

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

B558873183

FACILITY: Hound Resources - Wexford 10 Facility		SRN / ID: B5588
LOCATION: 7 Mile Rd., BUCKLEY		DISTRICT: Cadillac
CITY: BUCKLEY		COUNTY: WEXFORD
CONTACT: Julie Johnston , Vice President		ACTIVITY DATE: 07/24/2024
STAFF: Tammie Puite	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Complete a Full Compliance Evaluation and Inspection for the Wexford 10 Facility.		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

This facility is located off of North 7th Road, between West 4 Road and West 6 Road. It is on the East side of the road, a few hundred feet off the road in a farm field. A site visit was performed on July 24, 2024 with myself and Shane Nixon, Cadillac District AQD Supervisor and on August 1, 2024 with myself and Jack Hybza with Oil, Gas, and Minerals Division (OGMD). This facility has records for operations from 1974 to current, during it's prime, production levels were at major source thresholds, but the facility production has declined to levels that allow for most of the production equipment to be shut down, with the equipment that is operating meeting exemptions under AQD laws. The facility has a Permit to Install (PTI) 140-22, for the operation of the Dehy unit and flare. During my inspection, I found the facility is surrounded by fencing, and a nonfunctioning gate. Signs to keep out unauthorized personnel are damaged, faded or non-existent. The vegetation is overgrown, causing access issues to check equipment to determine if it is operating properly; grasses are knee to waist high, invasive bushes are shoulder height and higher. The site is littered with old equipment that is no longer in operation, marginally in operation, leaking and/or operating. It is clear that maintenance is not performed on a regular basis, however the site is visited by company personnel, both times I was onsite, there was someone present or driving through.

With the issuance of PTI 140-22, this facility is a true minor source, that currently reports emissions annually. PTI 140-22, covers the operation of the EUDEHY and the flare. A records request was made on July 30, 2024, for records pertaining to the EUDEHY, FLARE, and exempt equipment. On August 27, 2024 a partial response to the records request was received via email from Julie Johnston, Vice President, of Hound Resources, LLC.

COMPLIANCE EVALUATION**PTI 140-22**

GC 10 - The company clearly is not maintaining the facility is accordance with acceptable industry standards, and may be in violation of other parts covered under Part 55 of 1994 PA 451.

GC 1, GC 6, GC 12 & R 336.1278a (1) - There are two engines on site a 12 Cylinder Waukesha that is not in operation and a running engine on a Skid labeled BATB 28, 6 cylinder inline, running at 1130 RPM, with suction pressure of 20, and a PSI of 42. PTI 140-22 says that a CAT 3306NA 145 hp engine was in operation at the time of the PTI issuance. A records request was sent, requesting information to prove the operating engine onsite is truly exempt. Hound Resources says that the engine is a Caterpillar G3306NA, 145 HP, 4-stroke, rich burn, installed in 2014. Our records indicate that this engine was installed in 2016, replacing an electric compressor motor. There is evidence that an engine previously vented up through the roof, however, the current engine vents directly out through the wall of the building. I was unable to determine if the engine onsite is still the CAT G3306NA due to not finding a serial number or nameplate on the current operating engine. The CAT G3306 NA meets exemption requirements, and I assume that the current engine on site, if not the same, does as well, as the operation panel stated that it was operating at a low enough RPM to meet exemption. On August 1, 2024, the 4 gas meter alarmed when trying to view the sponges/seperators outside of the compressor engine building and downwind of the stack of the compressor engine, CO at 55 PPM, thus not allowing me to do a full analysis of the separators. Under GC 12, it would be better if the engine vented vertically upward, instead of horizontal.

EUDEHY – The permitted EUDEHY is for a Glycol dehydration system processing gas; that contains a 100,000 BTU/hr natural gas fired burner, that has a flare for pollution control.

