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By Alameda County Environmental Health 8:17 am, Feb 24, 2017

CITADEL ENVIRONMENTAL SERVICES, INC.

September 7, 2016

Mr. Michael L. Boettger
Vice President
MICHAELS DEVELOPMENT
2020 W. Kettleman Lane
P.O. Box 1570
Lodi, California 95241

Re: CITADEL Project No. 0849.1001.0
Request for Environmental Closure
Former Red Star Development
1396 Fifth Street
Oakland, California 94607
SLIC Case Number: R00002896

Dear Mr. Boettger:

Citadel Environmental Services, Inc. (Citadel) is pleased to provide this Request for Environmental Closure report for on-going concerns related to native and imported soil and former underground storage tanks (USTs). This report completes the site investigation work activities conducted by Citadel on June 30, 2016, and includes laboratory results requested by the Alameda County Department of Environmental Health (ACDEH) in a conference call on August 22, 2016.

If, after your review, you have any questions or require additional information, please do not hesitate to telephone me at the Citadel Office in Glendale at (818) 246-2707.

Sincerely,

CITADEL ENVIRONMENTAL SERVICES, INC.

Mark Drollinger, M. Eng, CSP, CHMM, EIT
Director, Environmental Geology and Engineering

Enclosure



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CITADEL ENVIRONMENTAL SERVICES, INC.

Michaels Development
2020 W. Kettleman Lane
P.O. Box 1570
Lodi, California 95241

Request for Environmental Closure Report

September 7, 2016

Citadel Project Number 0849.1001.0

Former Red Star Development
1396 Fifth Street
Oakland, California

www.citadelenvironmental.com

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1.0 BACKGROUND

The Alameda County Department of Environmental Health (ACDEH) reviewed the Revised Excavation Report¹ submitted by Citadel Environmental Services, Inc. (Citadel) in 2015. This report described results of services provided by Citadel, including soil investigation, excavation, and removal of underground storage tanks (USTs).

According to the ACDEH review, the report did not address several major items necessary to evaluate the case for closure at that time. Specifically, the ACDEH comments were related to the following items:

1. **Fill Material:** Approximately 7,000 tons of imported segregate/sand mix was imported from Inner City Recycling (ICR); the imported fill did not appear to have been characterized prior to acceptance on-Site. ACDEH requested that soil sampling be conducted for characterization of the fill material across the Site.
2. **Underground Storage Tanks:** Three USTs were encountered under the sidewalk along Fifth Street in 2011. Two of these USTs were removed and one was abandoned in-place with approval of the Oakland Fire Department (OFD) (Citadel, 2012b). In order to assess current Site conditions, ACDEH requested that soil and groundwater samples be collected in the areas of each of the former USTs.
3. **Lead in Native Soil:** Based on conversations with ACDEH, additional soil sampling for metals was requested to confirm the presence of lead and chromium above the regulatory limit in previously excavated and unexcavated areas.
4. **Groundwater Sampling:** To assess groundwater conditions upgradient of the former USTs, the ACDEH requested that a groundwater sample from the area near former groundwater monitoring well 5 (MW-5) be collected, as well as from a second location in the east portion of the Site.

Citadel prepared a Work Plan to address activities to complete the outstanding items, which was approved by the ACDEH on June 29, 2016. The field activities were completed on June 30, 2016 in accordance with the approved Work Plan and the investigation report was submitted to the ACDEH on July 28, 2016². Highlights of work tasks to respond to the requests of the ACDEH included:

1. All borings advanced at previously excavated areas of the Site were advanced one-foot below the fill into native soil. Continuous coring and logging was performed for geologic characterization of the fill and native material to delineate the fill/native material interface and to determine if the impacted fill came from multiple sources.
2. Soil samples were collected at specific sampling intervals based on recommendations provided by ACDEH:
 - a. Borings advanced in the western portion of the Site where soil was previously excavated to approximately seven feet below grade (B-1, B-2, B-3, B-4, B-5) were

¹ Citadel Environmental Services, Inc., Soil Excavation Report, Former Red Star Yeast Company, 1396 5th Street, Oakland, CA, August 21, 2012, Revised September 22, 2015.

² Citadel Environmental Services, Inc., Phase II Subsurface Investigation Report and Closure Request, Former Red Star Senior Living Apartments Development, 1396 Fifth Street, Oakland, California 94607, July 28, 2016.

