

Fire Department

Charter Township of White Lake

To:	Rik Kowall, Township Supervisor
From:	John Holland, Fire Chief
Date:	01/26/2024
Re:	2023 Young Road Incident Summary

Incident Date: 11/24/2023 Incident Number: 23-2779 Incident Location: 600 Young Road, White Lake MI, 48383 Property Operator: Hound Resources

Property Description:

This plant is positioned west off of Young Road, west of Bogie Lake Road. it has been in operation since approximately 1995. The current operation is best described as Fossil Fuel/Crude Oil capture with temporary storage. The crude oil is transported off of the property via-tanker truck. This plant is permitted, operated, and compliance inspected under the jurisdiction of the State of Michigan, Environment, Great Lakes, and Energy (EGLE).

There are three (3) storage vessels located at the north side of the property.

- Crude Oil
- Brine Water
- Vapor recovery

Our information is that that there is no below grade storage containers, or transmission piping. Located at the south side of the property is the flare tower. The plant operator explained that when crude oil is captured, it is contaminated with other dangerous gases like Hydrogen Sulfide (H2S). As part of the process, the gases are eliminated by burning them off through the flare. The plant operator stated that the stationary flare is being replaced, and that a portable (on trailer) flare had been used. The operator also stated that this is an acceptable alternative until the original is replaced. This explains the recent "brightness" that had been reported when the flare was in operation.

Incident information (copied from the incident report):

FD responded for an explosion at the Young Road oil pumping facility.

Enroute, FD noted a significant header of black smoke and visible flames from M-59 and requested a Box Alarm. E-1 stopped approximately 600 feet away from the fire location and the crew donned full protective gear, including SCBA to conduct a preliminary victim search/recon as a large explosion occurred. E-1 established Young Road command. A second alarm was requested.

E-1 crew approached the facility and noted 200' flames, with several storage tanks which appeared to be non-pressurized involved within a beamed containment field. The gate to the fence surrounding the facility was closed and locked, and no vehicles or victims were noted.

FD requested an ARFF truck from PTK airport for increased class B foam capabilities and a drone from Oakland County Sheriff Aviation Division to provide further reconnaissance.

FD established a staging area for Mutual Aid Companies at Lakeland High School and requested PD to assist with evacuation of approximately 20 residences within 1200 feet.

Wind conditions were light and from the NNW, pushing smoke with slow velocity SSE.

Dispatch had difficulty providing a MABAS radio profile due to excessive call volume.

FD requested contact information for the company which operated the facility (Hound Resources) and made contact with the individual in charge for the evening (Julie Johnston).

Mutual Aid Departments:

- Highland Township Fire Department
- Waterford Township Fire Department
- Springfield Township Fire Department
- Commerce Township Fire Department
- Milford Township Fire Department

Oakland County Hazardous Materials Response:

Report is pending

Environment, Great Lakes, and Energy (EGLE) – State of Michigan:

Mark Snow - (517) 230-8233, Email: SnowM@Michigan.gov See attached EGLE White Lake 29 CPF Incident Report. (6 pages)

Investigation:

- Alcohol, Tabacco, and Firearms. Special Agents Mike Stossie and Andrea Rossman
- White Lake Township Fire Department. Fire Chief John Holland (interview only), Fire marshal Jason Hanifen

Restitution:

Cost recovery charges are pending. This includes White Lake Township and all mutual aid Fire Departments, and the Oakland County Hazardous Materials Response Team.

Conclusion:

Based on the information provided by the on-scene investigators, it is their opinion that the fire originated at the north side of the property, in the area of the storage container(s). The exact ignition sequence at this time is undetermined, however the investigators concluded that there was no sufficient evidence of criminal activity as it pertains to the origin and cause of the fire. Should additional information become available, the investigators reserve the right to evaluate that information as it pertains to the origin and cause of this fire.

Other Comments. The damage to the storage containers is consistent with the application of sufficient heat energy, provoking vapor expansion, resulting in the witnessed - post fire explosions.

