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**WORK PLAN
FOR
ADDITIONAL
SITE CHARACTERIZATION**

*Former Mandela Trucking
1225 Mandela Parkway
Oakland, California*

ACHCSA Fuel Leak Case No. ROOOO041

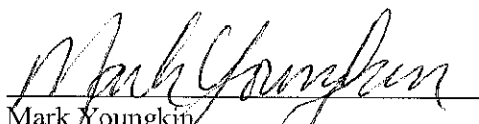
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January 21, 2006


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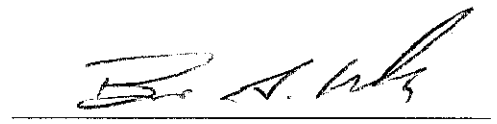

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TABLE OF CONTENTS

INTRODUCTION	1
Purpose.....	1
Scope.....	1
Site Location and Description.....	2
Site Geology and Hydrogeology.....	2
Environmental Site History	3
PLANNED WORK.....	7
Sequence	7
Pre-Field Activities	7
Additional Site Characterization Activities	8
Drilling and Soil Sampling Activities.....	9
Grab Groundwater Sampling Activities	10
Temporary Wellhead Elevation Survey Activities	10
Backfilling Activities.....	11
Soil & Groundwater Sample Analysis.....	11
Waste Management.....	11
AB2886 GeoTracker Uploading.....	12
Data Interpretation and Report Preparation	12
Schedule.....	12
Report Distribution	13
ATTACHMENTS	

INTRODUCTION

Purpose

This work plan was prepared in response to the most recent December 1, 2005 directive letter issued by the Alameda County Health Care Services Agency (ACHCSA) - Environmental Protection Division, requesting additional site characterization activities at the Former Mandela Trucking located at 1225 Mandela Parkway in Oakland, California. A copy of the December 1, 2005 ACHCSA directive letter is attached.

In general accordance with the technical comments presented in the aforementioned directive letter, the purpose of this work plan is to describe the procedures and methods used to conduct the following additional site characterization activities:

1) Complete implementation of the subject October 1998 work plan by removing the existing concrete island and associated subsurface product piping extending from the former underground storage tank (UST) cavity and conduct confirmation soil sampling beneath product piping, 2) collect additional soil samples and, if warranted, grab groundwater samples in the direct vicinity of the former diesel USTs to further assess the vertical extent of Total Petroleum Hydrocarbons as diesel in soil and groundwater, 3) define the vertical extent of residual source soil contamination (diesel and lead) beneath the fuel dispensers located at the east side of the property, and 4) assess the potential impact and extent of the hydrocarbon-affected groundwater in the direct vicinity of the former USTs and fuel dispensers. The work will be conducted in general accordance with the State Water Resources Control Board's Leaking Underground Fuel Tank (LUFT) manual and the TRI-Regional Board Staff Recommendation for Preliminary Evaluation and Investigation of Underground Tank Sites.

Scope

The general scope of work contained in this work plan includes the following:

- Pre-field work activities and permitting
- Direct push soil boring and sampling activities
- Direct push hydropunch boring and sampling activities
- Excavation, removal, and sampling of subsurface product piping and fuel dispenser island
- Sample analysis
- Temporary wellhead elevation survey (gradient determination)
- Backfilling activities
- Waste management
- GeoTracker AB2886 Analytical Uploading
- Data interpretation and report preparation and submittal.

Site Location and Description

The subject property is located at 1225 Mandela Parkway, at southwest corner of the intersection of Mandela Parkway (former Cypress Street) and 13th Street in Oakland, California (Alameda County). The site lays approximately 0.54 mile (2,850 feet) south-southwest of West Grand Avenue Parkway and approximately 1.3 miles south-southeast of Interstate 80 and the San Francisco Bay. The general location of the site is shown on the attached Figure 1, *Site Location Map*.

Since 2003, the commercial property has been occupied by VA Transportation, Inc. and was formerly occupied by Mandela Trucking since approximately 1983 and Mackey Trucking since approximately 1963. According to the current property owner, an Arco or Union 76 Fuel Distribution and Service Station occupied the property prior to at least 1963. The site is approximately 12,100 square feet in lot area, with an 1,100 square feet office structure located centrally onsite and the remaining area utilized for truck parking. The majority of the ground surface is paved with asphalt, with small areas of concrete on the east and west sides of the building structure. A 25 feet x 25 feet canopy covers the existing concrete dispenser island on the east side of the property. The site, adjacent properties, and pertinent site structures are shown on the attached Figure 2, *Site Plan*.

The property is relatively flat lying, slightly sloping to the north-northwest with estimated grade elevation of approximately 16 feet above Mean Sea Level (MSL; Figure 1). The topographic relief in the immediate vicinity of the site is also generally directed toward the north-northwest, and then slopes to the west toward the Oakland Outer Harbor. Regional topographic relief appears to be directed toward the west-northwest, in the general direction of the San Francisco Bay. Two 4,000-gallon diesel USTs, one 4,000-gallon gasoline UST, and one 425-gallon waste oil UST were located beneath the subject property at the approximate locations shown in Figure 2. TEC Accutite Environmental Engineering (TEC) removed the diesel/gasoline USTs in July 1997 and GGTR removed the waste oil UST in June 1998. A brief discussion of the tank removal activities is presented herein.

