

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

B555129945

FACILITY: Merit Energy Company - Manistee 15 CPF		SRN / ID: B5551
LOCATION: SCHOEDEL RD, MANISTEE TWP		DISTRICT: Cadillac
CITY: MANISTEE TWP		COUNTY: MANISTEE
CONTACT: Fred Holden , Maintenance leader		ACTIVITY DATE: 06/17/2015
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Self Initiated Inspection to see what process activities were at the site.		
RESOLVED COMPLAINTS:		

On June 17, 2015, Caryn Owens, Michelle Rogers, Mark Mitchell, and Mary Ann Dolehanty of the DEQ-AQD conducted a self-initiated inspection of the Merit - Manistee 15 Central Processing Facility (CPF) located at 3609 Schoedel Road in Manistee Township, Manistee County, Michigan (SRN No. B5551). More specifically, the facility is located on the south side of Schoedel Road, approximately 2/3 mile east of the Schoedel Road and M-22 (Orchard Highway) intersection. DEQ was accompanied by Fred Holden, the Plant Operator for Merit Energy. At one time, this site had four permit to installs (PTIs) (421-75, and 421-75A, 640-96, and 640-96A) that were voided in 1976, 1997, 2007 and 2012, respectively. The facility had an "operating" status in the DEQ-AQD's Michigan Air Compliance and Enforcement System (MACES), and structures were visible on current aerial photographs, so DEQ wanted to check on what operations were occurring at the site.

PTI 421-75 was issued to remove hydrogen sulfide from the natural gas stream and use a flare, which was voided when PTI 421-75A was issued in 1976 and revised in 1977. PTI 421-75A was issued to increase sulfur dioxide emissions for the site, and was voided in 1997 because the amine process to sweeten the natural gas was shut down. PTI 640-96 was issued for construction of an oil and gas CPF, which was voided in 2007 because there was a condition in the PTI stating that the facility could process sweet gas only, and the facility processed sour gas. PTI 640-96A was issued so that the facility could process sour gas. PTI 640-96A was voided in 2012 because the equipment that was covered in the PTI was reportedly removed or disabled.

The weather conditions were mostly sunny, approximately 75 degrees Fahrenheit and calm winds. Equipment observed at the facility consisted of: two in-line heaters; a separator building used to separate the natural gas, brine, and oil; an iron sponge; a blow down tank; a process heater; a glycol dehydrator building; an electric compressor engine; four approximately 400 barrel (bbl) above ground storage tanks connected to a vapor recovery unit (VRU); a flare tower; and a partially dismantled amine plant, with partially dismantled amine towers. Equipment that is no longer in operation consisted of: one of the in-line heaters; the flare; the glycol dehydrator system; and former amine plant building. The former amine plant was located on the eastern portion of the property, and the flare is on the southern portion of the property. According to Mr. Holden, the flare has been inoperable since at least 1990.

Currently at the facility, natural gas liquids, brine, and oil enter the facility on the northwestern portion of the property, and go through an in-line heater (when necessary) and then the fluids are separated in the separator building. According to Mr. Holden, the operating in-line heater is rarely used, and was not in use during the inspection. The natural gas flows through an iron sponge that contains a sulfatreat absorbent to remove any H<sub>2</sub>S that may be present in the gas stream, and then flows through a Van Gas dehydration enclosed process using tabletted deliquescent desiccants to remove the water from the natural gas. The natural gas is then compressed using a 130 horsepower electric compressor engine and routed to the sales line. The brine and oil separated from the gas stream are routed to the tank battery in the central portion of the property. A process heater is onsite to keep utility lines warm for transferring fuel throughout the site.

This site is considered a true minor source and Merit claims exemptions for the processes at the facility. Specifically, Merit claims exemptions: R 336.1284(f) for the above ground storage tanks in the tank battery; and R 336.1282(b)(i) for the process heater. The compressor and abandoned glycol dehydration system do not have associated emissions. DEQ agrees that no PTIs are necessary for this site at this time, and no further action is necessary.

NAME Annem Owens

DATE 4/17/15

SUPERVISOR 