DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Self Initiated Inspection

N	344	53	2	ງ2	6
---	-----	----	---	----	---

FACILITY: Ener Vest Operat	tring ASE 5C	SRN / ID: N6445		
LOCATION: SE, NE, SE Sect	ion 12, T29N-R2W,, WATERS	DISTRICT: Cadillac		
CITY: WATERS		COUNTY: OTSEGO		
CONTACT: Jeff Riling, OPE	RATIONS MANAGER	ACTIVITY DATE: 10/22/2015		
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT		
SUBJECT: Self Initiated Insp	pection			
RESOLVED COMPLAINTS:		,		

On Thursday, October 22, 2015, Caryn Owens of the Department of Environmental Quality (DEQ) – Air Quality Division (AQD) conducted a self-initiated field inspection of Enervest Operating, LLC (Enervest) – ASE-5C CPF (N6445) located in the southeast quarter, of the northeast quarter, of the southeast quarter of Section 12, Township 29 North, Range 2 West in Chester Township, Otsego County, Michigan. More specifically, the entrance of the site is located approximately ¼ mile north of Old State Road (County Road F 38) on a two-track, approximately ¼ west of the Old State Road and Westwood Road intersection.

The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) from Oil and Natural Gas Production facilities (40 CFR, Part 63, Subpart HH), and NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR, Part 63, Subpart ZZZZ – RICE MACT). The State of Michigan does not have delegated authority of the area source NESHAPs, and thus these areas were not reviewed by the DEQ at this time.

Permit to Installs (PTIs) 45-05 and 45-05A were voided in October 2005 and April 2013, respectively. PTI 45-05 was issued for equipment associated with processing natural gas from nearby Antrim wells, removing the water from the natural gas stream, and then compressing the gas to send to sales. A modification to PTI 45-05 was issued in October 2005 to increase the NOx emissions to 89.9 tons per year from the facility (PTI 45-05A). The compressor engine was replaced with a lower emitting engine and below significant levels to require a PTI in the year 2009. In September 2009, a letter from Environmental Consulting Technology, Inc. (ECT), on behalf of Enervest requested to void PTI 45-05A, but the request was not followed up on until April 2013. In the void request, Enervest is claiming that the equipment at the facility was covered under the following exemptions of the DEQ-AQD Air Pollution Control Rules:

- The glycol dehydrator meets exemption Rule 336.1288(b)(ii) since it processes gas from the Antrim formation only.
- The compressor engine at the facility meets exemption Rule 336.1285(g) since the engine has a heat input of less than 10,000,000 BTU/hr,
- The above ground storage tank in the tank battery meets exemption Rule 336.1284(e) since the sweet condensate removed from the natural gas stream is stored in a tank less than 40,000 gallons.

The facility had an "operating" status in the DEQ-AQD's Michigan Air Compliance and Enforcement System (MACES), and Ms. Owens voided PTI 45-05A in April 2013, but has not been to the site to see the current activities, so the DEQ wanted to check on what operations were occurring at the site.

On-Site Inspection:

During the field inspection it was partly cloudy with wind speeds approximately 5-10 miles per hour out of the west, and approximately 50degrees Fahrenheit. The facility consisted of: a glycol dehydrator system enclosed in a building; a compressor engine building; and a tank battery area containing one 100-barrel (bbl) storage tank. There was a concrete pad that appeared to have a load-out connection and possibly contained a former engine located on the eastern portion of the site. The facility was fenced in along the eastern and southern boundary lines, and the gate was open during the field inspection. DEQ observed a steam plume from the glycol dehydrator stack, and slight petroleum-like odors were in the area of the glycol dehydrator, but the odors were not present off site. No other visible emissions were observed during the field inspection.

The compressor engine was an 810 horsepower (hp) Caterpillar 3512LE engine, without a control device. The engine was identified on the engine block as NGCS186 and was operating at 1,202 revolutions per minute

(RPMs), 60 pounds per square inch (psi), and 183 degrees Fahrenheit. The maintenance sheet by the engine identified the engine as ASE-5C, Unit #186, CAT 3512.

Based on the inspection, the activities at the site appear to be covered under the exemptions listed above, and a

PTI is not/required for this facility at this time.