Site Geology and Hydrogeology

According to a Geologic Map of the San Francisco-San Jose Quadrangle published by the California Department of Conservation, the site is directly underlain by Dune Sand and Quaternary Alluvium and possibly marine sandstone, greenstones, shale, conglomerates, and cherts of the Mesozoic Franciscan Complex (thicknesses not established). The map also indicates that the site lays approximately 4.5 miles southwest and 14.5 miles northeast, respectively, of the Hayward and San Andreas Fault Zones.

Native subsurface soil reported at the site during the UST removal and over-excavation activities between July 1997 and April 2000 was predominantly a sandy, gravelly clay to a total explored sample depth of 11 fbg. Groundwater was not encountered during the UST removal or over-excavation activities, however, based upon information provided by the State Water Resources Control Board's GeoTracker Database System, the depth to groundwater as measured in active monitor wells located at a site (former Shell Service

Station at northeast corner of 14th and Union Streets) approximately 0.25-mile (1,300 feet) east-northeast of the subject property, ranged between approximately 6 (February 1998) and 13 (September 1997) fbg. The associated site groundwater gradient flow measured during the more recent July 2005 monitoring period was directed both to the northeast and southeast (site grade elevation @ 18.5 feet MSL). The regional groundwater flow in the vicinity of the site is assumed to be towards the west-northwest, in the direction of the San Francisco Bay, and generally following the natural topographic relief of the area.

The site is in the East Bay Plain groundwater basin according to the San Francisco Bay Basin Water Quality Control Plan prepared by the California Regional Water Quality Control Board – Region 2 (CRWQCB, 1995). Groundwater in this basin is designated beneficial for municipal and domestic water supply and industrial process, service water, and agricultural water supply. The nearest surface water body is the Oakland Outer Harbor Inlet of the San Francisco Bay, approximately 1.1 miles west-northwest and presumably down-gradient of the site (Figure 1).

Environmental Site History

Gasoline UST Removal and Sampling – July 1997

On July 11, 1997, TEC Accutite Environmental Engineering (TEC) of South San Francisco, California, removed two 4,000-gallon diesel USTs (#'s 1 & 2) and one 4,000-gallon gasoline UST (#3) at the approximate locations shown in Figure 2. Associated subsurface product piping and fuel dispensers connecting to each former UST were not removed at this time. Discrete soil samples collected beneath the ends of each UST at approximately 11 feet below grade (fbg) contained non detectable and/or insignificant concentrations of TPH as gasoline, BTEX, and MTBE. Soil samples collected from the south ends of UST #'s 1 & 2 contained 110 and 320 milligrams per kilogram (mg/kg) TPH as diesel, respectively. The soil sample collected from the north end of UST #2 contained 1,300 mg/kg TPH as diesel. No groundwater was encountered during the removal or sampling activities. The approximate location of each excavation soil sample is shown in Figure 2 (Grey Scale).

TEC generated three stockpiles of excavated soil, which were left onsite following UST removal activities. The UST excavation was not backfilled at this time. The table on the following page presents the analytical results of soil samples collected from the UST removal event.

Gasoline/Diesel UST Removal Soil Sample Analytical Results – July 1996

Sample ID	Sample Depth (fbg)	TPH-G (mg/kg)	TPH-D (mg/kg)	B/T/E/X (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
D-1-N-11	11	--	ND	ND/ND/ND/0.015	0.014	--
D-1-S-11	11	--	110	ND/ND/ND/0.015	ND	--
D-2-N-11	11	--	1,300	ND/ND/ND/0.061	ND	--
D-2-S-11	11	--	320	ND/ND/ND/0.063	ND	--
G-1-N-11	11	0.680	--	0.005/0.013/0.005/0.021	0.035	350
G-1-S-11	11	ND	--	ND/ND/ND/ND	0.070	91

Based on review of the gasoline and diesel UST removal activities, the ACHCSA, in a letter dated January 3, 1997, requested the following additional activities at the site:

- 1) Excavation sidewalls on the north and south ends of Diesel UST #'s 1 and 2 be scraped and re-sampled for diesel-range hydrocarbon analysis,
- 2) Subsurface product piping and associated fuel dispensers be removed with confirmation soil sampling,
- 3) Existing tank excavation be backfilled with the gasoline UST stockpile soil and clean imported fill,
- 4) Stockpiled soil from diesel UST excavation be transported under uniform waste manifest and disposed at a State-licensed landfill facility
- 5) The inactive 425-gallon waste oil UST located west of the subject site building be removed and underlying soil be sampled for waste oil constituents.

On August 11, 1997, the ACHCSA, submitted an associated *Directive and Order Pursuant to Health & Safety Code Section 25299*. A copy of the ACHCSA's January 3 and August 11, 1997 letters is attached.

