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

N824270180

FACILITY: White Pine Production LLC -ST. Garfield 9/10		**SRN / ID:** N8242
LOCATION: STATE GARFIELD 9/10 SEC 9, KALKASKA		**DISTRICT:** Gaylord
CITY: KALKASKA		**COUNTY:** KALKASKA
CONTACT: Stacey Goodenough ,		**ACTIVITY DATE:** 12/08/2023
STAFF: Caryn Owens	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: On-Site Inspection and Records Review.		
RESOLVED COMPLAINTS:		

On Friday, December 8, 2023, Caryn Owens of the Department of Environment, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted an on-site inspection of the White Pine Production – St. Garfield 9/10 Tank Battery facility (SRN: N8242) located in the northwest quarter of Section 9, Township 25 North, Range 5 West in Garfield Township, Kalkaska, MI. More specifically the site is accessed by heading north on Maple Road, approximately ¾ miles north of the 8 Point Road and Maple Road intersection. The site is located on the west side of Maple Road just before Maple Road curves to the right and changes to 10 Point Road. It is recommended to have a H2S monitor during the inspection.

The field inspection and records review were to determine compliance with permit to install (PTI) 49-09A. The site has opted out of major source applicability by limiting the operational and/or production limits potential to emit (PTE) to be below major source thresholds. The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) Part 63 Subpart ZZZZ, these requirements were not reviewed by the AQD at this time.

Summary:
The activities covered during this full compliance evaluation (FCE) appear to be in compliance with PTI 49-09A. Review of the records for the facility indicates the facility was in compliance with emission limits in accordance with the PTI. AQD recommends updating the MAP with the most current Company name referenced in the document and remove reference to previous engine at the facility. Specific permit conditions that were reviewed are discussed below.

On-site Inspection:
The site was covered in snow, and the weather conditions were cloudy, with winds approximately 10-15 miles per hour and from the south, and approximately 46 degrees Fahrenheit. AQD was unaccompanied during the field inspection, but there were some workers at the site. I talked to Jim Nelson of White Pine Production, and the only engine onsite at this time broke down overnight, and they brought in a portable generator to operate the plant. The current engine at the facility is located in the southeastern-most building and is a 160 horsepower (hp) rich burn Waukesha F1197 GU generator engine with no control. Once the current engine is up and operating again, it is not used for production, it's only purpose is to power the facility.

Through discussions with Mr. Nelson, the former engine on the north side of the drive was removed from the site approximately two years ago. He also indicated that there is no compressing gas at this facility.

The site also consisted of two process heaters, eight 400-barrel above ground storage tanks with vapor recovery, a separator, and a flare. There is not a glycol dehydrator at this facility. No odors were present during the inspection. The facility stores oil from the Richfield and DRZ fields, it's possible that the oil collected in the eight 400-bbl tanks contain hydrogen sulfide (H2S), therefore, the tanks are equipped with vapor recovery that are connected to the on-site flare. AQD observed no visible emissions from the flare, and according to Mr. Nelson, the flare is always lit and contains a self-igniting pilot even though a flame was not present during the inspection.

Records Reviewed
EUENGINE1: A 160 hp rich burn Waukesha F1197GU natural gas fired generator reciprocating internal combustion engine with no control.

- **Emission Limits:** EUENGINE1 is limited to 37.3 tons per 12-month rolling time period of NOx and 45 tons per 12-month rolling time period of CO. Based on the records reviewed from October 1, 2022 through September 30, 2023, the highest emissions reported were 20.32 tons per 12-month rolling time period for NOx and 36.03 tons per 12-month rolling time period for CO. The emissions are compliant with permitted limits.
- **Process/Operational Parameters:** The facility submitted a Malfunction Abatement Plan (MAP) on August 13, 2013. The facility's MAP is a standard Breitburn Operating MAP, who previously managed the facility. Based on the historical records of the facility, there was an engine changeout for a like for like engine in the fall of 2019. The

facility continues to maintain maintenance records, EUENGINE1 was serviced approximately one to two times per month from September 2022 to October 2023 for replacing filters, valves, spark plugs, gaskets, hoses, and/or repair leaks. The most recent oil change was April 2023. The records did not show maintenance concerns with EUENGINE1. Even though there were no maintenance concerns with the engine, AQD recommends updating their MAP, so it is current with the active Company operating the facility.

- **Design/Equipment Parameters:** The facility does not have a catalyst installed on EUENGINE1.
- **Testing Sampling Equipment:** The facility uses engine specific emission factors to calculate the emissions for NOx and CO. Performance testing has not been completed at this facility.
- **Monitoring/Recordkeeping:** The facility records monthly and 12-month rolling time period calculations for NOx and CO. The 12-month rolling time period emissions are discussed above, under Emission Limits. The facility also monitors and records the natural gas usage on a monthly and 12-month rolling time period basis. The facility maintains a log of all significant activities at the facility. The monthly and 12-month rolling time period records are attached. The facility continuously monitors the natural gas usage for EUENGINE1. The natural gas usage ranged between 479 to 651 thousand standard cubic feet per month.
- **Reporting:** The facility swapped out EUENGINE1 for a like for like engine on September 25, 2019. EUENGINE1 came from the Dobson 1-8CPF.
- **Stack/Vent Restrictions:** The engine was currently being worked on during the inspection. AQD did not estimate the size of the stack during the inspection, but based on previous inspection report, the stack of the engine appeared to be around 25 feet above ground surface.

FGFACILITY: All process equipment at the site, including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

- **Emission Limits:** FGFACILITY is limited to 46 tons per 12-month rolling time period of NOx and 83 tons per 12-month rolling time period of CO. Based on the records reviewed from October 1, 2022 through September 30, 2023, the highest emissions reported were 20.32 tons per 12-month rolling time period for NOx and 36.03 tons per 12-month rolling time period for CO. The emissions are compliant with permitted limits.
- **Material Limits:** The facility shall not burn any sour gas at the facility. Based on the gas sample results of the facility, no sulfur is in the natural gas at the site.
- **Process/Operational Parameters:** As previously stated in EUENGINE1, the facility submitted a Malfunction Abatement Plan (MAP) on August 13, 2013. The MAP covers both engines at the facility. The records did not show maintenance concerns with engines at the facility. However, the MAP should be updated with the current facility owner, and remove reference to previous engine at the facility.
- **Design/Equipment Parameters:** Design and Equipment Parameters did not have applicable conditions for FGFACILITY.
- **Testing Sampling Equipment:** This facility receives the fuel gas for the generator engine from the Garfield 1-8, 8-9 facility located approximately ¼ mile away, and based on fuel gas analysis, hydrogen sulfide was not detected above laboratory method detection limits.
- **Monitoring/Recordkeeping:** The records submitted were well kept in a format acceptable to the AQD. The 12-month rolling time period emission calculations are reported above, under Emission Limits, and were within the permitted limits.
- **Reporting and Stack/Vent Restrictions:** Reporting and Stack/Vent Restrictions did not have applicable conditions for FGFACILITY.

NAME Cayce Owens DATE 2-1-24 SUPERVISOR Shane Nixon