



March 10, 2011

Scott Menard
Arbor Development Group, LLC.
3650 Mount Diablo Blvd., Suite 200
Lafayette, CA 94549

Subject: 1000 North Vasco Road, Livermore, Former Geno's Country Store

Dear Mr. Menard:

I have reviewed the Tank and Pipeline Removal Narrative (February 10, 2011) documenting the underground tank system removal at this site and a discussed the findings with Jerry Wickham of the Alameda County Environmental Health Division. Based upon the information contained in the Narrative, I am referring this case to Alameda County Environmental Health. In addition, an Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report must be submitted. A copy of the form is enclosed.

Sincerely,

A handwritten signature in black ink, appearing to read 'Danielle Stefani', written in a cursive style.

Danielle Stefani
Assistant Fire Marshal

Encl: Contaminated Site Case Transfer Form
Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report
Tank and Pipeline Removal Narrative, February 10, 2011 (Jerry Wickham only)

cc: ~~Jerry Wickham, Alameda County~~ Environmental Health
Matt Macedo, Geno's County Store
Colleen Winey, Zone 7

TANK AND PIPELINE REMOVAL NARRATIVE

1000 N. Vasco Road Livermore, California

January 21, 2011 and January 27, 2011

I. Methods and Protocols

Sampling and laboratory testing followed the Tri-Regional Board staff recommendations (RWQCB, 2004, 1990) as instructed in the field by the Livermore-Pleasanton Fire Department inspector, Danielle Stefani. The appropriateness of the Tri-Regional Board staff recommendations (Appendix A, Table #2) was confirmed specifically by telephone communication with Mr. Jerry Wickham, Alameda County DHS. A total of 23 soil samples were collected, including four (4) from the gasoline storage tank pit (TP1), four (4) from the diesel tank pit (TP2), twelve (12) from the trenches, one (1) from the base of the vent pipe rack below elbow depth, and two (2) from soil stockpiles (STK-PL2 and STK-PL3).

Each soil sample was collected using a slide hammer and sample spoon loaded with a new 2-inch diameter by 6-inch long brass sleeve. Tank pit soil samples were collected off the backhoe bucket with effort to 1) obtain sample from just above the water surface and 2) obtain sample from the side tooth of the backhoe bucket used to scrape the sidewall of the tank pit.

Soil samples were capped with Teflon sheet and plastic end caps, labeled, and placed in an ice chest with abundant water ice. Samples were delivered by the sampler with a completed chain-of-custody form, within approximately 2 hours of sample collection.

Two pit water samples were collected. Water samples were collected using new polyethylene bailers with bottom emptying tubes, and new line, one set-up for each tank pit. A 1-Liter amber glass bottle was filled with water collected from TP2, and triplicate VOAs were filled with water collected from TP1. Ms. Stefani observed and confirmed presence of a meniscus and absence of headspace or air bubbles in each of the three VOAs. Samples were labeled and placed in an ice chest with abundant water ice. Samples were delivered by the sampler with a completed chain-of-custody form, within 2-5 hours of sample collection.

McC Campbell Analytical (Pittsburg, CA) performed all of the analytical testing. McC Campbell Analytical, Inc., is a California DHS-certified test laboratory (ELAP Certification #1644) certified to perform the testing by U.S. EPA analytical methods reported herein.

II. Sampling and Test Results for Tank Pit Sidewall Sampling on February 21, 2011

On Friday, January 21, 2011, M. Papineau sampled the tank pits as witnessed by Inspector Danielle Stefani, Livermore-Pleasanton Fire Department. Eight (8) soil samples and two (2) pit water samples were collected and were submitted by the sampling technician for testing by McC Campbell Analytical (Pittsburg, CA) in accordance with Tri-Regional Boards recommendations (1990, 2004). The Tri-Regional Boards guidance, Appendix A, Table #2, lists EPA Method 8260B analysis of soil and ground water samples for underground gasoline storage tanks including the following analytes: BTEX, MtBE, DIPE, EtBE, TAME, TBA, 1,2-DCA, and EDB. The list of analytes was confirmed with Mr. Jerry Wickham on Friday, January 21, 2011, and amended the

testing indicated on the Chain of Custody by telephone call and email to the laboratory.

Soil Samples Collected from Pit Sidewalls

Soil samples were collected off the excavator or backhoe bucket from soil at or near the water level. The pit water level was 9.3 feet below grade surface. Diesel and gasoline tank pit sidewall sample test results are "clean" ("ND" for gasoline, "ND" for diesel, and "ND" for BTEX, listed oxygenates, and additives).