- sampled at depth intervals of one, three, and five, feet; and one foot into the native soil.
- b. Borings advanced in the area of the Site where soil was previously excavated to approximately three to four feet below grade (B-6, B-9, B-10) were sampled at depth intervals of one and three feet; and one foot into the native soil.
 3. Sampling of native soil at the eastern boundary of the Site where soil was not previously excavated was advanced to seven feet below grade and sampled at intervals of one, three, five, and seven feet. Native soil samples were analyzed for total petroleum hydrocarbon (TPH) and Title 22 heavy metals.
 4. In addition to performing grab groundwater sampling in the vicinity of the former USTs, soil sampling was performed at these same locations. Soil samples were analyzed for TPH and volatile organic compounds (VOCs). Soil and groundwater samples were also analyzed for methyl tert-butyl ether (MTBE).

The soil sample results were compared to San Francisco Bay Regional Water Quality Control Board's (SFBRWQCB) Tier 1 or Tier 2 Environmental Screening Levels (ESLs) for contaminants of concern in soil and groundwater.

Tier 1 ESLs are based on conservative default Conceptual Site Model (CSM) scenario conditions including residential land use, use for groundwater as a drinking resource, maximum contaminant limits (MCL) given priority over risk-based levels, groundwater occurrence at depths of 10 feet below ground surface (bgs) or less, soil type of sand, and soil exposure depth of 10 feet bgs or less. This scenario is designed to protect sites with unrestricted land and water use, shallow soil contamination, shallow ground water, and permeable soil.

Tier 2 ESL are selected by refining the default CSM to identify relevant pathways, receptors, and concerns specific to an individual site.

2.0 PHASE II SUBSURFACE INVESTIGATION RESULTS (JULY 28, 2016)

Imported Soil Characteristics

Imported fill material at the Site was mostly grayish in color and consisted of gravel with silt and sand. Native soil was identifiable as a combination of reddish brown silt, very fine sand and clay. The silt was overlain by clay in the northern part of the Site, became more clay-rich in the southern part of the Site and sandier in the eastern part of the Site.

Polycyclic Aromatic Hydrocarbon Analysis

Tier 1 ESLs were used to evaluate soil sampling results for the June 30th investigation. For polycyclic aromatic hydrocarbons (PAHs), Tier 1 ESLs were exceeded for benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthrene and dibenz[a,h]anthracene. All samples with Tier 1 ESL exceedances are from the fill material with the exception of the sample at three feet bgs from boring B-4 which exceeded the Tier 1 ESL for benzo[a]pyrene. Tier 1 ESLs are designed to protect sites with unrestricted land and water use, shallow soil contamination, shallow ground water, and permeable soil.

Benzo(a)pyrene was reported to be present above the Tier 1 ESL of 0.016 milligram per kilogram (mg/kg) in five soil samples collected at one foot bgs, three soil samples collected at three feet

bgs and one soil sample collected at five feet bgs, ranging in concentration from 0.026 mg/kg to 0.150 mg/kg. Benzo(a)anthracene, benzo(b)fluoranthrene, and dibenzo(a,h)anthracene were detected in one sample (B-5 at one feet bgs) above their respective Tier 1 ESLs.

Tier 1 ESLs assume residential land use. Evaluating the Site utilizing Tier 2 ESLs for commercial land use indicated that all PAHs were below the Tier 2 ESLs using the commercial land use scenario. In addition, the Tier 1 ESLs for PAHs are driven by human health from direct exposure to contaminated soils. Future development is not anticipated to include direct exposure to subsurface soils and ESLs for exposure to construction workers, leaching to groundwater, gross contamination and odor nuisance are all above maximum concentrations of PAHs observed at the Site.

Total Petroleum Hydrocarbons - Soil

Areas that were expected to be predominantly native soils were also analyzed for TPH as gasoline (TPHg), TPH as diesel (TPHd), TPH as motor oil (TPHo). TPHg was encountered in two samples collected from native soils in the eastern portion of the Site at five feet bgs with a maximum concentration of 0.100 mg/kg. All other samples in fill and native soils were non-detect for TPHg. Maximum concentrations of TPHd and TPHo in fill material was 28 mg/kg and 310 mg/kg from one boring at three feet. Maximum concentrations of TPHd and TPHo in native soils were 15 mg/kg for TPHd at three feet bgs and 39 mg/kg for TPHo at seven feet bgs. The Tier 1 ESLs were not exceeded in any soil samples for TPHg, TPHd or TPHo.

