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

N753832104

FACILITY: LINN Operating, Inc. - Wild West Booster		SRN / ID: N7538
LOCATION: SE4 NE4 SE4 SECTION 16 T30N R4W, HAYES TWP		DISTRICT: Cadillac
CITY: HAYES TWP		COUNTY: OTSEGO
CONTACT: Diane Lundin , Senior EHS Representative		ACTIVITY DATE: 11/10/2015
STAFF: Shane Nixon	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: on-site inspection and records review		
RESOLVED COMPLAINTS:		

AQD staff traveled to Otsego County to perform an inspection of the Wild West Booster facility. The purpose of the inspection was to determine the facility's compliance with Permit to Install (PTI) No. 264-05 and applicable state and federal air pollution control regulations. The facility consists of a Caterpillar 3408 HCTA compressor engine equipped with a three-way catalyst.

The compressor engine was operating at the time of the inspection and operating parameters recorded at that time are below:

Unit number: 303595

Engine coolant temperature: 190°F

Compressor oil temperature: 165°F

Engine oil pressure: 70 psi

Compressor oil pressure: 75 psi

Engine operating rate: 1,679 rpm

Catalyst inlet temperature: 787°F

Catalyst outlet temperature: 847°F

Emission Limits - NOx and CO emissions are each limited to less than 90 tons per year, based on a 12-month rolling time period. Records submitted by Ms. Diane Lundin, Linn Operating, The highest 12 month rolling NOx emissions occurred in September 2014. At that time, 12 month rolling NOx emissions was 5.12 tons. The highest 12 month rolling CO emissions occurred in March 2015 and was 8.75 tons. Linn Operating has adequately demonstrated that the compressor engine is well below the limits established in the PTI.

Material Limits - Sweet gas is the only fuel allowed to be burned in the compressor engine. Information provided by Ms. Lundin indicates the hydrogen sulfide concentration of the fuel burned in the compressor is 1 ppm. Based upon the concentration, the gas is considered sweet.

Process/Operational Restrictions - The facility is required to have a preventative maintenance/malfunction abatement plan. A revised plan was submitted on June 6, 2014 and approved by AQD on July 2, 2014. The revised plan was to update the type of engine and pollution control equipment located at the facility.

Testing - Verification of NOx and CO emissions is required upon AQD request. Based upon the engine size and calculated emissions, AQD does not consider testing to be necessary at this time.

Monitoring - Linn Operating is required to monitor the natural gas usage of the compressor engine on a monthly basis. AQD staff observed that fuel gas was monitored and recorded using a "circle chart" and was operating at the time of the inspection.

Recordkeeping/Reporting/Notification - Ms. Lundin submitted to AQD records of all maintenance activities and repairs made to the compressor engine. These records demonstrate that Linn Operating is maintaining the engine in accordance with the PM/MAP.

Pursuant to the requirements of the PTI, Linn Operating submitted notification to AQD on February 13, 2014 that the compressor engine at that time would be replaced with a Caterpillar 3408. The notification included information demonstrating that the replacement engine was equal or lesser emitting. A revised PM/MAP reflecting the change in compressor engines was submitted on June 6, 2014.

Monthly fuel use records, monthly and 12 month rolling NOx, and monthly and 12 month rolling CO emission calculations were available upon request. AQD determined the records were adequate and demonstrated compliance with the recordkeeping requirements of the PTI.

Stack/Vent Restrictions - AQD observed at the time of the inspection that the compressor stack was constructed in accordance with the parameters listed in the PTI.

Conclusion - AQD staff considers the facility to be in compliance with PTI No. 264-05 and applicable state and federal air pollution control regulations.

NAME _Shane Nixon_   DATE _11/13/15_   SUPERVISOR _____