PID Measurements

During February 21, 2011, one PID response was noted near the east end of the diesel tank pit (TP2). The PID response was 30 ppmv off the bucket (TP2-E2) and 117-184 ppmv in a Ziplok plastic bag containing a handful of the soil. The PID on February 21 was a Thermo Analytical 580B with a 10.6 eV lamp (Environmental instruments ID#187) calibrated to 100 ppmv isobutylene.

Pit Water Samples Collected from Tank Pits

Pit water samples were collected from the pits by casting a bailer on line and trawling to retrieve a sample. The bailer was observed to fill as it tilted about 15 degrees from horizontal and partially submerged at the end (bottom-emptying device end). Neither pit was de-watered and allowed to re-charge before sampling. The water surface was noted in both as having floating scum. D. Stefani noted sheen in TP1. M. Papineau noted this was limited to the edge of the pit TP1 at the water line. TP2 was not noted as having scum but not sheen.

For the gasoline tank pit water sample (TP1-gas-W) McCampbell Analytical reported concentrations of 240 micrograms/liter (same as 240 ppb) as TPHg, 0.98 ppb as MtBE, 5 ppb as TBA, and non-detected benzene (<0.5 ppb). Concentrations of benzene (ND, <0.5 ppb), MtBE (0.98 ppb), TBA, (5 ppb), toluene (6.3-7.6 ppb), ethylbenzene (3.8-4.6 ppb), and xylenes (38-41 ppb).

The diesel tank pit water sample (TP2-diesel-W) has reported concentrations of 540,000 ppb as TPHd, 190 ppb as ethyl benzene, 800 ppb as toluene, 1500 ppb as xylenes, and non-detected (<12 ppb) benzene.

III. Sampling and Test Results for Product Line Trench and Vent Pipe Bracket Sampling on February 27, 2011

On Thursday, January 27, 2011, M. Papineau sampled the product line trenches as witnessed by Inspector Paul Smith, Livermore-Pleasanton Fire Department. At each sample location pea gravel backfill was pot-holed with a backhoe to expose the top of native soil at the backfill interface with native soil. Three trenches labeled as PL1, PL2 and PL3 were sampled. Samples were generally collected under the former dispensers or every 20 feet. Thirteen soil samples were collected from the pot holes. Two additional soil samples were collected from temporary soil stockpiles located adjacent to trenches PL2 and PL3 (see Section IV).

The three product line trenches were labeled as PL1 (front along Vasco Road), PL2 (1 diesel product line and two (2) vent lines between tank pits TP1 and TP2), and PL3 (diesel- only lines on the north side of the service station and restaurant building. The last sample was collected from the vent pipe rack (VP), at the base of the vent pipe rack. This also is located on the north side of the building. About 3-5 feet of vent pipe

remains underground under the curb from the south wall of the diesel tank pit (TP2). See Diagram, page 5.

Soil Samples Collected from Trenches and Vent Pipe Rack Test Pit

Before sampling the product line and vent pipe trenches, pot-holing was performed at each sample location to remove additional pea gravel and expose native soil under the dispensers. There were no observed areas of gross contamination, free product or PID response greater than 10 ppmv. Minor staining was observed at locations PL1-S1, PL3-S10, and PL3-S12. Minor staining means the native soil, generally brown (Munsell soil color 10YR 5/3), had a grayish-brown color, but without noticeable petroleum odor or Photo-Ionization Detector (PID) response.

Minor soil staining without petroleum odor or PID response was noted at locations PL1-S1, PL3-S10, and PL3-S12. Predominant soil color is Munsell 10YR 5/3. Staining was noted by sampling technician as Munsell 2.5 Y 4.5/2. Similar staining was not noted at PL1-S2 through PL1-S5, PL2-S6 through PL2-S8, PL3-S9, or PL3-S11.

Laboratory test results for product line trenches confirm general clean status for the two trenches named PL1 and PL2. A minor TPH gasoline range concentration (2.9 mg/Kg without BTEX or MtBE) and minor TPH diesel range concentration (4.0 mg/Kg) were reported for soil sample PL1-S1. This is consistent with minor staining (but no odor or PID response observed) at the PL1-S1 location. Soil samples PL1-S3 and PL1-S4 also were reported to contain minor TPH diesel range concentrations of 1.5 mg/Kg (PL1-S3) and 1.3 mg/Kg (PL1-S4). Results are also clean (ND) for soil samples PL1-S2, PL1-S5, PL2-S6 through PL2-S8, PL3-S9, and vent pipe rack soil sample VP-S13.

Three soil samples (PL3-S10, PL3-S11, and PL3-S12) collected from the diesel-only product line trench were reported by McCampbell Analytical to contain detectable diesel concentrations of 1400 mg/Kg, 3200 mg/Kg, and 2700 mg/Kg. Reported results are generally consistent with observations of minor staining noted at PL3-S10 and PL3-S12. The above units, milligrams per kilogram (mg/Kg), are the same as parts per million.