John Holland Fire Chief

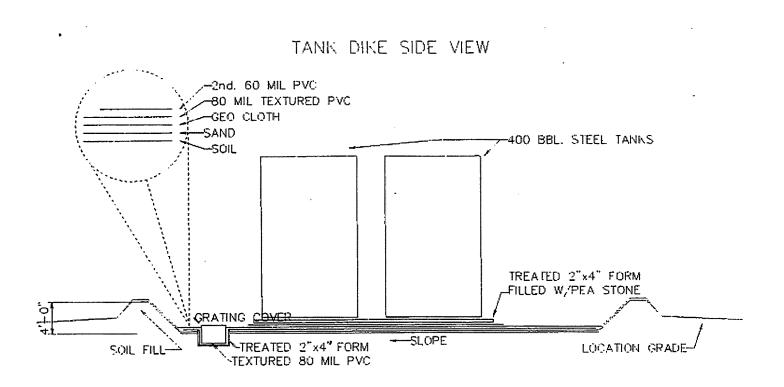


Contact

Mark Snow 517-230-8233 <u>SnowM@Michigan.gov</u>

During this incident, the produced water tank at this location exploded and the contents of an adjacent crude oil tank were released into secondary containment area and subsequently caught on fire. Central Production Facilities are regulated locations where production equipment (storage tanks, vessels, compressors, treatment equipment) are used to handle produced hydrocarbons. This CPF is surrounded by security fencing and includes the oil producing well and tanks that hold produced water (brine) and crude oil. The tanks and are surrounded and underlain by a secondary containment system - as seen in the figure below. Secondary containment is a safeguard that prevents seepage of tank contents into the surrounding soils, surface water, and groundwater by creating a diked/bermed area around the tanks that is lined with impervious material. At the White Lake CPF the secondary containment was designed with an additional liner that covered the bottom of the system. Based upon site inspections, the first layer of this liner was burned during the fire, however lower most liner and it is believed to have remained largely intact. No fluids appear to have breached the bermed area surrounding the tanks and the crude oil burned within the secondary recovery area until it was final extinguished. Out of an abundance of caution because of hydrogen sulfide potential, the local fire department evacuated approximately 30 residences during this fire. Multiple fire agencies responded to this fire

and were on the scene for several hours. No injuries or property damage (beyond that of the CPF) have been reported and area residents were permitted to return to their homes the following day.



The exact cause of the fire remains unknown and is currently being investigated by Hound Resources and the White Lake Township Fire Department. To date, based upon field screenings and observations during cleanup operations, the OGMD does not believe that there has been an impact to groundwater and/or surface water. The oil producing well at this location has been shut-in and the flowlines have been purged and capped. Additional site clean-up and environmental testing remains on-going and the OGMD will be using this page to provide updates.

Updates

December 8, 2023

- Hound Resources continues cleanup operations with M.L. Chartier at White Lake CPF 29.
- Hound Resources has contracted Global Environmental to conduct groundwater sampling on Wednesday, December 6, 2023. EGLE will be onsite during sampling activities.
- EGLE visually inspected nearby surface waters (small creek in the wooded area adjacent to the facility, wetlands to the south, and tributary to Lake Neva) and no impacts were observed.
- Last week brine and other fluids were removed from the secondary containment area and disposed at Aevitas Specialty in Detroit, MI.
- Thick crude oil and other wastes from the containment area were removed and placed in sludge boxes and are awaiting disposal.
- The liner was steamed, and fluids disposed at Aevitas Specialty in Detroit.
- Tank hatches were removed, and tanks cleaned. Tanks were removed from containment and placed on liner while awaiting disposal.
- Flow lines that were damaged in the incident were flushed, cut, and capped. Lines were placed on liner and covered while awaiting disposal.
- The secondary containment liner was removed from the tank battery and placed in 3 lined and covered roll off boxes.
- Soils below liner are a fine sand fill. Limited impact was observed (slight to moderate petroleum odor, no free
 product, and no stained soils were observed) and is believed to be very localized. Additional excavation and
 investigation will be conducted. Dike walls with charred liner were scrapped back and placed on plastic liner
 within excavation. Entire excavation area is covered with a plastic liner.
- Hound Resources is still awaiting landfill approval for sludges and soil disposal. Expected landfill for disposal is C & C Landfill in Marshall, MI. Hound Resources would like to direct load into trucks once they received landfill approval.
- Areas outside of containment where firefighting foam was used have had free liquids/foam removed. Additional excavation may be required.
- Hound Resources is removing top layer of soil/vegetation on the perimeter of the facility that had minor burning from the incident.
- EGLE had discussions with numerous residents, concerned citizens, and the Oakland County Health Department on the incident, potential environmental impacts, and oil and gas operations.