Soil samples were collected to evaluate for the presence of petroleum hydrocarbons and VOCs adjacent to the former USTs. TPHg was non-detect in all samples and the maximum concentration of TPHd and TPHo were 28 mg/kg and 130 mg/kg at 15 feet bgs. All samples were non-detect for benzene, toluene, ethylbenzene, and xylenes (BTEX), oxygenates and VOCs with all results were below Tier 1 ESLs.

Total Petroleum Hydrocarbons - Groundwater

Groundwater samples were analyzed for TPHg, TPHd, TPHo, BTEX, oxygenates and VOCs. Maximum concentrations in groundwater were observed in samples GW-4 and GW-5 on the north side of the Site. Groundwater gradient has not been documented at this Site or adjacent sites, but is assumed to be toward the Oakland Inner Harbor, which is located approximately 3,300 feet to the south. Additionally, a site located approximately 900 feet to the north-northwest of the Site has historical groundwater gradient to the south-southwest.

Maximum concentrations reported at the Site for TPHg, TPHd and TPHo were 1,500 microgram per liter ($\mu\text{g/L}$), 200 $\mu\text{g/L}$ and 210 $\mu\text{g/L}$, respectively. Maximum concentrations of BTEX constituents were 1.1 $\mu\text{g/L}$, 230 $\mu\text{g/L}$, 3.6 $\mu\text{g/L}$ and 25 $\mu\text{g/L}$, respectively. Maximum concentrations of tert-butyl alcohol (TBA) was 70 $\mu\text{g/L}$. The maximum concentrations all occurred in groundwater samples GW-4 and GW-5 located on the north, or upgradient, side of the site.

Maximum concentrations of contaminants of concern in groundwater samples collected from the vicinity of the former USTs include TPHg at a concentration of 41 $\mu\text{g/L}$ in GW-13, TPHd at a concentration of 130 $\mu\text{g/L}$ in GW-14 and TBA at a concentration of 13 $\mu\text{g/L}$ in GW-13. BTEX, other oxygenates and VOCs were all non-detect in these groundwater samples.

The presence of TBA suggests an off-Site source since this compound is typically found as an additive in gasoline and would not have been expected to be used on-Site.

The locations of the maximum concentrations indicate that these contaminants may be from an offsite source that is north of the Site which include the Bay Area Rapid Transit (BART) right-of-way (ROW) that is immediately adjacent to the northern perimeter of the Site, the former service station located approximately 175 feet north of the Site and a former truck repair facility located approximately 150 feet northeast of the Site.

Groundwater collected from the two upgradient sampling locations, GW-4 and GW-5, had exceedances of Tier 1 ESLs for TPHg, TPHd, benzene, toluene, xylenes and TBA. Only TPHg (1,500 µg/L in GW-4) and toluene (230 µg/L in GW-4) exceed the Tier 2 ESLs. These concentrations are well below the California Low Threat Closure Policy (SWRCB, 2012) guidance concentrations for Site closure.

Request for Additional Information

Based on results of Citadel's 2016 investigation, the ACDEH agreed to remove the following concerns from further evaluation:

- Characterization of imported fill across the site;
- Characterization of native soil at the eastern boundary of the site; and,
- Characterization of soil and groundwater near the former USTs.

However, slightly elevated contaminants of concern were reported in the vicinity of B-5/GW-5 in soil and groundwater. Further, chromium results at four locations exceeded 10 times the STLC and were not analyzed using the Waste Extraction Test (WET) procedure. To address these on-going concerns and evaluate potential off-site sources of contamination to soil and groundwater, the ACDEH requested the following:

1. Analyze soil samples collected from boring B-5 at one, three, and five feet bgs for TPHg, TPHd, and TPHo;
2. Analyze soil samples collected from boring B-5 at seven feet bgs for TPHg;
3. Analyze soil samples collected from boring B-5 for BTEX, oxygenates and other VOCs; and
4. Conduct a review of historic investigations performed at the Site to determine whether or not elevated concentrations of chromium were present in the soil and the results of any WET procedure.