PID Measurements

The PID on February 27, 2011, was a RAE 2000 with a 10.6 eV lamp (Environmental Instruments ID# 236) calibrated to 100 ppmv isobutylene. A 100 ppmv isobutylene span gas mini-canister was used in the field as a span check, and the field test showed the PID was functioning normally. Measurements in the trenches did not have any significant PID response.

IV. Sampling and Test Results for Soil Stockpile Sampling on February 27, 2011

Soil excavated from the product line and vent pipe trenches consisted primarily of pea gravel. There was minor amount of native soil in the stockpiles and, where present, the native soil sandy silt, silt-sand, and clayey sandy silt originated from the sidewalls. Before sampling the product line and vent pipe trenches, pot-holing was performed at each sample location to remove additional pea gravel and expose native soil under the dispensers; therefore, the temporary stockpiles were mainly pea gravel with limited soil cut from the sidewalls.

A minor diesel concentration (1.2 mg/Kg) was reported for stockpile soil sample STK-PL2. A diesel concentration of 380 mg/Kg was reported for stockpile soil sample STK-PL3.

V. Comparison to Screening Levels (ESLs)

The San Francisco Bay RWQCB has published screening levels for diesel and gasoline in soil and ground water. For gasoline and diesel in shallow soils (<10 feet), where ground water is a current or potential drink water source, the ESL is 83 mg/Kg (83 ppm) for both diesel and gasoline, for residential or commercial/industrial land use.

Laboratory test results for product line trench PL1 samples PL1-S1, PL1-S3, and PL1-S4, and soil stockpile sample STK-PL2, therefore, are well under the ESL. The results for diesel product line trench PL3 soil samples PL3-S10, PL3-S11, and PL3-S12, and trench stockpile STK-PL3 are above the ESL.

For tank pit water, from Tables F-1a/Table F-1b, ESLs where ground water IS/IS NOT a potential drinking water source are: 1/46 ppb for benzene, 30/43 ppb for ethylbenzene, 40/130 ppb for toluene, 20/100 ppb for xylenes. Also, from Tables F-1a/Table F-1b, ESLs where ground water IS/IS NOT a potential drinking water source are: 100/210 ppb for gasoline and 100/210 ppb for diesel. The ESL for benzene is 1 ppb (based on toxicity) where ground water IS a current or potential source of drinking water, or 46 ppb where ground water IS NOT a current or potential source of drinking water. Where ground water IS a current or potential source of drinking water, the ESLs are 5 ppb for MtBE and 12 ppb for TBA (RWQCB, 2008).

Gasoline and xylenes concentrations in the pit water sample (TP1-gas-W) are marginally above the ESLs. Laboratory results for the diesel tank pit water sample (TP2-diesel-W) are above the ESLs. Neither pit was de-watered and allowed to re-charge before sampling.

References

RWQCB, 2008. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*.

