

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N245555996

FACILITY: BreitBurn Operating LP - KALKASKA 1-21 CPF		SRN / ID: N2455
LOCATION: SE 1/4 SE 1/4 SECT 21, KALKASKA TWP		DISTRICT: Gaylord
CITY: KALKASKA TWP		COUNTY: KALKASKA
CONTACT:		ACTIVITY DATE: 10/30/2020
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Site inspection for FCE		
RESOLVED COMPLAINTS:		

On October 30, 2020, I inspected the Breitburn Kal 1-21 facility to determine compliance with the conditions of the facility permit, Permit 611-96A. In a previous activity report I checked compliance with its recordkeeping and recording requirements, as well as its emission limits.

Permit 611-96A, Special Condition 1.9, sets stack dimensions for the glycol dehydrator as a maximum stack diameter of two inches at a minimum height above ground level of 10 feet. On site, by eye, I estimated still vent dimensions as 2 inches diameter and 12 feet above ground level. It terminates in a flat cap, but the permit condition does not mention exhausting unobstructed vertically upward. Therefore this complies with the permit condition.

Note that glycol dehydrators typically have two stacks. The dehydrator also has a burner stack. I estimated that as 6 inches diameter and 15 feet above ground level, terminating in a flat cap.

Condition 2.2 requires burning only sweet natural gas in the two natural gas fired reciprocating engines which drive natural gas compressors. I did not see any hydrogen sulfide warning signs or smell anything to indicate there was sour gas on site. But I did find a small tank of a hydrogen sulfide scavenging compound, as noted in comments below. This does suggest the presence of some hydrogen sulfide on site. There was no iron sponge and apparently no gas sweetening plant on site, which would indicate the presence of moderate or large amounts of hydrogen sulfide..

Condition 2.4 requires catalytic oxidizers and air to fuel ratio controllers be installed and operating properly on both engines. The engines were not operating at the time of my inspection. There are catalytic oxidizers visible in the exhaust pipes of both engines; they appear to be installed properly. I found air to fuel ratio control panels attached to each engine. So far as I can see, this complies with the permit condition.

Conditions 2.7a and 2.7b set the dimensions of both engine stacks as maximum diameter of 9 inches at a minimum height of 25 feet above ground level. The stacks appear to comply with this requirement. Both stacks exhaust unobstructed vertically upward to the ambient air, as the permit condition also requires.

COMMENTS

This is a large, old facility. There is evidence of old equipment that has been removed, such as concrete brackets that appear to be meant to hold a large pressure tank, perhaps for condensate, which is no longer present. There is some equipment that is in place but appears to be unused and also some dismantled equipment and pipe work.

Neither of the compressor engines were running. The engine to the north was labeled as GCS 750 in metal letters welded to the engine skid. I did not find any unit label on the engine to the south. Exhaust pipes for each engine leave the shed horizontally, through catalytic oxidizers outside the shed wall, then to horizontal mufflers. After that exhaust is directed through a pipe elbow and a short stack to exhaust unobstructed vertically upward.

I noticed various tanks. Small tanks included two 300 gallon drum on stilt tanks outside the engine shed under a roof overhang; one was labeled methyl alcohol, I did not see a label on the other. There was another 300 gallon drum on stilts tank near the glycol dehydrator, labeled as "Petrosweet HSW 700

Scavenger," which turns out to be a treatment to remove hydrogen sulfide from oil and gas equipment. I saw one 300 gallon drum on stilts tank labeled Chevron HDAX Low Ash Gas Engine Oil, in the engine shed.

There is a tank farm of 400 barrel sized oil field storage tanks, inside a lined berm. I saw a total of 12 of these tanks. 8 of them appeared to be deteriorating, with some type of foam coating peeling off. These were piped to a building which might contain a vapor recovery unit. The remaining four tanks, to the east of the others, appeared freshly painted. There was an electric motor running near them.

There were 6 process heaters or heater treaters, plus what appeared to be a couple more with their stacks removed. The stacks on the heaters were all unobstructed vertically upward. Three were perhaps 16 inch diameter by 20 feet high, one perhaps 20 inches diameter by fifteen feet high, and one perhaps 12 inches diameter by 25 feet high.

Maintenance on the equipment still in use appeared to be fair. I did not see any spills, leaks, or stained soils. I did not smell any odors from the facility.

NAME _____

DATE _____

SUPERVISOR _____

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