

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

N624571792

FACILITY: ANR PIPELINE COMPANY WINFIELD DEHY PLANT		SRN / ID: N6245
LOCATION: 10680 N GREEN RD, HOWARD CITY		DISTRICT: Grand Rapids
CITY: HOWARD CITY		COUNTY: MONTCALM
CONTACT: Chris McFarlane ,		ACTIVITY DATE: 04/15/2024
STAFF: Laura Martin	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY '24 on-site inspection to determine compliance with facility's PTI 125-97.		
RESOLVED COMPLAINTS:		

On April 15, 2024, the Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff Laura Martin (LM) and Chris Robinson (CR) met with Mr. Ben Samuelkuty to conduct an onsite inspection of the ANR Pipeline Company Winfield Dehydration Plant (Winfield, SRN N6245), located at 10680 North Green Road in Howard City, Newaygo County, Michigan. Per field work guidance this inspection was scheduled one business day in advance to ensure proper staff would be onsite. This facility is unmanned requiring any visit to be scheduled to ensure proper personnel are onsite.

The purpose of the inspection was relayed to Mr. Samuelkuty, which was to determine the Winfield Dehy station's compliance with respect to site specific opt-out Permit to Install (PTI) No. 125-97 and any other applicable air quality rules and regulations.

Weather conditions were sunny, approximately 60°F with ESE winds at 3mph (weatherunderground.com).

No visible emissions or significant odors were observed at any time during this inspection, however the dehydration unit covered in opt-out Permit to Install (PTI) No. 125-97 was not operating, nor was the remediation system covered in voided PTI No. 164-09. It was stated that ANR is taking steps towards shutting the facility down permanently. An exempt compressor engine was onsite and operating during the inspection in order to remove all gas from underground storage so that wells at the facility could be permanently closed and capped.

Facility Description

The purpose of the Winfield Dehy Plant is to remove liquid and impurities from natural gas as it is withdrawn from the underground storage reservoirs. The natural gas is contacted with triethylene glycol in an absorption contact tower to remove moisture to meet pipeline dew point specifications. In addition to moisture, the glycol absorbs hydrocarbons from the gas. The rich glycol from the tower passes through a flash tank where light hydrocarbons are removed. The rich glycol then goes to the regeneration still where the moisture and glycol are separated by distillation. Hydrocarbons are also removed from the glycol. The regenerated glycol is then cycled back to the tower for reuse in a closed loop system.

The Volatile Organic Compounds (VOC) / Hazardous Air Pollutants (HAP) emission points are the flash tank and the still. The regenerator still emissions are controlled by a glycol cooled condenser.

Regulatory Evaluation

The Winfield Dehy Station is a Title V opt-out source for Hazardous Air Pollutants (HAPs), a true minor for VOCs and operates under PTI No. 125-97. General PTI No. 164-09 for the remediation system was previously voided.

The facility is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Natural Gas Transmission and Storage Facilities for Glycol Dehydrators promulgated in 40 CFR Part 63, Subpart HHH because it is not a major source.

The site is small, and all equipment is visible from a single vantage point. Mr. Samuelkuty stated that both the engine operating onsite and the contactor tower replacement were covered by an exemption and paperwork could be provided. Following the inspection, the paperwork was provided showing that the engine was installed and operated under exemption R.336.1285.(2)(g) and the contact tower was replaced under exemption R336.1285(2)(a).

Compliance Evaluation, PTI No. 125-97

Special Conditions no. 13 – 15

Permit to Install (PTI) No. 125-97 is a Title V opt-out permit limiting the facility's HAP emissions to 9 tons/year for any individual HAP or 22.5 tons/year for any combination of HAPs based on a 12-month rolling time period. VOCs are also limited to 323 lbs./day, or 30.3 tons/year based on a 12-month rolling time period. Emissions data was provided covering the time period from April 2022 through April 2024. The system operated in April of 2022 and not again until February of 2023. Operation has been minimal and as such, emissions are also minimal. The 12-month rolling time period starting in April 2022 had a total of .007 tpy VOC emissions, .001 tpy individual HAP emissions of Benzene and .003 tpy aggregate HAPs emissions. The highest VOC emissions was 14.144 lbs in February 2023. The 12-month rolling time period starting in April 2023 had .008 tpy VOC emissions, 2.416 tpy individual HAP emissions of Benzene and .003 tpy aggregate HAP emissions. The highest VOC emissions was 11.575 lbs in December 2023.

Special Conditions no. 16 -20

The glycol dehydrator's regenerative still is equipped with a condenser that is operated with an exhaust temperature of less than 115°F which is monitored continuously. Exhaust temperatures are recorded on a daily basis, which are based on hourly averages. The facility does not have a temperature display on-site therefore temperatures were not collected during the onsite visit conducted on April 15, 2024. However, the system was not operating. Based on records received for the April 2022 through April 2024 time period, the highest temperature recorded was in February 2024 at 62.7 DegF.

The glycol dehydrator is also equipped with a flash tank. Exhaust gases from the flash tank and condenser are discharged vertically to the ambient air.

Special Condition no. 21

The exhaust gases from the glycol regenerator are discharged to the ambient air from a stack. While the stack dimensions were not explicitly measured during the inspection, they appeared to meet the permit requirements of having a maximum diameter of 3-inches and height of not less than 24-feet above ground level.

Special Conditions no. 22-26 only apply if a thermal incinerator replaces the condenser control, which the facility has not done.

Special Condition no. 28 limits the glycol dehydrator to 4,500 hours of operation per year based on a 12-month rolling time period. Hours of operation records are included in both the temperature and emissions records provided via email. Based on these records the dehydrator operated for a total of 120.2 hours during the 12-month rolling time period starting in April 2022 and 617.3 hours during the 12-month rolling time period starting in April 2023.

Winfield Dehy also has a temporary compressor engine operating at the site in order to extract natural gas from underground storage reservoir prior to sealing the well for permanent shut down of the facility. The engine operates under R.336.1285.(2)(g) for internal combustion engines that have less than 10,000,000 Btu/hr (10 MMBtu/hr) maximum heat input and is exempt from requiring a permit to install.

Compliance Determination

Based on observations made during the April 15, 2024, onsite inspection and records review, the ANR Pipeline Company Winfield Dehydration Plant appears to be in compliance with applicable air quality rules and regulations including the requirements established in PTI No. 125-97.

NAME Ravraj Asti DATE 5/14/24 SUPERVISOR [Signature]