Gasoline/Diesel UST Excavation and Stockpile Sampling - June 1998

On June 17, 1998, as directed by the OFSA, GGTR collected five discrete soil samples from the four sidewalls (@ 9 fbg) and bottom (@ 10 fbg) of the gasoline/diesel UST cavity. GGTR also collected one four point composite sample from the three stockpiles of soil generated during the gasoline/diesel UST removal activities in July 1997. The approximate locations of each excavation soil sample are shown in Figure 2 (Grey Scale). No groundwater was encountered during the sampling activities.

The TPH as gasoline, BTEX, and MTBE concentrations measured in the excavation and stockpile composite sample were below the respective laboratory reporting limit (0.5 mg/kg for TPH-G, and ≤ 0.0101 mg/kg for BTEX and MTBE), except for insignificant detectable concentrations of TPH-G (2.0 mg/kg) and total xylenes (0.030 mg/kg) measured in the discrete sample collected from the east sidewall of the excavation. Results of the soil sampling activities were submitted to both the ACHCSA and OFSA. Additional details are presented in GGTR's July 9, 1998, letter report of *Gasoline Tank Soil Sampling and Analyses*.

Waste Oil UST Removal Sampling - June 1998

On June 17, 1998, under the direction of the OFSA, GGTR removed one inactive 425-gallon waste oil UST from the site at the approximate location shown in Figure 2. GGTR

collected one discrete soil sample from the bottom of the UST excavation @ 9 fbg and one four point composite sample from the soil stockpile. The table on the following page presents the analytical results of soil samples collected from the UST removal event.

Waste Oil UST Removal Soil Sample Analytical Results – June 1998

Sample ID	TPH-G (mg/kg)	TPH-D (mg/kg)	TEPH (mg/kg)	BTEX (mg/kg)	MTBE (mg/kg)	VOCs ¹ (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)	Ni (mg/kg)	Zn (mg/kg)
7519-C ²	ND	ND	70	ND/ND/0.008/0.03	ND	0.012 (1,2,4-TMB)	ND	37	33	40	430
7519-SP ²	180	780	5800	ND/0.09/0.15/1	ND	1.1 (1,2,4-TMB)	0.25	34	490 ³	26	390
LRL	0.5	1.0	50	≤0.010	0.005	≤0.250	1.0	1.0	1.0	1.0	1.0

Notes:

- ¹ = Highest reported VOC concentration shown
 - ² = Sample also analyzed for semi-volatile organic compounds by EPA Method 8270 (All Results ND, except for estimated 1.8 mg/kg butylbenzylphthalate in 7519-SP)
 - ³ = Sample also analyzed for STLC Lead (22 mg/l) and TCLP Lead (0.61 mg/l)
- LRL = Laboratory Reporting Limit

As requested by the OFSA, GGTR, in October 1998, transported the stockpiled soil under Uniform Hazardous Waste Manifest No. 98601044 to the Class I Chemical Waste Management disposal facility in Kettleman City, California. The excavation was backfilled with clean imported fill material and compacted, and repaved to restore original site conditions. Additional details are presented in GGTR's July 24, 1998, *Tank Closure Report*.

Work Plan - October 1998

On October 23, 1998, pursuant to the ACHCSA's August 1997 Directive and Order requirements, GGTR submitted their *Work Plan for Additional Work*, which was conditionally approved by the ACHCSA in their letter dated February 1, 1999. The proposed work including scraping of the diesel excavation sidewalls, subsurface product piping removal, soil disposal, confirmation soil sampling, and report preparation. A copy of the ACHCSA's February 1, 1999 approval letter is attached.

Limited Work Plan Implementation Activities – April 1999 & 2000

On April 22 and 23, 1999, GGTR over-excavated and removed the diesel-impacted soil from both the north and south sidewalls of the UST excavation, in general accordance with the October 1998 work plan. The approximate limits of the over-excavation areas are shown in Figure 2. Because the excavation remained open, rain and/or drainage water accumulated in the excavation, with the depth to the surface of the water measured at approximately 11 fbg. Two discrete confirmation soil samples (Sample ID's 7519D1-S & 7519D2-S) were collected from the south sidewall and one discrete sample (Sample ID 7519D2-N) was collected from the north sidewall, at approximately 11 fbg (water/soil interface). Soil samples were collected in relatively clean, undisturbed soil using a brass tube-lined remote core sampler, and collected north and south of the previous sample locations reported during the 1996 UST removal activities. GGTR collected one grab sample (Sample ID 7519) of the rain/drainage water within the excavation. Following removal of the three existing fuel dispensers, GGTR collected two additional samples

(Sample ID's 7519I-S & -N) beneath the north dispenser (1) and south dispensers (2), respectively, at approximately 2 fbg. Approximate locations of each sample are shown in Figure 2. GGTR was not authorized to backfill the excavation at this time, nor did GGTR remove the associated subsurface piping extending between the former UST cavity and dispenser island. The tables shown below present the analytical results of soil and grab groundwater samples collected during the over-excavation at the site.