In addition to providing the requested information, Citadel reviewed on-line environmental databases from Department of Toxic Substances and Controls (DTSC) Envirostor database and the SWRCB's Geotracker database for information related to potential upgradient sources of fuel related petroleum hydrocarbons and chlorinated solvents to soil and groundwater. Two adjacent upgradient facilities were listed: Trucker's Friend, located at 1395 East 7th Street (RB Case #: 01-0323, LOP Case #: RO0000053), and J&A Trucking, located at 500 Kirkham Street (DTSC Case #: 01510022, LOP Case #: RO0000421). These facilities are briefly discussed below.

3.0 PETROLEUM HYDROCARBON RESULTS

In Citadel's 2016 investigation, soil and groundwater at the Site were analyzed for TPH and VOCs. Maximum concentrations of TPHg, TPHd, TPHo, and BTEX in groundwater were observed in samples collected at the upgradient (northern) side of the Site from sampling locations GW-4 and GW-5. Groundwater samples collected adjacent to the former USTs at the Site had low or non-detectable concentrations for TPH and VOCs. The TPH and BTEX concentrations observed in the upgradient side of the Site appear to be coming from an offsite source. Immediately upgradient

of the Site is the BART ROW along with a service station (Trucker's Friend) and a former truck repair facility (J&A Trucking).

To evaluate the source of TPH and VOC concentrations in onsite soil and groundwater, one, three, and five-foot soil samples collected from the boring B-5 located on the upgradient side of the Site were analyzed for TPH and VOCs. The results were consistent with those from other soil samples at the Site; TPHg and VOCs were not detected in one, three, and five-foot soil samples from B-5, and TPHd and TPHo were present at maximum concentrations of 15 and 120 mg/kg, respectively. Table 1 has been updated with the additional analysis results and is included with this report.

4.0 CHROMIUM RESULTS

In June, 2016 Citadel reported four soil samples with chromium concentrations exceeding 50 mg/kg or 10 times the STLC. The ACDEH requested that Citadel confirm whether previous investigations had encountered soil samples with elevated levels of chromium, and whether any of these investigations included STLC/WET analysis.

Chromium was measured at concentrations greater than or equal to 50 mg/kg in 16 soil samples collected at the Site on March 4 and 5, 2011 (Citadel Soil Excavation Report, revised September 2015). The highest chromium results reported was 81 mg/kg in sample CB12-6. STLC extractions were not conducted on these samples.

Soil pile samples were collected from the Site on August 18 and 21, 2011. Five soil samples were reported with concentrations of chromium above 50 mg/kg, ranging from 52 to 100 mg/kg. STLC extractions were conducted on these samples and concentrations of chromium in all five samples were less than the STLC regulatory limit of 5.0 milligrams per liter (mg/L) with a maximum concentration of 0.47 mg/L of chromium in the STLC extraction was reported for the soil sample with a concentration of 100 mg/kg. These STLC results indicate that the concentrations of chromium at the Site did not exceed STLC regulatory limits.

5.0 UPGRADIENT FACILITIES

Truckers Friend

The Trucker's Friend site is located north of the Site at 1395 7th Street (Figure 1). This site has long been developed; first as a residential property, and later as part of the Golden West Brewing Company that occupied the site from about 1951 through 1967. In 1967, the property changed ownership and was redeveloped with a full service gasoline station. The site continues to be operated as a gasoline service station and is currently known as Park Gas and Food.

Citadel's review of available reports for Trucker's Friend found that Epigene International collected two soil samples (S-1 and S-2) from this site on August, 19, 1996. Soil and groundwater samples were also collected at the site on August 27, 1996 and analyzed for TPH and VOCs. TPH compounds, toluene and xylenes were reported to be present in the soil samples

Concentrations of TPHg and TPHd in groundwater were 65 µg/L and 3,700 µg/L, respectively. The Tier 1 ESL for both TPHg and TPHd in groundwater is 100 µg/L.

Epigene International collected seven groundwater samples at the Trucker's Friend site on January 26, 2002. TPHg, TPHd, toluene and xylenes were reported to be present in the groundwater samples at 2.2 µg/L, 670 µg/L, 0.55 µg/L and 0.81 µg/L, respectively.

The samples were not analyzed for MTBE. Ethylbenzene and benzene were non-detect for all samples. One groundwater sample (P-2) was analyzed for PAHs; all PAHs were non-detect.

There have not been any further environmental investigations at the Trucker's Friend site since 2002. However, a work plan for conducting a Phase II Investigation was approved by the DTSC in May 2016.