December 15, 2023

- Hound Resources continues cleanup operations with M.L. Chartier at White Lake CPF 29. Field observations for the cleanup appear to be promising.
- Groundwater sampling was conducting by Global Environmental on December 6-7, 2023 at three existing groundwater monitoring wells immediately surrounding secondary containment dikes. Samples were to be delivered to Merit Laboratories for analysis.
- Soil sampling is expected to take place on December 12, 2023. EGLE will be onsite to observe sampling procedures and locations.
- M.L. Chartier excavated multiple roll-off boxes of potentially impacted soils from below the secondary containment liner. Approximately 10-12" of sand fill and sandy loam soils were excavated across the entirety of the diked area (65' x 65') and placed in lined roll off boxes onsite prepared for disposal.
- EGLE staff evaluated the soils after excavation and observed sand to sandy loam soils with no staining and a very slight petroleum odor. EGLE used a Photoionization Detector (PID) and collected approximately 70 readings across the excavation. Maximum PID reading observed was 11.8 ppm. EGLE also did field testing at three locations to check for potential elevated chlorides in the soil. No elevated chlorides were observed during field testing.
- Hound Resources received approval from two landfills and will begin disposal processes this week. A total of 16 roll off boxes of soil/waste are ready for disposal. A total of 4 sludge boxes are ready for disposal.
 - Sludges will be disposed at Waste Management in Lennon, MI
 - Soils will be disposed at Waste management Eagle Valley in Orion, MI
- EGLE continued discussions with numerous residents and concerned citizens on the incident, potential environmental impacts, and oil and gas operations.

December 21, 2023

- Hound Resources began shipping wastes to two approved landfills. A total of 16 roll off boxes of soil/waste are ready for disposal. A total of 4 sludge boxes are ready for disposal.
- Sludges were disposed at Waste Management in Lennon, MI
- Soils were disposed at Waste Management Eagle Valley in Orion, MI
- Global Environmental was onsite on December 12, 2023, to collect floor samples of the soil from the
 excavated area. Six samples were collected from the base of the excavation and sent to a 3rd party laboratory

for analysis.

- EGLE staff conducted additional evaluation of the excavation using a Photoionization Detector. Several locations, along the perimeter of the excavation, showed signs of impacted soils. Petroleum odor and oil staining were observed in limited quantities. Hound Resources is working with M.L. Chartier to schedule additional excavations in these areas to remove the impacted soils. Following the additional excavation, soil samples will be collected to confirm that the remaining soils meet regulatory standards.
- Global Environmental collected a sample of the Fire Fighting Foam to be analyzed at an accredited laboratory. Global Environmental has been working with EGLE staff to confirm that correct analysis and methods are used for this testing.
- Lab results from groundwater sampling conducted on December 6 and 7, 2023 (at the three on-site monitoring wells) came back this week. Chlorides were detected in one sample that were below regulatory standards and consistent with previous sampling and no hydrocarbon indicator compounds were detected.
- EGLE continued discussions with numerous residents and concerned citizens on the incident, potential environmental impacts, and oil and gas operations.

January 5, 2024

- Hound Resources completed shipping of wastes to two approved landfills on January 5, 2024. A total of 16 roll off boxes of soil/waste have been disposed. A total of 4 sludge boxes have been disposed.
- Sludges were disposed at Waste Management in Lennon, MI
- Soils were disposed at Waste management Eagle Valley in Orion, MI
- Global Environmental was onsite on December 12, 2023, to collect floor samples from the excavated area. Six samples were collected from the base of the excavation and sent to a 3rd party laboratory for analysis. Expecting results on January 5, 2024.
- EGLE staff working with Hound Resources to schedule tactical excavation of limited impacted soils. During the initial soil sampling, several small areas, within the former containment, were discovered with petroleum odor and minor staining. Under the direction of EGLE and Global Environmental, soils will be excavated, and underlying soils will be sampled to verify that they meet regulatory standards.
- Global Environmental collected a sample of the Fire Fighting Foam to be analyzed at an accredited laboratory. Global Environmental has been working with EGLE staff to confirm that correct analysis and methods are used for this testing. Still awaiting results from analysis.
- EGLE staff walked nearby wetlands and surface water on January 5, 2024, to visually inspect conditions. Surface water has a thin ice layer, but no discoloration, sheen, oil, or foam was observed. EGLE staff also

observed conditions from Whispering Meadows Drive to gain a wider and elevated view and found no evidence of impact.

January 19, 2024

- No Hydrocarbon Indicator Parameters were found above laboratory detection limit and were all below Part 201 Residential Soil Cleanup Criteria.
- Chloride was below Part 201 Residential Soil Criteria for Residential Drinking Water Protection Criteria at all sample locations.
- Chloride exceeded Part 201 Residential Soil Criteria for direct contact standards at two locations. Additional excavation will occur at the two areas with elevated chlorides and additional samples will be collected to verify cleanup.
- Hound Resources continues to wait for analytical results for soil and groundwater samples collected for PFAS compounds analysis.
- Hound Resources has scheduled additional excavation and verification sampling for the week of January 22nd, 2024. EGLE staff will be on location during these activities.

EGLE White Lake 29 CPF incident

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