Over-Excavation Soil Sample Analytical Results – April 1999

Sample ID	Sample Depth (fbg)	TPH-G (mg/kg)	TPH-D (mg/kg)	B/T/E/X (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
7519D1-S	11	--	ND	ND/ND/ND/ND	ND	4
7519D2-S	11	--	ND	ND/ND/ND/ND	ND	4
7519D2-N	11	--	ND	ND/ND/ND/ND	ND	7
7519I-S	2	85 ¹	12,000 ²	ND/0.074/1.4/5.0	ND	6
7519I-N	2	1.8 ¹	960 ²	ND/0.009/ND/ND	ND	100
7519-SP (Stockpile)	NA	--	8 ²	ND/ND/ND/ND	ND	120
Laboratory Reporting Limit		0.5	1.0	<0.010	0.005	1.0
CRWQCB Tier 1 ESL		100/400	1000/1000	0.044/0.38, 2.9/9.3, 3.3/32, 2.3/11	0.023/5.6	750/750

Notes:

¹ = Does not match typical gasoline pattern on associated chromatogram

² = Matches fuel oil hydrocarbon pattern

CRWQCB Tier 1 ESL = California Regional Water Quality Control Board's February 2005 Tier 1 Environmental Screening Level; for commercial land use soil >10 fbg where groundwater *is / is not* a potential drinking water resource

Over-Excavation Groundwater Sample Analytical Results – April 1999

Sample ID	Sample Depth (fbg)	TPH-G (ug/l)	TPH-D (ug/l)	B/T/E/X (ug/l)	MTBE (ug/l)	Total Lead (ug/l)
7519-B-W	11	70	ND	ND/1/ND/1	ND	28
Laboratory Reporting Limit		50	50	<1.0	0.5	50
CRWQCB Tier 1 ESL		100/500	100/640	1/46, 40/130, 30/290, 20/100	5/1,800	2.5/2.5

Notes:

CRWQCB Tier 1 ESL = California Regional Water Quality Control Board's February 2005 Tier 1 Environmental Screening Level; where groundwater *is / is not* a potential drinking water resource (commercial land use)

On March 30, 2000, GGTR collected a four point composite sample (Sample ID 7519-SP DISP) of the stockpile generated during the over-excavation of the diesel-impacted soil. The TPH-G, TPH-D, BTEX, and MTBE concentrations measured in the composite sample were below the respective laboratory reporting limit. The composite sample contained 140 mg/kg total lead, the results of which were submitted to both the ACHCSA and OFSA for review of use as appropriate UST excavation backfill material. The ACHCSA, in a letter dated April 4, 2000, approved the soil as acceptable backfill material based upon conditional approval by the OFSA. On April 6, 2000, the OFSA verbally approved GGTR's request. A copy of the ACHCSA's April 4, 2000 approval letter is attached.

Between April 7 and 12, 2000, GGTR returned to the site and backfilled the excavation with stockpiled soil and clean, imported Class II base rock, and compacted the backfill material in 2-foot lifts. GGTR then resurfaced the excavation with asphalt pavement according to the owner's specifications and cleaned the site to its original condition.

As requested by the ACHCSA, GGTR, on August 1, 2005, submitted their *UST Removal and Remedial Investigation Summary Report*, discussing the environmental site activities presented above. The ACHCSA, in a letter dated December 1, 2005, requested a work plan for soil and water investigation, addressing the additional site/source characterization activities to be conducted at the subject site. The work plan is presented in the following sections.

PLANNED WORK

Sequence

The following is the planned sequence of activities at the site:

- Notify all representative parties of scheduled field activities
- Obtain Drilling Permit from Alameda County Public Works Agency
- Obtain site Excavation Permit from City of Oakland Department of Public Works Engineering for all work conducted in public right of way
- Conduct site markout and notify Underground Service Alert for utility clearance
- Conduct GeoProbe soil and groundwater sampling to delineate vertical extent of source soil in direct vicinity of former diesel USTs and fuel dispensers
- Conduct Hydropunch groundwater sampling to assess potential impact and lateral extent of contaminant groundwater plume in the vicinity of the site, and establish site groundwater gradient
- Backfill borings with neat Portland cement
- Conduct excavation, removal, and confirmation soil sampling of subsurface product piping and fuel dispenser island
- Backfill excavation with appropriate fill material
- Submit all samples to State-licensed environmental laboratory for analysis
- Profile, transport, and dispose of all impacted solid/liquid waste
- Interpret all field and analytical data and prepare summary report

Pre-Field Activities

GGTR will obtain a drilling permit from of the County of Alameda Public Works Agency and an excavation permit from the City of Oakland Department of Engineering. GGTR will notify all property owners and tenants as well as the ACHCSA of all scheduled work activities. At least 72 hours before commencing field activities, GGTR will visit the site and outline the proposed work areas in white surface paint and subsequently notify

Underground Service Alert (USA) to locate and mark any subsurface utilities extending through the designated work areas. Also, GGTR will prepare a traffic control plan should partial or complete closure of the parking lane and/or sidewalk along the 13th Street frontage of the property be warranted.

