed in 12/01/1970 for EU-UNIT1301 and 10/01/1970 for EU-UNIT1302.
These turbines are not considered "Grandfathered" for permitting purposes due to installation after the effective date of the Air Pollution Act which became effective on August 15, 1967.
These turbines are grandfathered in regards to 40CFR60 GG-(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.
(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of §60.332.

Although the turbines are greater than 10 MMBtu, rated at 40,747,180 Btu (using a conversion of 16,000 HP with 1HP = 2546.7Btu), they were installed prior to the date of 10/3/77.

While onsite, EU-UNIT2 turbine had been swapped out with another same model turbine so that it could be shipped out for maintenance. It is determined that this practice is not considered construction, modification, or reconstruction and thus does not trigger the unit as subject to 40CFR60 GG.

I. Emission Limits
1. None

II. Material Limits
1. None

III. Process / Operational Restrictions
1. Permittee shall combust only natural gas in EU-UNIT1303 as defined in 40 CFR 60.331. (R 336.1213(3))
-Inspection Result: There is no other option as no other type of fuel container is onsite that could fuel the turbine

IV. Design / Equipment Parameters
1. None

V. Testing / Sampling
1. None

VI. Monitoring / Recordkeeping
1. None

VII. Reporting
1-3. are requirements regarding standard ROP reports in regards to deviations, and certification of compliance.
-Inspection Result: Semi-annual reports are being received on time and a review back to the second half of 2013 found that since then all have been marked as "all monitoring and associated recordkeeping requirements of the ROP were met and no deviations from these requirements or any other terms or conditions occurred."

VIII. Stack/Vent Restrictions- none

IX. Other requirements- none

EU-CLEANER

This is a small parts cleaner with approx. 6ft of surface area, that is serviced by an outside source, and uses a water based cleaning solution.

EU-OVBOILER
This boiler is located in the same building as EU-OVAPU and is rated at 6.1 MMBtu and is thus exempt from permitting per R336.1282(b)(i) as equipment used for space heating using sweet natural gas and less than 50 MMBtu. Due to the facility being an "Area Source of HAPs" 40CFR63 DDDDD does not apply. Due to the boiler being fueled by natural gas, the unit is exempt of the requirements of 40CFR63 JJJJJJ per 63.11195(e).

While walking the plant to perform the inspection, there was an outside crew servicing what appeared to be a manhole area. John and Bruce explained to me that the fluid used to circulate heat throughout the plant was found to be leaking. They stated that all of the fluid was contained in a sump type area. I wrote the name of the fluid as Amertol, but could not find any information online as to the SDS of the fluid. On 11/7/16, I requested a SDS of the fluid. A copy of the SDS was received on 11/8/16 from Tiffany. The fluid is named Ambitrol FL 50 and is composed of 30-60% Ethylene glycol CAS: 107-21-1, <50% water CAS: 7732-18-5, and <1.5% Dipotassium hydrogen phosphate CAS 7758-11-4. The SDS for this fluid is attached to this report.

A search of the AQD toxics list found that Dipotassium hydrogen phosphate CAS 7758-11-4 is not a toxic in regards to air quality; this chemical is not listed on the EPA (Hazardous Air Pollutant) HAP website. Ethylene glycol CAS: 107-21-1 is listed as a HAP, and is listed as a AQD toxic with an Initial Threshold Screening Level of 1000 µg/m³ for an 1 hour average. Since this was not an air release of this substance in a vapor or aerial form, this will not be pursued further by AQD but it was prudent to note of the situation.

Cooling Fans
Also onsite is a bank of cooling fans that are located on the southwest side of the property. I estimated that there were approx. 20 fans with radiators above them on the positive pressure side of the fan. These devices are used for cooling ng is the gas exceeds a certain temperature during the compression cycle (I believe the triggering temperature in 119° F). The cooling of the NG allows for easier compression. John stated that due to the lack of use of the turbines, the fans also have not been used for some time.

Gas Scrubbers
There are 2 gas scrubbers onsite. These devices are used to remove impurities including water. Not inspected.

Condensate Tanks
Past reports indicate there is a 10,000 gallon tank for storage of the impurities which by due to the contents is exempt per R336.1284(e)

Based on the violations cited for EU-OVAPU, the facility will be receiving a Non-Compliance report and Full Compliance Evaluation (FCE).

NAME _____ DATE 11/18/16 SUPERVISOR _____

reprinted due to errors on original print from 11/10/16