

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N815131034

FACILITY: VECTOR PIPELINE L.P., Athens Compressor Station		SRN / ID: N8151
LOCATION: 4981 2 Mile Rd, ATHENS		DISTRICT: Kalamazoo
CITY: ATHENS		COUNTY: CALHOUN
CONTACT: Michael Betzold , Mechanical Technician		ACTIVITY DATE: 08/20/2015
STAFF: Rex Lane	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Self Initiated Inspection		
RESOLVED COMPLAINTS:		

On August 20, 2015, Air Quality Division (AQD) staff, Rex Lane and Monica Brothers (hereafter "staff") arrived at Vector Pipeline Systems' Athens Compressor Station (ACS) located at 4981 2 Mile Road, Athens, Michigan at 2:50 p.m. to conduct an unannounced air quality inspection. Staff made contact with Mr. Mike Betzold, ACS mechanical technician and Mr. Joe Hubbard, ACS instrument and operations technician. Staff stated that they would like to conduct an unannounced air quality inspection of the facility. Staff presented Messrs. Betzold and Hubbard with their inspector credentials and provided them with a business card and a copy of MDEQ's Environmental Inspections brochure.

Vector Pipeline is a joint venture between Enbridge, Inc. and DTE Energy which operates a 350 mile 42-inch pipeline that transports approximately 1.3 billion ft³/day of natural gas from Joliet, Illinois to Ontario, Canada. Vector Pipeline has five natural gas compressor stations along the pipeline to supply and transport natural gas to various parties through multiple interconnects.

During the pre-inspection meeting, staff asked and Mr. Betzold indicated that there have not been any operational changes to the facility since the last AQD inspection (9/4/2013). We briefly discussed the gas turbine engine and auxiliary gear box replacement that occurred in March 2014 and facility file documentation that demonstrated why the project did not trigger a reconstruction and was exempt from air use permitting under Rule 285(a)(vi). We also discussed the 3/26/14 NOx emission test that was conducted on EUTURBINE1. Pursuant to 40 CFR Part 60, Subpart KKKK (60.4340(b), the initial stack test results for NOx (7.5 ppm) were well below 75% of the applicable NOx limit (25 ppm @ 15% oxygen), therefore, staff informed Mr. Betzold that the annual turbine retest deadline may be extended out to 26 months or by 5/26/16.

The facility currently operates under Renewable Operating Permit (ROP) MI-ROP-N8151-2011. The ROP renewal application was received on 08/5/15 and has been determined to be administratively complete. Based on the ROP renewal application, potential to emit for greenhouse gases is approximately 61,500 tons CO₂e/year. The facility is a major source for carbon monoxide and is considered to be an area source for HAPs.

The facility utilizes a 15,000 HP (120 MMBtu/hr.) natural gas fired combustion turbine (EUTURBINE1) to compress natural gas in the pipeline. The turbine is equipped with a dry lean pre-mixed combustion technology (Solonox) to reduce NOx emissions. The Solonox operating mode activates at a natural gas producer speed of 93%. The facility also has a 365 HP natural gas fired engine (EUSPU) and generator set for emergency backup power. EUSPU is identified in the current ROP as being subject to 40 CFR Part 60 (NSPS), Subpart JJJJ. However, information provided in the ROP renewal application indicates that the engine was ordered in April 2008 and manufactured in December 2008 and is not subject to NSPS, Subpart JJJJ by definition (i.e. 40 CFR 60.4230(a)(4)(iv)) because it applies only to emergency engines greater than 25 HP that are manufactured on or after January 1, 2009.

Required PPE is fire resistant clothing (coveralls provided by ACS), safety glasses, hard hat and hearing protection in the turbine building. Mr. Betzold indicated that there are combustible gas monitors around the facility that will trigger flashing blue lights and audible alarm in the event the monitors detect concentrations at or above 20% of lower explosive limit (LEL). Mr. Betzold directed staff to proceed to the muster area outside and east of the facility's fence line in the unlikely event that the monitor alarms. A blowdown vent is located in the northwest corner of the facility. Staff was then given a tour of the generator and turbine buildings. EUSPU was not in operation during the inspection. Staff took a picture