- **FLARE – IV. 1-3.** A records request to determine if the sulfur dioxide emissions from the flare meet the exemption of less than 1 pound per hour. As built diagram of the flare was requested. There are multiple flares on site, and a diagram would help determine the exact equipment that records are provided for and which one pertains to the issued PTI. There was a flare onsite that was operating, but it was not maintained in accordance with industry standards. VI.4 – A request was made for 12-month rolling time period when the flare pilot was extinguished. OGMD, did inform me that they have had odor complaints that pertain to this facility, which leads me to believe that there are periods where the flare pilot does extinguish. Hound Resources reports that there were, "No recorded instances of Flare not burning during audit periods." Hound Resources reported that SO₂ emission are .000014 lb/hr that feed to the flare from the 400 BBL Tank. No calculations were provided, nor any Lab Analysis for verification. I was unable to reproduce this number doing my own calculations from the data provided, and this number is not for the full amount of emissions going to the flare. At this time I am unable to make a compliance determination to determine if the flare is meeting the exemption requirements. As built diagrams were not provided, but field checks with a range finder demonstrate that the flare is built and operating as permitted.
- **EUDEHY –** It is believed that there are at least 3 different Dehys on site, and an Amine Plant/ Sulfanol Process, two sponges, and a refrigeration unit. Two dehy's were not operational. The one that matched up with previously submitted company diagrams as the "operating dehy" was partially operating, the heater for recycling the Glycol was not in operation, the dehy unit was in disrepair and leaking. There was no burner operating that is associated with any of the dehys. V.1 – A wet gas analysis was requested. III.1 – Records were requested to demonstrate that the dehy is not exceeding the minimum of 0.13 GPM recirculation rate. A request for a site diagram showing what equipment is supposed to be operating that pertains to the permit was made. During the permitting process, the company provided documentation to show that the EUDEHY met the criteria for exemption but felt that having a PTI best suited the company's needs, a wet gas analysis was provided for the permitting process and issuance of PTI 140-22. Hound Resources responded with a site diagram that showed that the leaking dehy is the permitted unit. That the sponges are an active part of the process, and the refrigeration unit and Amine Plant/ Sulfanol Plant are not operating. Hound Resources records showed that the Dehy is recirculating at 0.41 gpm, which is violation of the permitted limits of 0.13 gpm. A wet gas analysis was not submitted with the records request. This equipment is not being maintained or operated per industry standards.

Other equipment on site that appeared to be operational:

NGL Tank 30,000 gallon – secondary containment was ½ full of water. It appears that the loadout for this tank has not been used, due to the amount of overgrown vegetation, and no tire tracks. Hound Resources reported that 128.42 (gallons?) were hauled away in June of 2023.

400 BBL Stock Tank – Vegetation was so overgrown that I was unable to see much about this tank. It does appear to still be in use, due to active pipes going to the tank. Hound Resources reported that 114 (Barrels?) were trucked out in September of 2023.

Two Iron Sponges or separators are located on site. Only 1 is in operation, but the system does have pressure, at 140 PSI. There is an oil leak for the sponge that is working.

Refrigeration Skid – Was not in operation, but it is pressurized. It appears that there is flow through this process. A 6 cylinder Wakesha engine powers this unit. This engine was determined to meet exemptions February 20, 2016, when it was operating.

LP tanks – It does look like these hold propane or other fluids, but there is active bee's nests under the caps, so I was unable to get close enough to make an accurate determination as to which one(s) is functioning.

Compressor – There is a small compressor on site that is operating, but the equipment is leaking.

Point of Sale Sheds – There are 3 sheds close together. One has newer equipment in it, with a pressure relief valve that had some odors. One Point of Sale shed was locked and appeared to be in

use. The other was for Lambda – Luther 1-10 well, and the last notes on the record was from 5-7-24, the Barton Scanner 1140 was not in operation, and everything looked to not be in use.

There are lots of other equipment and the Luther 1-10 wellhead on site. It was difficult to access most of this equipment, nor could I access the meter that looked to be measuring flow of liquids for the active pipeline due to the amount of overgrown vegetation. Birds and other wildlife are nesting and utilizing the old buildings and equipment, as well as getting trapped inside the old equipment, evidence by skeletal remains visible through the looking glass.

SUMMARY

The site was clearly in need of maintenance and not keeping up with industry standards. A worker was onsite during my August 1st visit, with equipment to cut the lawn and trim vegetation, so it seems Hound Resources is working on getting the invasive vegetation under control. I had a follow up conversation with Jack Hybza of OGMD, and he informed me that the site has been removed of invasive vegetation and the spill from the Dehy Unit has been cleaned up as of September 11, 2024. The records request did demonstrate that this source is a true minor source. This source will be removed from annual emissions reporting and marked as a true minor source for the 2025 fiscal year. A violation notice will be sent for the exceedance of permit limits for the EUDEHY, the lack of maintenance, and missing wet gas analysis for the unit.



Image 1(EUDEHY) : Showing Leak



Image 2(Engine Stack) : Shows Stack Venting out Wall



Image 3(Sponges) : Shows that one of them is not operating.



Image 4(NGL Tank) : Shows Secondary containment 1/2 full of water.