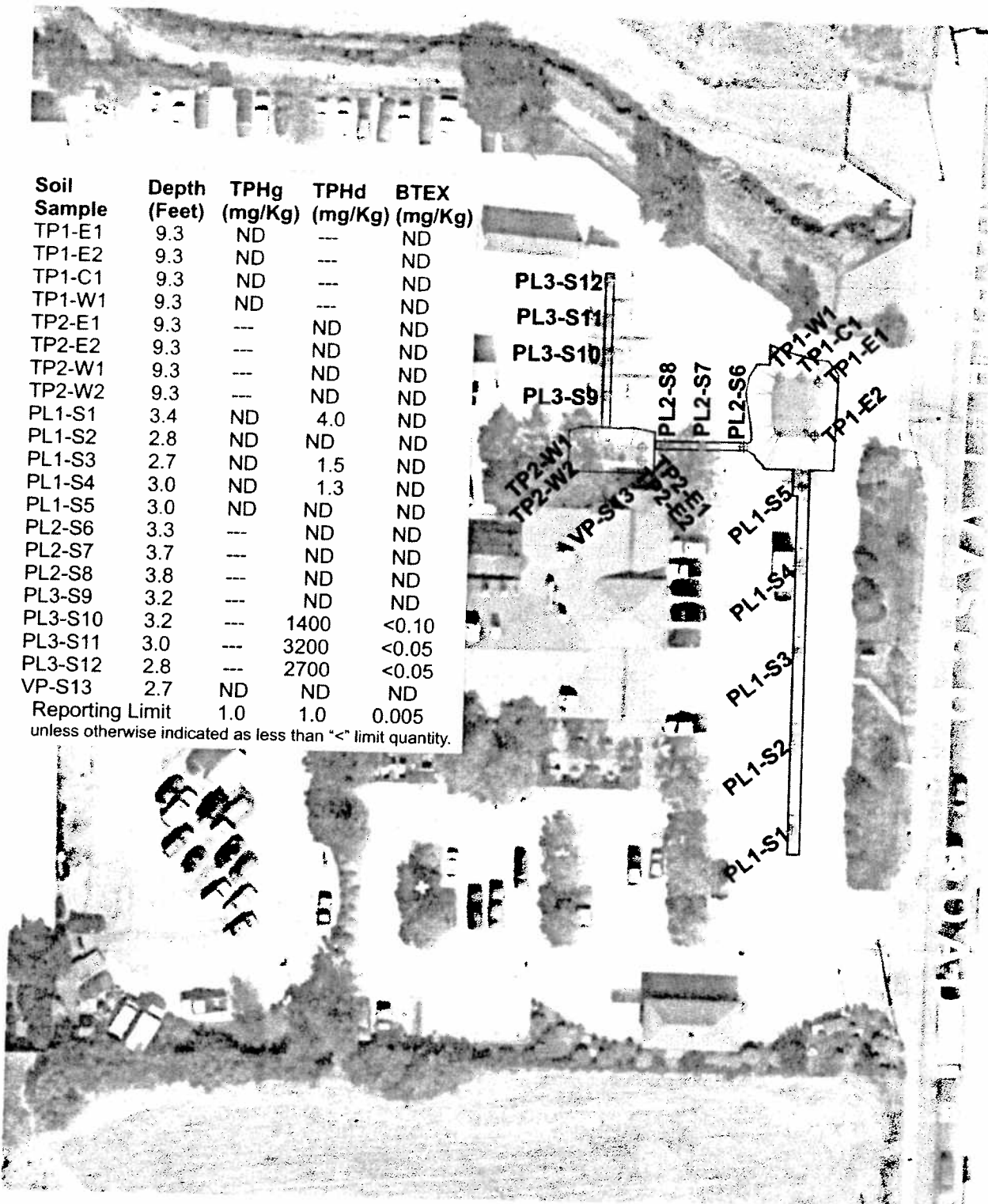
http://www.swrcb.ca.gov/rwqcb2/water_issues/available_documents/ESL_May_2008.pdf

Tri-Regional Boards, 2004. *Tri-Regional Boards Staff Recommendations for Preliminary Investigation and Evaluation of Tank Sites*, April 16, 2004, Appendix A, Table #2, p. 11 or 24.

http://www.swrcb.ca.gov/rwqcb5/water_issues/underground_storage_tanks/tri-regionals_appendix_a.pdf

Tri-Regional Boards, 1990. *Tri-Regional Boards Staff Recommendations for Preliminary Investigation and Evaluation of Tank Sites*, August 10, 1990.

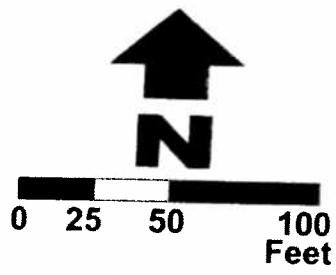
http://www.swrcb.ca.gov/rwqcb5/water_issues/underground_storage_tanks/usttri-reg.pdf



Soil Sample	Depth (Feet)	TPHg (mg/Kg)	TPHd (mg/Kg)	BTEX (mg/Kg)
TP1-E1	9.3	ND	---	ND
TP1-E2	9.3	ND	---	ND
TP1-C1	9.3	ND	---	ND
TP1-W1	9.3	ND	---	ND
TP2-E1	9.3	---	ND	ND
TP2-E2	9.3	---	ND	ND
TP2-W1	9.3	---	ND	ND
TP2-W2	9.3	---	ND	ND
PL1-S1	3.4	ND	4.0	ND
PL1-S2	2.8	ND	ND	ND
PL1-S3	2.7	ND	1.5	ND
PL1-S4	3.0	ND	1.3	ND
PL1-S5	3.0	ND	ND	ND
PL2-S6	3.3	---	ND	ND
PL2-S7	3.7	---	ND	ND
PL2-S8	3.8	---	ND	ND
PL3-S9	3.2	---	ND	ND
PL3-S10	3.2	---	1400	<0.10
PL3-S11	3.0	---	3200	<0.05
PL3-S12	2.8	---	2700	<0.05
VP-S13	2.7	ND	ND	ND
Reporting Limit		1.0	1.0	0.005

unless otherwise indicated as less than "<" limit quantity.

Underground Tank and Line Removal 1000 N. Vasco Road Livermore, California



Last revised: 2/10/2011

Tank pit sampling: January 21, 2011
Product and vent line trench sampling: January 27, 2011
Performed by: M. Papineau