J&A Trucking

J&A Trucking is located at 500 Kirkham Street on the north side of the BART tracks and east side of Kirkham Street, northeast of the Site (Figure 1). J&A Truck Repair occupied the site from 1984 to 1994. Prior to being a truck repair facility the site was occupied by Smilo Chemical Company, a chemical wholesaler and repackaging facility, from 1954 to 1984. The site was immediately adjacent to the former alignment of the Nimitz Freeway. Caltrans purchased the property in 1994 as part of the demolition and realignment of the freeway property.

Site assessment activities conducted in 1994 prior to demolition of all onsite facilities focused on soil and groundwater assessment in the vicinity of a 1,100-gallon gasoline UST. Maximum concentrations in soil for TPHg and BTEX were 6,500 mg/kg, 7.7 mg/kg, 94 mg/kg, 44 mg/kg and 250 mg/kg, respectively. Maximum concentrations of TPHg and BTEX in groundwater were 59,000 µg/L, 15,000 µg/L, 7,700 µg/L, 2,100 µg/L and 7,200 µg/L, respectively.

The UST and all other onsite facilities were removed in 1995. Soil samples collected during UST removal had maximum concentrations of TPHg and BTEX of 5,500 mg/kg, 40 mg/kg, 260 mg/kg, 100 mg/kg and 52 mg/kg, respectively. A groundwater sample collected during the UST removal had TPHg and BTEX concentrations of 32,000 µg/L, 5,600 µg/L, 5,100 µg/L, 63 µg/L and 5,500 µg/L, respectively. In November 1995, the area was excavated to approximately six feet below grade with 4,700 cubic yards of soil removed.

Additional assessment of petroleum hydrocarbons was conducted by Geocon (2013) at the J&A Trucking site. The investigation was situated entirely in the southwestern corner of the site, across Kirkham Street from the northeastern corner of the former Red Star Site. Almost all contaminant detects were in two samples collected at eight feet bgs.

Soil Sampling Results (2013):

- TPHg was reported at a maximum concentration of 590 mg/kg.
- TPHd was reported at a maximum concentration of 70 mg/kg.
- TPHo was reported at a maximum concentration of 7.9 mg/kg.
- Benzene was reported at a maximum concentration of 0.55 mg/kg.
- Toluene was reported at a maximum concentration of 3.9 mg/kg.
- Ethylbenzene was reported at a maximum concentration of 7.0 mg/kg.
- Xylenes were reported at a maximum concentration of 30.5 mg/kg.

Groundwater Sampling Results:

- TPHg was reported to a maximum concentration of 79 µg/l.
- TPHd was reported to a maximum concentration of 560 µg/l.
- TPHo was reported to a maximum concentration of 1,400 µg/l.
- BTEX was non-detect for all groundwater samples.

7.0 CONCLUSIONS AND RECOMMENDATIONS

From Citadel's June 2016 assessment, TPH concentrations are minimal in soil and groundwater adjacent to the USTs located at the downgradient edge of the Site. TPH concentrations in groundwater were reported to be higher on the upgradient side of the Site.

To verify that an onsite source of petroleum hydrocarbons in soil is not contributing to concentrations in groundwater, the soil samples from boring B-5 (the north most boring) were analyzed for TPH and VOCs. TPHd and TPHo were detected in similar concentrations as compared to the other samples collected at the Site. VOCs and TPHg were not detected in these soil samples; however, the maximum TPH concentrations observed in groundwater were in the TPHg range.

Since TPHg has not been detected in soil in Citadel's June 2016 investigation, the presence of TBA in groundwater and that on-going investigations are anticipated for the upgradient gasoline station, an upgradient site may be the likely source of the observed groundwater impacts. (Figure 1).

Chromium concentrations were above 50 mg/kg in four samples collected during Citadel's June 2016 assessment; however, STLC/WET analysis was not performed. Citadel reviewed previous investigations/analyses conducted at the Site and found that STLC extractions were performed on five samples in 2011 with chromium concentrations ranging from 52 to 100 mg/kg. The maximum concentration of chromium in the extraction was 0.47 mg/L, which is below the STLC regulatory limits of 5 mg/L.

Based on the above findings and conclusions, Citadel respectfully requests closure of the USTs; conditional closure of soil with elevated lead and chromium concentrations; closure of groundwater concerns in the area of GW-5 due to upgradient contribution; and acceptance of the imported fill.