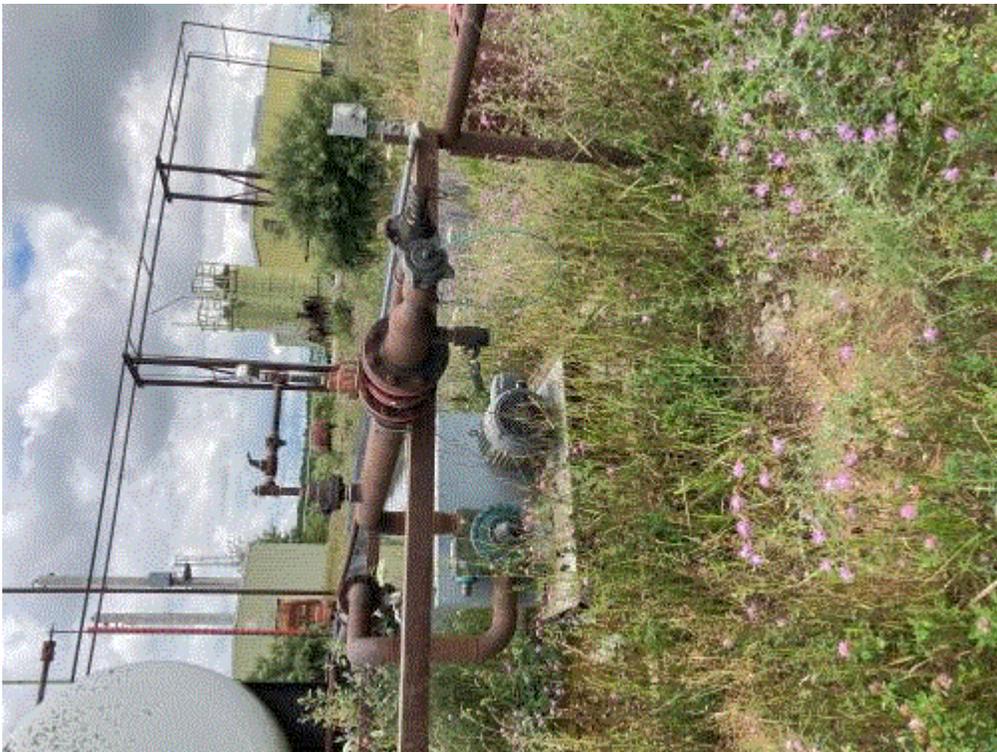


Image 5(NGI Tank Loadout) : NGL Loadout with excessive vegetation.



Image 6(400 BBL Tank) : Overgrown Vegetation limiting Access to Tank.

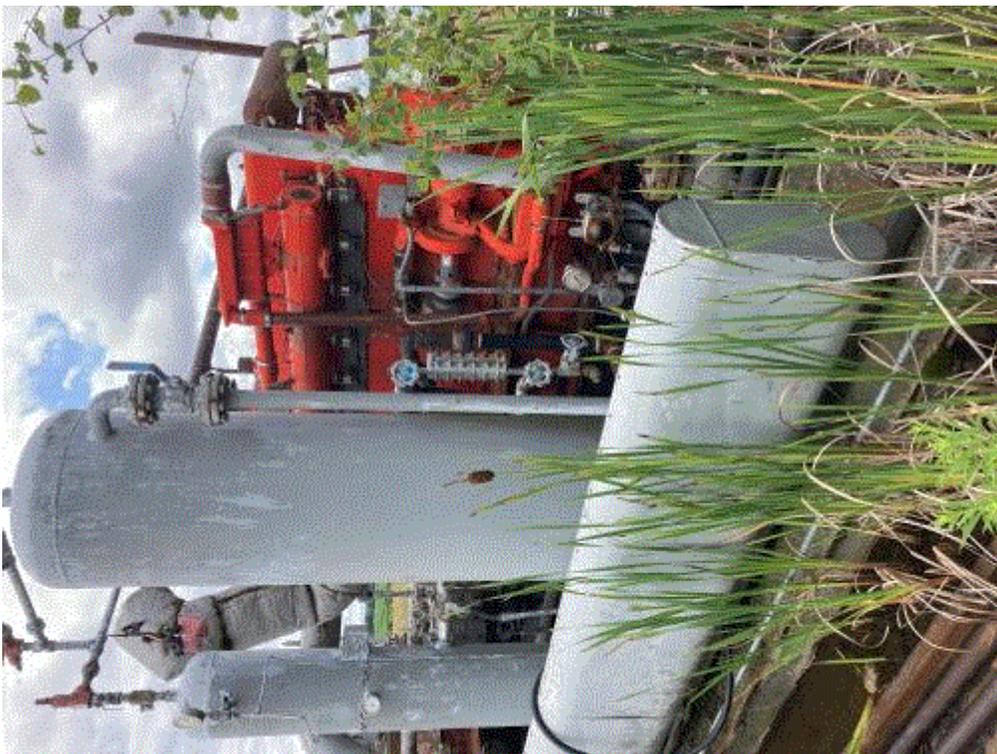


Image 7(Refrigeration Skid) : 6 Cylinder Waukesha Engine



Image 8(EUFLARE) : Operating Flare



Image 9(Old Compressor Eng) : 12 Cylinder Waukesha Engine - Not in Operation.