Additional Site Characterization Activities

Proposed Boring Locations

Based on review of the findings of the historical site investigation activities discussed above, GGTR proposes drilling three (3) direct push soil borings and three (3) hydropunch borings in the direct vicinity of the former diesel USTs and fuel dispensers to further define the lateral and vertical extent of soil and potential groundwater contamination at the site. GGTR provides the following rationale for the proposed additional boring locations, which are shown in Figure 2.

GeoProbe Borings SB1-SB3, located adjacent to the west side of each former fuel dispenser (SB-1 & SB-2) and adjacent to the approximate north side of former diesel UST#2 (SB-3), will assess the vertical extent of soil and potential groundwater contamination reported during the UST removal and over-excavation activities. If warranted, results will be used to determine the approximate vertical limits of excavation during subsequent removal of the concrete dispenser island and underlying potentially impacted source soil. Discrete grab groundwater samples from each borehole will be also be utilized to assess groundwater quality at these locations. GeoProbe borings will be drilled to approximately 20 to 25 fbg and sampled in continuous intervals (discussed below).

Hydropunch Borings HB-1 to HB-3, located along the north property line and in the presumed up-gradient direction of the former fuel dispensers, will further assess the extent of potential groundwater contamination and determine an approximate site groundwater gradient. Hydropunch borings will be drilled to approximately 15 fbg and screened to just above the measured groundwater table level, prior to collecting a discrete grab groundwater sample (discussed below).

Subsurface Product Piping Removal & Sampling

As requested by the ACHCSA, GGTR proposes excavation and removal of the existing subsurface product piping extending between the former UST cavity and fuel dispensers. The approximate location of the subsurface piping (@ 60 lineal feet) is shown in Figure 2. GGTR will initially track the piping run to confirm its correct location and extent, subsequently sawcut and remove the overlying concrete/asphalt pavement, and excavate and remove the soil overlying the piping. GGTR will also remove the majority of the concrete dispenser island, allowing the concrete surrounding the existing canopy column supports to remain in place. As directed by the ACHCSA, prior to removal of the piping, GGTR will drain any residual product into a DOT-approved container positioned at the down-gradient end of each pipe. GGTR will then remove all piping from the trench excavation and transfer the piping to a flatbed truck lined with plastic sheeting. Beneath

all observed pipe joints and/or at a minimum of every 20 lineal feet, GGTR will collect a discrete soil sample approximately 2 feet below the elevation of the piping, using either a hand auger and/or brass tube-lined remote core sampler. Additional discrete samples may be warranted to assess the vertical extent of soil contamination. Proposed soil sample locations are shown in Figure 2.

Based on results of soil/groundwater samples collected in SB-1 & SB-2, additional excavation beneath the former dispenser island may be warranted to remove residual impacted soil. GGTR will collect discrete confirmation samples at locations directed by the ACHCSA.

Based on field screening of soil samples collected during field activities, additional samples and/or soil borings may be warranted to further delineate the extent of source contamination. The additionally proposed sample/boring locations will be reviewed and authorized by both the ACHCSA and responsible party prior to implementation.

Drilling and Soil Sampling Activities

GGTR will direct the subcontracted driller to initially hand auger each proposed soil boring location up to approximately 4 fbg to confirm clearance of any unmarked subsurface utilities. GGTR will drill each boring using a trailer-mounted, Geoprobe[®] direct push technology rig equipped with 1- and 2-inch-diameter, flush-threaded, dual-cased drill rods and split spoon sampler. A dual-cased rod assembly is recommended to minimize potential sidewall soil from cross contaminating deeper zone soil and/or groundwater in each borehole.

Each boring will be drilled to approximately 20 to 25 feet below grade, to assess potential contamination in unsaturated zone soil and in saturated zone soil to account for petroleum product possibly entrapped below the groundwater table. Soil samples will be collected in each boring using a butyrate plastic tube-lined remote core sampler (2 to 4 feet in length) beginning at approximately 5 fbg and continuing to the maximum proposed sample depth. Soil samples will be collected continuously, specifically at changes of lithology, at the soil/groundwater interface, and at areas showing obvious contamination.

At the anticipated drill depth, the inner drill rods will be extracted and the inner rod/split spoon sampler assembly will be re-advanced through the cased borehole to depth and subsequently pushed approximately 24 additional inches into relatively undisturbed soil. All soil samples retained for laboratory analysis will be sealed with Teflon and plastic end caps, appropriately labeled, and transferred to cooler chilled to approximately 4° Centigrade. Soil boring samples will also be screened using a Thermo[®] 580B Organic Vapor Analyzer (OVA) and described using the Unified Soil Classification System and Munsell Rock Color Chart.