8.0 LIMITATIONS

This report has been prepared by Citadel Environmental Services, Inc. exclusively for the Client and their Authorized Representatives. The information contained herein pertains only to accessible soils identified at the referenced properties at the time of sampling in accordance with a mutually agreed upon scope of work. The findings and recommendations presented are based upon observations of present conditions, and may not necessarily indicate future conditions. The information contained herein may not be used, disclosed, or copied without written permission of the Client.

9.0 SIGNATURES

Report Prepared by:



T. Michael Pendergrass, PG 5685
Senior Project Manager



Report Reviewed and Approved by:

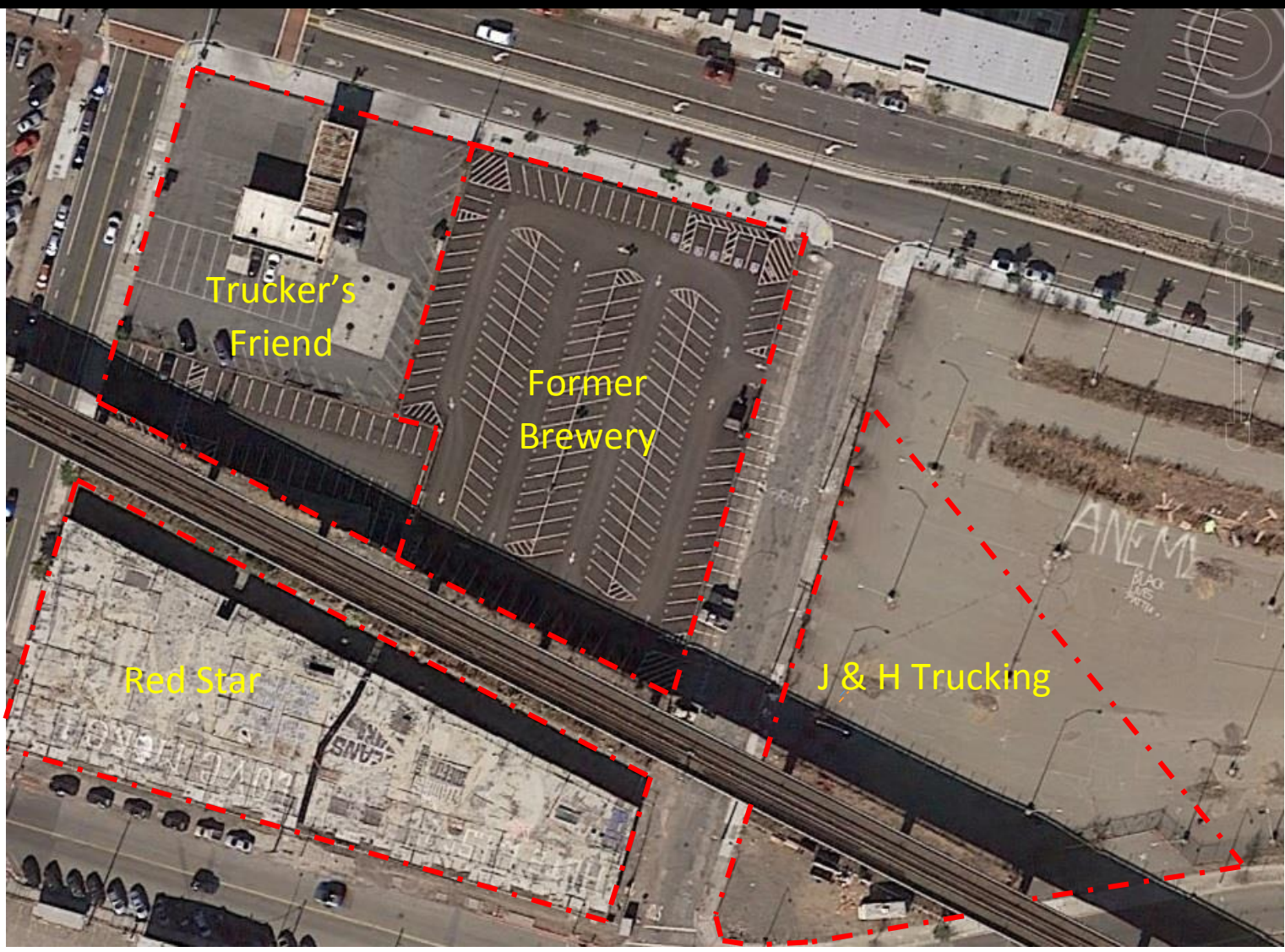


Mark Drollinger, M. Eng., CSP, CHMM, EIT
Director, Environmental Geology and Engineering



CITADEL
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Figures



= Approximate Property Boundaries



Scale bar = 100 feet



1396 East 5th Street,
Oakland, CA

Figure 1

PROJECT NO: 0849.1001.0

DATE: September 2016

Site Map Vicinity Map Showing Adjacent Properties



CITADEL
ENVIRONMENTAL SERVICES, INC.