Image 10(BATB28) : Operating Engine



Image 11(EUDEHY) : Operating Dehy

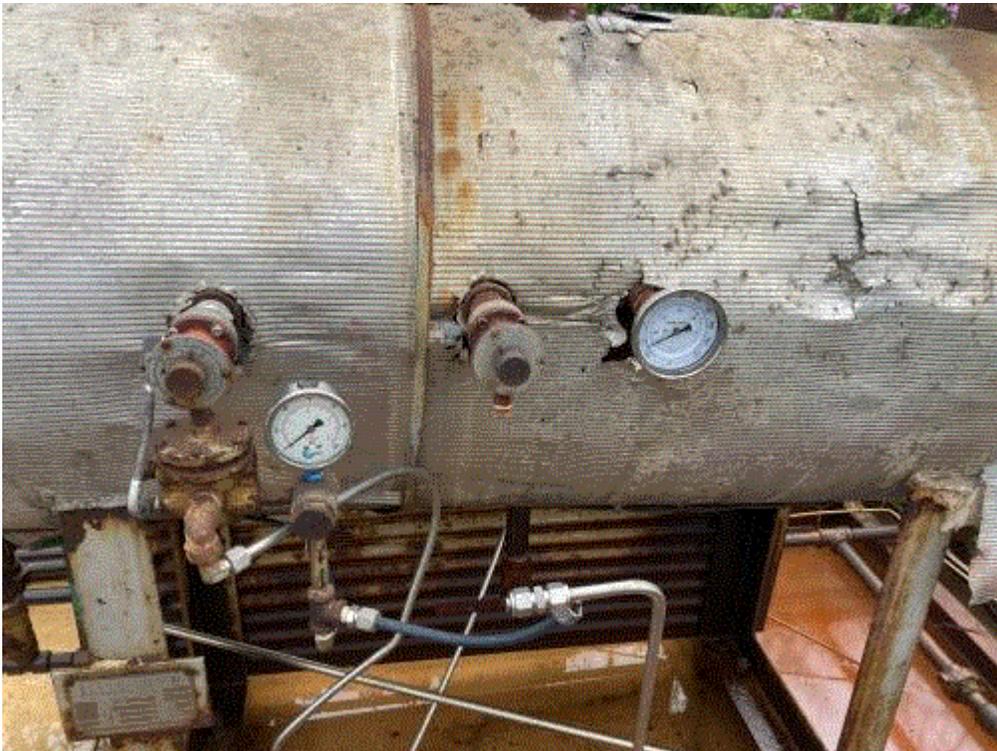
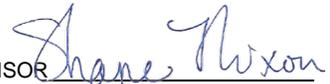


Image 12(EUDEHY) : Showing Reboiler not working

NAME 

DATE 12-4-24

SUPERVISOR 



30,000 gal
NGL Tank

Leaking Compressor

Old Amine Plant (NA)

Old Flare (NA)

Sponges - Only
1 working

400 BBL Tank

Compressor Bldg - BATB 28

Refrigeration Skid - Gas
was flowing through (NA)

Operating Dehy Unit

Locked

Pneumatic pump in
Operation

Dehy ?

Flare - Working

Flare & Heater (NA)