Geoprobe[®] drilling will be conducted by a California-licensed Water Well Drilling Contractor (C57). Boreholes will be logged under the supervision of a Registered Civil

Engineer/Geologist. Hand auger soil cuttings generated during drilling activities will be stockpiled or transferred to a 55-gallon, D.O.T.-approved steel drum. GGTR will collect a four point composite soil sample from the drummed or stockpiled soil cuttings for analysis and waste disposal characterization. All down hole drilling and sampling equipment will be decontaminated between each boring location using an Alconox[®] solution and double rinsed with potable water. Equipment wash and rinse water will be transferred directly to a separate 55-gallon drum. All drilling and sampling activities will be conducted under the direct supervision of a representative of the ACHCSA.

Grab Groundwater Sampling Activities

Immediately following soil sampling activities in **SB-1 to SB-3**, and in Hydropunch Borings **HB-1 to HB-3**, GGTR will then periodically monitor and record the depth to water in the cased borehole and allow sufficient time for stabilization. Based upon observed subsurface lithology and if the borehole appears to have adequate groundwater recharge capability, GGTR will advance 0.75-inch-diameter, factory-sealed, screened PVC casing directly through the cased borehole to the approximate total depth of each borehole.

The casing will be screened between the soil/groundwater interface depth and the maximum borehole depth, unless otherwise specified by the ACHCSA. The outer drill rod assembly will then be extracted an equivalent length to the top of the well screen, exposing the screened portion of the temporary well to the surrounding soil strata, and a grab groundwater sample will be collected using a clean, stainless steel bailer. If a sufficient volume of groundwater is present, GGTR will initially purge approximately 0.25 gallon prior to sampling.

GGTR will carefully drain the volatile groundwater sample directly into laboratory-cleaned, 40-milliliter volatile organic analysis (VOA) vials. A specialized drainage tip will be used to prevent loss of any volatile constituents during sample transfer. GGTR will seal each sample container with a threaded cap and invert the VOA vials to insure no headspace or entrapped air bubbles are present. Groundwater samples analyzed for non volatile analysis, will be transferred to laboratory-supplied amber glass or polyethylene bottles.

Temporary Wellhead Elevation Survey Activities

Approximately 48 hours following drilling activities, GGTR will return to the site and perform temporary wellhead elevation survey activities. GGTR will initially monitor and record the depth to water and presence of free product using an electronic water level indicator smeared with product/water indicator pastes. GGTR will then survey the top of casing and associated grade elevation of each temporary piezometer well (hydropunch borings) to the nearest 0.01 foot. Elevations will be measured relative to a local benchmark with known elevation (Mean Sea Level) or arbitrary datum point using an assumed elevation. GGTR will then calculate (by triangulation) the approximate groundwater gradient and flow direction across the site.

Backfilling Activities

Immediately following grab groundwater sampling and surveying activities in all soil and hydropunch borings, GGTR and/or the subcontracted driller will extract all temporary well casing and drill tubes from each borehole and tremie grout with neat Portland cement up to approximately 0.5 fbg. All trenches will be backfilled with clean overburden soil and imported fill material and subsequently compacted. The balance of each borehole and trench excavation will be backfilled with appropriate surface material to restore original site conditions.

Soil & Groundwater Sample Analysis

A Chain-of-Custody form will be initiated by GGTR personnel at the time of sampling and will accompany the soil and groundwater samples to a State-certified environmental laboratory using California Department of Health Services approved analytical methods.

All unsaturated zone soil and grab groundwater samples will be analyzed for:

- Total Petroleum Hydrocarbons as Diesel (TPH-D; EPA 8015M) w/ Silica Gel Cleanup (EPA 3630)
- Total Petroleum Hydrocarbons as Gasoline (TPH-G; EPA 8260)
- Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX; EPA 8260)
- Fuel Oxygenates by EPA Method 8260, including Methyl Tertiary-Butyl Ether (MTBE) and Ethylene Dibromide and Ethylene Dichloride (EDB & EDC; EPA 8260)

All grab groundwater samples will additionally be analyzed for dissolved lead (EPA 6010B/ICAP; pre-filtered prior to acidification and analysis).

The stockpile composite soil sample will be analyzed for:

- TPH-D
- TPH-G (EPA Method 8020)
- BTEX & MTBE (EPA Method 8020)
- Total Lead (EPA Method 6010B/ICAP)

Waste Management

Hydrocarbon-affected soil generated during the additional trenching and soil boring activities will be either drummed and/or stockpiled and then temporarily stored onsite in a secure area. Pending receipt of the composite stockpile soil sample analysis, GGTR will subsequently profile and transport the waste to an appropriate licensed disposal facility under uniform waste manifest.

Equipment wash and rinse water generated from the decontamination of soil boring and sampling equipment will be transferred to a 55-gallon, D.O.T.-approved steel drum, labeled, and stored onsite. The liquid waste will be profiled for disposal/recycling under

uniform waste manifest following receipt of the laboratory results of soil boring grab groundwater sample analysis.

