

SUBSURFACE REMEDIATION TECHNOLOGIES, INC.



ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES

355 Central Street • Rowley, Massachusetts 01969

(978) 948-3861

October 22, 2018

Mr. Steve White – Former Owner
c/o Nancy C. White Trust
6 Market Street
Newburyport, Massachusetts 01950

RE: Underground Storage Tank (UST) Removal Evaluation Report
550 Gallon Waste Oil UST Decommissioning

Dear Sir:

Subsurface Remediation Technologies, Inc. (SRT) is submitting this letter documenting our evaluation conducted at the above referenced former garage location on September 14, 2018. The location is shown on Figure 1. UTM Coordinates N4741694, E346715. The owner/operator of the former garage building Mr. & Mrs. Steve White of the Nancy C. White Trust requested our services to address documentation requirements by the Newburyport Fire Department for the waste oil USTs' removal. One steel 550 gallon capacity UST was removed on the left front corner along Market Street of the site building. The area beneath this UST was tested by an environmental professional for potential oil releases. The UST was used for waste oil at the former gasoline station. The gas station has not been used since the 1980s. The reason for its decommissioning was that it had not been used for over 10 years and was considered abandoned. The site building is a former gasoline station and presently a sign making business and previously the Country Driving School. The subject steel oil tank was pumped/cleaned of its contents by Hale Street Services (HSS) and its contents were disposed of by NRC, Inc. in Salisbury, MA. SRT measured in August 2018 the oil in the UST and found 14" of product/water liquids. The 125 gallons (3 drums) of oil/water and sludge was transferred for proper disposal just prior to its removal.

SRT responded to your request to evaluate the condition of the UST upon its removal, sample soils beneath the UST for field testing with a Photoionization detector and perform lab testing on those samples at a licensed laboratory. SRT was on scene from 10:45AM to 2:30 PM on September 14, 2018. Upon its removal at 1:35 pm, the USTs appeared in excellent condition, there were no obvious indications of significant holes in tank or in overfills at the fill port areas. Photos are available upon request. Observations were made in the presence of the fire inspector, Kevin Parsesian, NFD, representing the town's fire and safety departments. The tank appeared sound due to it containing up until the day of its decommissioning 125 gallons of oil. Upon removal, the tank was cleaned of its outside corrosion rust, no corrosion holes appeared at the bottom. Our investigation progressed to determine if this release required an emergency remedial response action or to determine if a 120 day notification was necessary for compliance with the Massachusetts Contingency Plan, 310CMR 40.000.

A soil sample was obtained beneath the UST after its removal which was screened for oil vapors with a PI-101 Hnu Systems, Inc. photo-ionization detector. SRT used the Department of Environmental Protection (DEP) procedure for field screening soil samples for this evaluation of potential releases for notification purposes. All the soil sample jar headspace field readings were <100 ppm for the waste oil UST soils beneath the UST. SRT recorded 0 ppm which was well below the 72 hour notification threshold of 100 ppm for reporting to the DEP.

The soil sample was then prepared for submittal for Total Petroleum Hydrocarbons (TPH) lab testing. No samples were laboratory tested for groundwater because the water table was not encountered within 7 feet of the surface. No oil or odors were observed beneath the UST. The soil composite sample was obtained at 5.5-7 feet and just below the former UST bottom. These readings negated the necessity to test groundwater but it was later tested in a nearby monitoring well with none present. The soils consisted of silty sand and some gravel and were a sample composite of 2 locations just below the removed USTs bottom. The soil sample was delivered to Amro Environmental Laboratories in Merrimack, New Hampshire for Total Petroleum Hydrocarbon (TPH) test soil analysis.

Attached is the lab test result of that above mentioned soil sampling. The lab soil test concentrations were below 49 mg/kg (all possible petroleum types) beneath the waste oil UST. This location was significantly less than than the S1-GW2 reportable and MCP standard for a TPH concentration standard which is 1000 mg/kg. The Certified Laboratory reports are included in Attachment 1. This result does not exceed the 120 day notification requirement in the MCP. As a consequence, no further action was required to be in compliance with the MCP.


Attachment 2 contains copies of the tank removal and disposal permits and documentation for their proper disposal. This report will be sent to the fire department (Attn: Fire Prevention) that inspected the UST on the day it was removed as they requested it.

LIMITATIONS

The investigation procedures reported herein were conducted to assess the conditions at the UST removal location at 6 Market Street in Newburyport, MA, as defined by Massachusetts General Laws Chapter 21E and the Massachusetts Contingency Plan (MCP 310 CMR 40.0000). The conclusions stated are based on observations made by the writer on the site, review of available public records at the time services were conducted, and interpretation of all data collected. This report was prepared for the property owner for use in an environmental evaluation of the subject property. Groundwater was not tested in this evaluation as the soils did not indicate a release. Future events may alter these findings. Soils were tested in this evaluation because they were possibly or could have been impacted by the subject tank's possible releases of oil. The current and historical use of this immediate area would suggest that background levels of petroleum products exist in soils/sediments, surface water and groundwater. Should additional research and/or field investigation reveal inconsistent findings, sections of this report may require modification. No other warranty is expressed, written, or implied.

If you have any questions regarding this submittal letter, please contact the undersigned at (978) 948-3861.

Sincerely,



Timothy A. Toomey, PG/LSP
Subsurface Remediation Technologies, Inc.

cc: Newburyport MA Fire Dept.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
2	9 inches	29 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
3	29 inches	59 inches	stratified fine sand to loamy fine sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5

Soil Map ID: 3

Soil Component Name: Agawam

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
2	9 inches	29 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
3	29 inches	59 inches	stratified fine sand to loamy fine sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 4

Soil Component Name: Merrimac

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	18 inches	25 inches	sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	25 inches	59 inches	stratified gravelly sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 5

Soil Component Name: Water

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.