

General Environmental Incident Summary

Incident: 3435 **Date/Time Notice:** 6/27/2014 1027 **DEM Incident No:**

Responsible Party: Tioga Medical Center

Date Incident: 7/25/2014 **Time Incident:** 0900 **Duration:**

County: Williams **Twp:** 157 **Rng:** 95 **Sec:** 22 **Qtr:** SW SW SW

Lat: 48.40263 **Long:** -102.93520 **Method:** Interpolation from map

Location Description: The facility is the Tioga Medical Center located at 810 North Welo Street, Tioga, ND, 58852. The location of the UST was at the southeast corner of the

Submitted By: Jim Kunzelman **Affiliation:** Consultant

Address: 3001 North Broadway

City: Minot **State:** ND **Zip:** 58703

Received By:

Contact Person: Randy Pederson
810 South Welo Street
Tioga, ND 58852

Distance Nearest Occupied Building: 3 Feet **Release Contained:** Yes

Type of Incident: Tank Leak

Description of Released Contaminant: Diesel

Volume Spilled: **Ag Related:** No

EPA Extremely Hazardous Substance: No **Reported to NRC:** No

Cause of Incident:

Material Testing Services (MTS) received a call from Shingobee construction services on June 25, 2014 after an abandoned (+/-) 3,000-gallon diesel UST (filled with concrete) was discovered during excavation/construction activities associated with the addition to the hospital. The tank was purportedly abandoned 25 years ago and was utilized at that time for emergency generator purposes. Subsequently, construction services ceased and MTS was called to the site to assess the situation.

Risk Evaluation:

There are no apparent IDLH issues or other risks to human health anticipated at this time.

of Fatalities: 0 **# of Injuries:** 0 **Affected Medium:** 03 - soil

Potential Environmental Impacts:

As of now, the status of impacts to the groundwater is not known, as the water table exceeded the depth of the excavated area, which was approximately 15 feet deep. A monitor well is schedule to be installed with the aid of a CME 45 drill rig in the following weeks and sampled for the appropriate parameters. It appears, however, due to the presence of predominantly clayey soils, that the impacted material appears isolated to the vicinity of the former UST location.

Action Taken or Planned:

The MTS representative accessed the site the afternoon of June 25, 2014. By the time the MTS representative arrived, the UST had already been removed from the ground. The tank was steel, oxidized, and contained small pits or "BB" sized holes noted on both ends of the tank. The soils in the

former location of the UST were stained and malodorous. It was also apparent that the petroleum impacted material migrated beneath the existing hospital structure to the east.

Subsequently, a series of soil borings were performed around the former tank pit in an effort to determine the extent of impacted material onsite. After performing a series of borings with PID analysis, the highest reading encountered was 80 ppm. This was along the eastern wall of the former tank pit, going beneath the existing structure. No PID readings exceeded 100 ppm. Additionally, it was apparent that the material was old, weathered and volatilized rapidly during PID analysis.

The contractor was advised to remove, to the best of their ability, as much of the impacted material as possible. Some material remained beneath the hospital structure due to the fear of compromising the structural integrity of the building. The excavated impacted material was deposited on visqueen plastic and contained within an earthen berm at the east end of the hospital property.

On July 3, 2014, the MTS representative accessed the property once again to perform a limited indoor air-quality testing of the two (2) patient rooms (located above the unexcavated impacted material), a file room (located in the basement adjacent to the east of the impacted area) and in a "tunnel" (also located in the basement adjacent to the east of the impacted area). The purpose of the IAQ testing was to see if any petroleum vapors had entered and adversely affected the air quality of the nearby rooms. Additionally, PID analysis, temperature and humidity readings were collected as well. The IAQ sample kits were collected the following day on July 4. All of the collected IAQ test results were non-detect. Additionally, no positive PID responses were encountered in any of the rooms, nor were any petroleum or unusual odors detected olfactorily.

On July 8, MTS returned to the site to perform final verification PID analysis of the former tank pit and surrounding area. It was apparent upon entering the excavation pit that the impacted soils had aerated/volatilized, as a petroleum odor was barely noticeable. The highest PID reading encountered was once again located in the material below the existing hospital structure. In this area, there is approximately 3 to 4 feet of "clean material" capping the impacted material. The 70 ppm reading encountered at this location was approximately 4 feet below the existing ground surface.

Impacted material placed on visqueen to the east was continued to be reworked and aerated. The highest PID reading out of 12 samples collected was 40 ppm. The contractor was advised to continue reworking the soils to allow them to aerate.

A series of soils samples were collected for laboratory analysis from the original area which exhibited the highest PID reading (80 ppm, beneath the hospital structure). The samples were analyzed according to the following parameters:

TCLP RCRA 8 Metals (per landfill request).
pH and Ignitability (per landfill request).
Benzene (per landfill request).
8260/8270 and DRO.

The lab analysis revealed concentrations of petroleum hydrocarbon that were either low or below reporting values, with the exception of DRO which was detected at 865 mg/Kg. According to the lab chemist, however, it was evident that the material was weathered and degrading/attenuating.

After discussions with NDDOH representatives via email and phone (Carl Ness, Curt Erikson and Reuben Panchol), the State stated that they would allow the impacted material to be used as fill beneath the planned asphalt paved parking areas, at least five feet away from the hospital addition, which is currently under construction. Assessment activities are currently on-going. On August 26, 2014, MTS plans on visiting the site to perform a test pit on the east side of the hospital patient room to delineate the eastern extent of the petroleum impacted material, if any. Additionally, one (1) monitor well location will be marked near the source area and installed following a utility locate. The groundwater samples subsequently collected from the well will be analyzed in the laboratory and a report will be generated indicating our conclusions and recommendations.

Lastly, I believe, with your approval, I will submit a combination site assessment/tank closure report as well as an incident report form. Please let me know what you think and call me if you have any questions.

Wastes Disposal Location: As previously stated, the waste material has gained acceptance into a landfill facility in Tioga, however, due to the low levels of VOC's encountered during our PID analysis, and with verbal approval from the NDDOH, the material will not be disposed off-site, but utilized as fill beneath the proposed asphalt parking lot. The material will be placed at least five (5) feet away from the proposed structure.

Agencies Involved:

Updates

Date: 6/27/2014 **Status:** Reviewed - Assigned to NDDoH Division **Author:** Roberts, Kris

Updated Volume:

Notes:

Waste Management Division - Underground Storage Tank Program has oversight.

Date: 1/23/2015 **Status:** Reviewed - No Action Required **Author:** Panchol, Reuben

Updated Volume:

Notes:

The UST-program reviewed the assessment report and issue letter of No Further Action.