AB2886 GeoTracker Uploading

Pursuant to State Assembly Bill 2886, Fall 2000, all soil/groundwater sample analytical data, wellhead elevation and coordinate data, and well fluid-level data collected at the site since September 2001 are required to be uploaded in Electronic Deliverable Format to the State Water Resources Control Board's GeoTracker Database System. Also, geologic boring logs and well construction logs of each existing and newly-installed boring/monitor well (if warranted), as well as a copy of all letters, work plans, and reports prepared during current and future phases of this site investigation, are required to be uploaded in PDF format to the State GeoTracker Database.

Data Interpretation and Report Preparation

Following the completion of all field work, GGTR will review all field and analytical data and prepare a technical report, discussing the activities and findings of the investigation and present conclusions and recommendations. The report will be submitted to the ACHCSA for regulatory review.

Schedule

GGTR anticipates beginning the additional field activities within two to three weeks of receiving client authorization to proceed and based upon scheduling and driller availability. The aforementioned report should be available within 60 days following receipt of all soil and groundwater analytical results.

Report Distribution

All reports that are prepared during the continuing work on this project will be sent to:

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Attention: Mr. Don Hwang (1 PDF Copy Via ACHCSA FTP & GeoTracker)

Mr. Thomas O. Gillis
1153 Copper Verde Lane
Modesto, California 95355 (2 Hard Copies w/ CD, Bound)

Clarence & Virginia Glasper
P.O. Box 245160
Sacramento, California 95824 (1 Hard Copy w/ CD, Bound)

ATTACHMENTS

FIGURES
REGULATORY CORRESPONDENCE

37°49'52", 122°18'35"

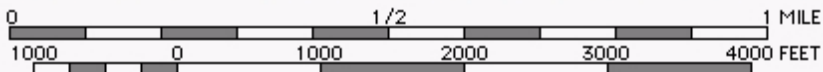
37°49'52", 122°16'29"



37°48'11", 122°18'35" NAD83

37°48'11", 122°16'29"

TN MN
15 1/2°

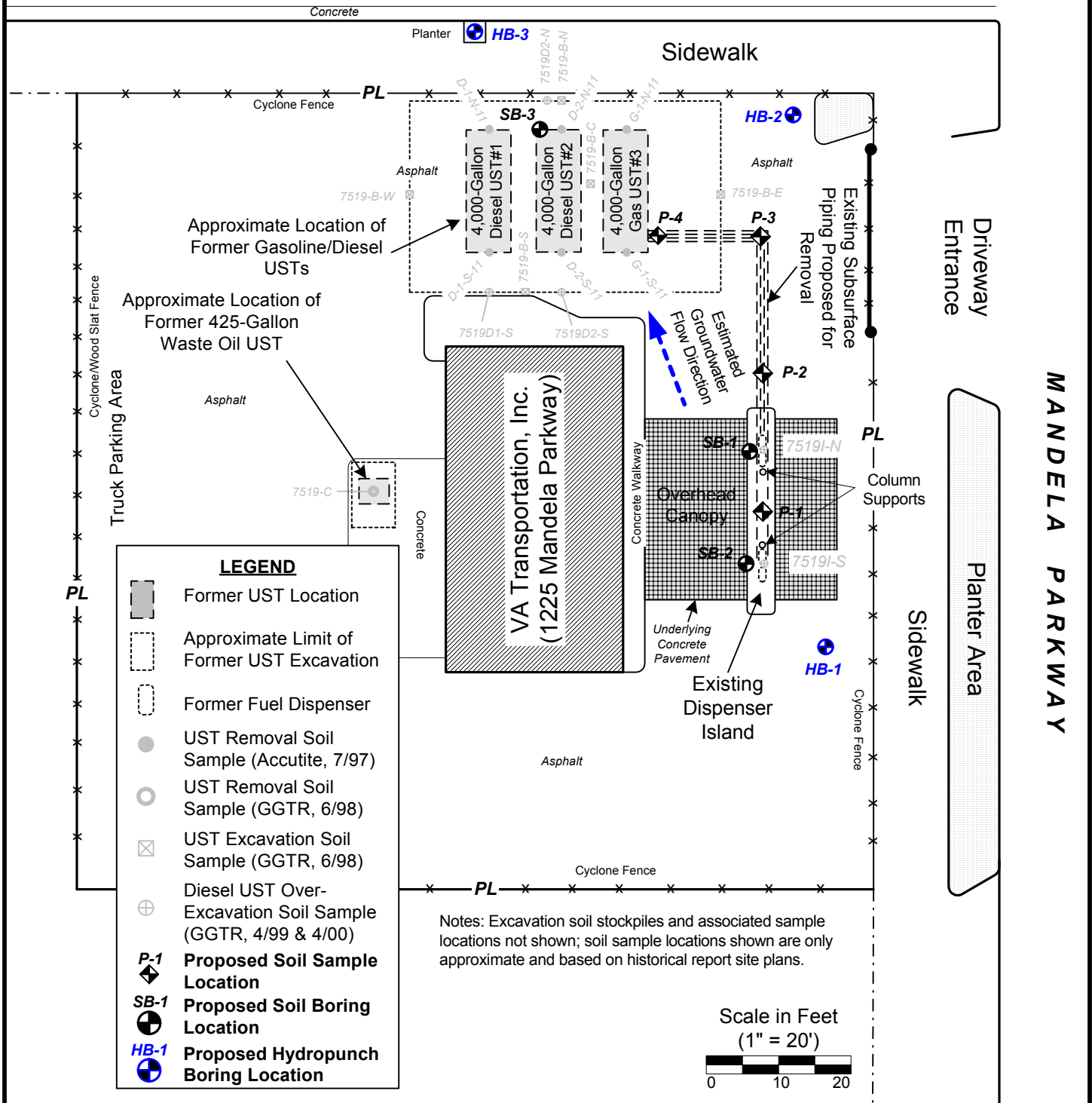
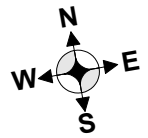