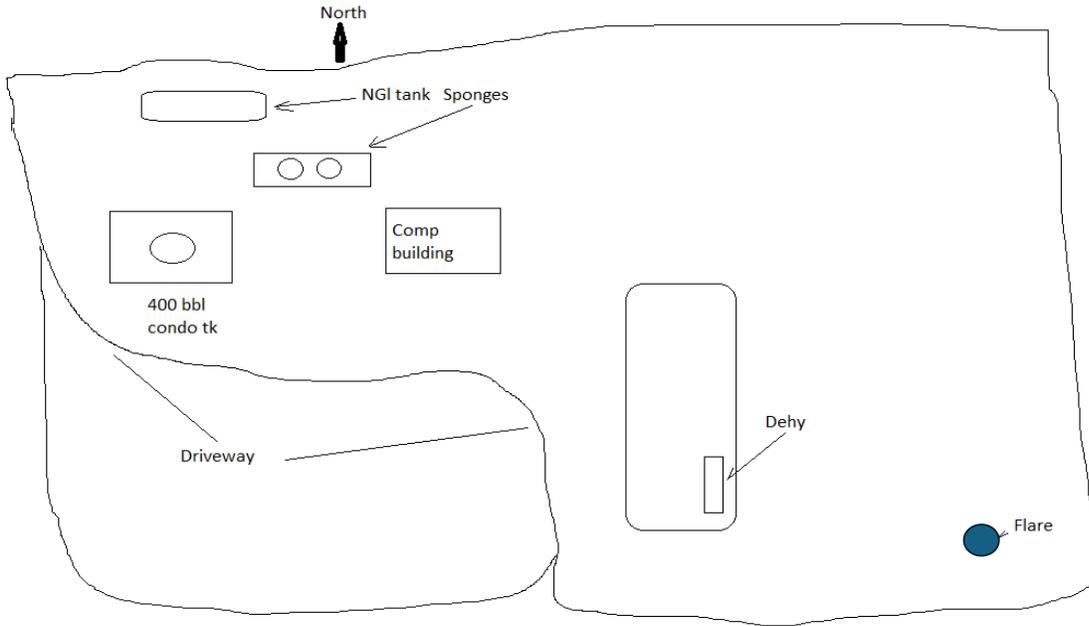
Waukesha Engine - Old
Compressor Bld (NA)

EUDEHY/SVFLARE

Dimensions remain the same as the previously reported and information supplied

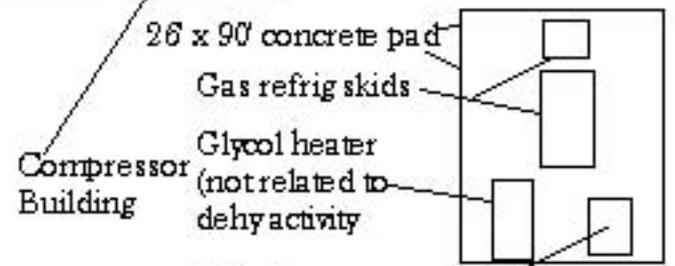
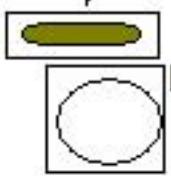
Flare is 3 inches in diameter and 36 feet tall

Location is showed in diagram



Proposed NGL tank New iron sponge location

Old gas plant



26 x 90 concrete pad

Gas refriger skids

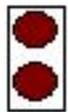
Glycol heater
(not related to
dehy activity)

Compressor
Building

Dehydrator-
New location

TEG storage
tank

Existing iron
sponge location

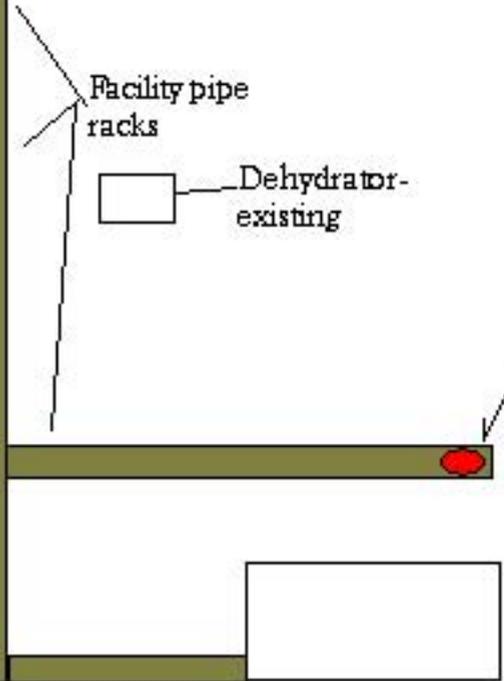


Facility pipe
racks

Dehydrator-
existing

Small flare

Old
compressor
building



Sour production gas from wells

1st stage compression

Sulfa Treat Sponges

2nd stage compression

Dehy&Ref skid

Relief valves

FLARE

400 bbl stock tank (sour)

30,000 gallon NGL tank, (sweet)

MichCon Sales Line

Sour fluids to 400 bbl

Tank vapors

Sweet Fluids to NGL tank

NGL vapor
1. Fuel system
2. Suction
3. Flare

Old amine plant, amine heater, and big flare are not used or even connected to the process anymore.