Tables

Table 1. Petroleum Hydrocarbons, Oxygenates and Volatile Organic Compounds (VOCs) in Soil
Former Red Star Senior Living Apartments Development
Michaels Development
1396 Fith Street, Oakland, California

Boring ID	Sample Depth (feet)	Date Sampled	TPHg mg/kg	TPHd mg/kg	TPHo mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Total xylenes mg/kg	MTBE mg/kg	ETBE mg/kg	DIPE mg/kg	TAME mg/kg	TBA mg/kg	Isopropyl-benzene mg/kg	N-Propyl-benzene mg/kg	Styrene mg/kg	1,2,4-Trimethyl-benzene mg/kg	1,3,5-Trimethyl-benzene mg/kg	Comments
B-5	1	6/30/2016	ND<0.070	16	120	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Backfill
B-5	3	6/30/2016	ND<0.070	5.7	38	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Backfill
B-5	5	6/30/2016	ND<0.069	8.2	39	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Backfill
B-5	7	6/30/2016	ND<0.069	7.5	39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-7	1	6/30/2016	ND<0.069	9.9	54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Backfill
B-7	3	6/30/2016	ND<0.070	15	29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-7	5	6/30/2016	ND<0.069	ND<5.2	24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-8	1	6/30/2016	ND<0.070	18	83	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Backfill
B-8	3	6/30/2016	ND<0.069	28	310	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Backfill
B-10	1	6/30/2016	ND<0.070	13	61	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Backfill
B-10	3	6/30/2016	ND<0.070	ND<5.3	ND<5.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-10	5	6/30/2016	ND<0.068	ND<5.2	ND<5.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-11	1	6/30/2016	ND<0.069	11	47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Backfill
B-11	3	6/30/2016	ND<0.070	6.5	31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Backfill
B-11	5	6/30/2016	0.100	ND<2.5	7.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-11	7	6/30/2016	ND<0.070	ND<2.5	ND<2.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-12	1	6/30/2016	ND<0.070	5.7	46	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Backfill
B-12	3	6/30/2016	ND<0.070	ND<5.2	ND<5.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-12	5	6/30/2016	0.070 J	ND<11	ND<11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-12	7	6/30/2016	ND<0.070	ND<10	ND<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Native Soil
B-13	10	6/30/2016	ND<0.070	6.3 J	12	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Native Soil
B-13	15	6/30/2016	ND<0.070	28	130	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Native Soil
B-14	10	6/30/2016	ND<0.070	ND<5.3	ND<5.3	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Native Soil
B-14	15	6/30/2016	ND<0.070	ND<5.0	9.2 J	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Native Soil
B-15	10	6/30/2016	ND<0.069	ND<5.3	ND<5.3	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Native Soil
B-15	15	6/30/2016	ND<0.069	ND<5.0	ND<5.0	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Native Soil
SFRWQCB Tier 1 ESL			100	230	5,100	0.044	2.9	1.4	2.3	0.023	--	--	--	0.075	--	--	1.5	--	--	

Notes:
mg/kg = Milligrams per Kilogram
ND = Not detected
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015B
TPHo = Total petroleum hydrocarbons as oil by EPA Method 8015B
Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260B
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
J = denotes value between method detection limit and detection limit for reporting purposes
Detected concentrations are shown in bold type
Isopropylbenzene, N-Propylbenzene, Styrene, 1,2,4-Trimethylbenzene, and 1,3,5-Trimethylbenzene were detected in groundwater samples from these borings, but were Non-Detect in all soil samples
All other VOCs were Non-Detect
SFRWQCB Tier 1 ESL = San Francisco Regional Water Quality Control Board Tier 1 Environmental Screening Level
-- = No ESL Established
--- = Not Analyzed