

BACKGROUND:

Leaksite No: 17141

Date: 1/26/09

Site name: South Central Grain and Energy, Hector

Hydro: John Kaehler

Proj.Mgr: Nancy Hennen-Blomme

Consultants: Glacial Lakes

Emergency : no

Tank Info:

4 ASTs have been removed.

2 diesel, 1 gas, 1 used oil.

Tanks were listed in good condition

Site Info:

Bordered on the S by a RR

E by grain storage bins.

W by former fertilizer building concrete slab

N residential area

Onsite building is a maintenance shop.

No other release sources identified within 500 ft.

Release Info:

During removal of the ASTs, contamination detected near the surface prompting further investigation.

Excavation:

No excavation as part of the tank removal.

Soil Investigation:

5 geoprobes advanced, 1 at the source and 4 in each direction approx 50 ft from the source.

Field results indicated contamination only in the source boring, GP-1. Highest readings were found at the surface and rapidly diminished with depth. No contamination detected past 6 ft deep.

Deepest probe went to 26 ft.

Soil samples collected at the WT interface for lab analyses did not detect any contamination.

Surface contamination appears to be present within the earthen containment berm.

Groundwater investigation:



5-6 ft bg

samples collected from all 5 probes

Worst case probe, DRO @ 570 ppb

Probes to the N and E were clean

Probes to the W and S indicated DRO around 100 ppb

No non-petro compounds detected

There does not appear to be significant contamination in either extent or magnitude.

Hydrology:

Depth to GW; 5-6 ft

Transmissivity (ft<sup>2</sup>/day): <50

GW Flow Direction; NE, towards Buffalo Creek

Aquifer?: no

General geology/stratigraphy:

0-26 ft sandy lean clay,

bedrock approx 300 ft bg

Well Receptor Info:

Muni water supplied to the area

No private/muni/industrial wells within ½ mi of the site.

Surface Water Info:

None within ¼ mi

Vapor Intrusion/Risk Info:

Vapor migration appears to be limited.

Other than the shop the nearest receptor would be a residential basement approx 150 ft N of the source.

2 VI borings advanced, one at the source the other approx 50 ft N of the source

Source;

B @ 25, T @ 58, E @ 200, X @ 300, TriMethyB @ 700

Radial;

B @ 12, T @ 40, E @ 7, X @ 30, TriMethyB @ 22

There does not appear to be any VI receptors at risk.

Consultant Discussion:

Elevated PID found in only 1 borings

No soil contamination detected at the WT

Remaining contamination appear to be limited within the berm and at the surface

GW has been impacted at low levels with little migration.

Low level soil gas present with no receptors within the soil gas cloud.

Recommend surface soil removal.

Hydro Comments :



Review of LSI dated Dec 08

Contamination resulting from loadout activities at the ASTs

The AST have been removed and not replaced.

The site is currently a maintenance shop.

The earthen berm surrounding the ASTs appears to have been successful in limiting the extent of contamination.

Remaining contamination does not appear to pose a risk to any receptors.

Agree with recommendation for surface soil and submittal of CCAD.

01/27/09

Review of CCAD worksheet submitted with LSI.

LSI identified surface soil contamination contained within the AST berm.

Removal or capping were explored, excavation was chosen.

Indications are that the soil within the berm to a depth of 2 ft will result in the removal of approx 67 cys.

The excavation would take place in spring/summer of 2009.

Clean soil would be backfilled, contaminated soil pile would be analyzed for subsequent appropriate disposal.

My take:

Given the results from the LSI the above excavation as a CAD should be approved.