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GOLDEN GATE TANK REMOVAL, I NC.
 255 Shipley Str eet
 San Francisco, CA 941 07
 Ph (415) 512-1555 Fx (415) 512- 0984

SITE LOCATION M AP
 1225 Mandela Parkw ay
 Oakland, Calif ornia

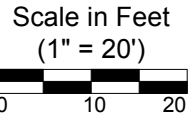
13TH STREET



LEGEND

- Former UST Location
- Approximate Limit of Former UST Excavation
- Former Fuel Dispenser
- UST Removal Soil Sample (Accutite, 7/97)
- UST Removal Soil Sample (GGTR, 6/98)
- UST Excavation Soil Sample (GGTR, 6/98)
- Diesel UST Over-Excavation Soil Sample (GGTR, 4/99 & 4/00)
- P-1** Proposed Soil Sample Location
- SB-1** Proposed Soil Boring Location
- HB-1** Proposed Hydropunch Boring Location

Notes: Excavation soil stockpiles and associated sample locations not shown; soil sample locations shown are only approximate and based on historical report site plans.



GOLDEN GATE TANK REMOVAL, INC.

255 Shipley Street
San Francisco, CA 94107
Ph (415) 512-1555 Fx (415) 512-0964

SITE PLAN

1225 Mandela Parkway
Oakland, California

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

December 1, 2005

Thomas O. Gillis
1153 Copper Verde Lane
Modesto, CA 95355

Clarence & Virginia Glasper
PO Box 245160
Sacramento, CA 95824-5160

Dear Mr. Gillis, Mr. & Mrs. Glasper:

Subject: Fuel Leak Case No. ROOOO041, Mandela Trucking,
1225 Mandela Parkway, Oakland, CA

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the subject site including "UST Removal and Remedial Investigation Summary Report" dated August 1, 2005 prepared by Golden Gate Tank Removal, Inc. (GGTR). The report contains the results of the partial implementation of the "Work Plan for Additional Work" dated October 23, 1998 and recommendations for more work. The fuel tanks excavation was overexcavated and sidewall soil samples were collected at the soil/water interface (rain and/or drainage water accumulated in the excavation). We request that you address the following technical comments, perform the proposed work, and send us the reports requested below.

TECHNICAL COMMENTS

- 1) Total Petroleum Hydrocarbons-Diesel (TPH-D) analyses not performed after overexcavation of fuel tanks pit: 2 of the 3 tanks that were removed contained diesel. The initial soil sampling after the tanks were removed found up to 1,300 milligrams/kilogram (mg/kg) TPH-D. Therefore, additional TPH-D analyses are requested in the fuel tanks pit. In the Work Plan requested below, please include TPH-D analyses for fuel tanks pit sampling.
- 2) Source characterization - The results above and up to 12,000 mg/kg TPH-D was detected beneath the dispensers indicate that respectively, the soil in the fuel tanks pit and beneath the dispensers have not been vertically delineated. We request that you propose additional borings to delineate the vertical extent of soil contamination in these source areas in the Work Plan requested below.
- 3) Groundwater assessment - The proposal to drill at least two hydropunch borings at the site to further assess the potential impact of petroleum hydrocarbons is denied. At least three borings are necessary to

Mr. Gillis
Mr. & Mrs. Glasper
December 1, 2005
Page 2

determine hydraulic gradient. Please propose at least three borings in the Work Plan requested below. Also, on future site plans, cumulative historical hydraulic gradients with magnitude and direction will be requested.

- 4) Site plan not to scale - Please draw site plans to scale.
- 5) Proposed locations for additional soil sampling beneath product piping – Approved, however, since the site plan was not drawn to scale, the minimum of a sample per 20 ft. couldn't be verified.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Don Hwang), according to the following schedule:

- January 21, 2006 - Work Plan for Soil and Water Investigation
- 60 days after Work Plan approval - Soil and Water Investigation Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from USTs have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

Mr. Gillis
Mr. & Mrs. Glasper
December 1, 2005
Page 3

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

If you have any questions, please call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist
Local Oversight Program

c: Brent A. Wheeler, Golden Gate Tank Removal, Inc., 255 Shipley Street,
San Francisco, Ca. 94107
Donna Drogos
File