DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Sample Results Review

B372129095

FACILITY: ANR Pipeline - Reed City Compressor Station		**SRN / ID:** B3721
LOCATION: 7677 230th Ave., REED CITY		**DISTRICT:** Cadillac
CITY: REED CITY		**COUNTY:** OSCEOLA
CONTACT:		**ACTIVITY DATE:** 04/08/2015
STAFF: Kurt Childs	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Review of Subpart HHH glycol dehydrator BTEX emissions test and LDAR assessment report.		
RESOLVED COMPLAINTS:		

The test report was submitted timely (within 60 days of the test) and included the ROP certification form. The report provides an overview of the process and the test procedures as well as presenting the results of BTEX emissions testing and Leak Detection And Repair (LDAR) assessment of the two glycol dehydration systems at the Reed City Compressor Station. Emissions testing and LDAR assessment are required by 40 CFR 63 Subpart HHH for Natural Gas Transmission and Storage Facilities (HHH).

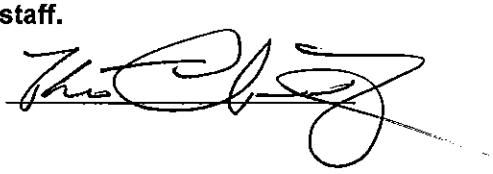
BTEX Emissions Testing

The results of the BTEX emission testing indicate emissions from glycol dehydrator thermal oxidizer control devices are well below the HHH emission limits. The BTEX emission limit is calculated using Equation 1 from HHH. The test report did not include the data used in the calculation but did include a sample calculation of the emission limit. The specific data used in the emission limit calculation was requested and later provided by ANR (TransCanada). The resultant emission limits are 48.96 Mg/yr. for the LoReed dehydration unit (EURC015) and 6.92 Mg/yr. for the RC Stray dehydration unit (EURC024). The emission limit calculation is based on the annual average daily natural gas throughput(4,190,675,.56 scm/day and 2,812,076.34 scm/day from 2009 - 2013 for EURC015 and EURC024 respectively) and the annual average BTEX concentration of natural gas at the inlet of the dehydration system (103.3 ppmv and 21.8 ppmv for EURC015 and EURC024 respectively). The results of the testing indicate the annual mass rate of BTEX emissions are <0.0053 Mg/yr. for EURC015 and <0.0054 Mg/yr. for EURC024. These results are based on typical maximum operating hours of 3,624 for the total withdrawal season (the dehydration systems only operate during the withdrawal season, typically November through march).

LDAR Assessment

The LDAR assessment consisted of identifying and testing 27 locations on EURC015 and 29 locations on EURC024 using a portable FID. Results of the test did not detect any leaks (defined as greater than 500ppm VOC) except at one location on EURC024. That leak was noted, repaired and re-tested two days later. No leak was detected during the re-test.

The test report indicates that both EURC015 and EURC024 are in compliance with the HHH requirements for BTEX emissions and LDAR. Additional technical review of the test report may be conducted by AQD TPU staff.

NAME  DATE 4-27-15 SUPERVISOR