DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

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FACILITY: SUMMIT ESSEXVILLE - ARMS RD		SRN / ID: N0827
LOCATION: ARMS RD, ESSEXVILLE		DISTRICT: Saginaw Bay
CITY: ESSEXVILLE		COUNTY: BAY
CONTACT: J. Scott Huber , Petroleum Engineer		ACTIVITY DATE: 06/06/2019
STAFF: Benjamin Wilkopp	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Inspect crude oil production facility		
RESOLVED COMPLAINTS:		

On June 6, 2019 Ben Witkopp of the Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division (AQD) visited the crude oil production site on Arms Rd owned by Summit Petroleum. It is also known as the Wazbinski facility because only a single well is involved. The well is located south of the production site. The operation and subsequent emissions are covered by air use permit 309-96A.

Initially, the well site was checked prior to heading to the production facility. The well was pumping at the time. The wiring from the murphy switch back to the engine was checked to be sure it could react to the required shutdown system in case of pilot light failure at the facility flare. The wiring was intact and in good shape. The murphy switch settings were checked at the wellhead. The permit specifies a maximum pressure of 220 psi. The actual high-pressure setting was 200.

The pumped oil flows north to the facility and into the heater treater. The treated oil then goes to the tank battery located to the east. The produced gas from the heater treater is routed to a tall (70 ft) flare located at the north end of the site. It is equipped with an auto ignitor. A shorter flare is found near the main flare. The short flare burns gas potentially coming from the tanks as residual gas may separate from the oil as it sits. The short flare was visibly burning. The tall flare did not have a visible flame. It should be noted the entire facility grounds were flooded so the shutdown system could not be checked at that time. The tank battery hatches were closed. The winds were from the NE and no H2S odor was detected.

On the way to another site I met Derrick Poet of Summit. He is the new pumper for the area. I told him there wasn't the typical highly visible flame coming from the flare and he went to check right away. It turned out the pilot flame was lit, there just hadn't been enough gas produced yet to cause a push to the flare. Driving past the site later revealed the presence of a large flame.

Records required by the permit were requested from Scott Huber of Summit via email. He provided the records promptly. The submitted records were checked. SO2 emissions were basically 22 pounds per operating hour while the limit is 87.18 pph. The permit has a SO2 limit of 85 tons based upon a 12 month rolling time period. Records showed actual amounts were about 18.5 tons. Gas flows to the flare were in the range of 8-10 thousand cubic feet per day with the higher ends of the values occurring on Mondays and Tuesdays after the well was shut in over the weekends. H2S concentrations were 10.5 %.

The site was revisited on the 18th with new pumper Derrick Poet and longtime pumper Don Meihls. The shutdown system, in case of pilot flame failure, was in place and indications were it was operational. The bypass was closed. The shutdown system would stop fluid flow into the facility if the pilot flame went out.