



San Francisco Bay Regional Water Quality Control Board

March 6, 2018 File No. 01S0762 and 01-2279 (MYM)

Mr. Stuart Depper 1380 East Avenue, Suite 128 Chico, CA 95979

Sent via email: CleanTech@yahoo.com

Sent via U.S. Mail Former Glovatorium, Inc. 3820 Manila Ave Oakland, CA 94609 Mr. Eric Depper
4623 Welding Way
Chico, CA 95979
Sent via email:
TurnoutServices@gmail.com

SUBJECT: Transmittal of Revised Tentative Order – Site Cleanup Requirements for Former Glovatorium, Inc., 3820 Manila Avenue, Oakland, Alameda County

Dear Messrs. Stuart and Eric Depper:

Attached is a Revised Tentative Order for the subject Site. This Order names Mr. Stuart Depper, Mr. Eric Depper, and the former Glovatorium, Inc. as the Dischargers for petroleum hydrocarbons and chlorinated solvent releases to soil, soil vapor, and groundwater, and requires further investigation and cleanup of these releases. The Revised Tentative Order is annotated to describe changes made to the Tentative Order issued on September 7, 2017. Below is a summary of those changes:

- On page 14, delete Finding No. 19
- On page 15, switch Tasks 1 and 2 and revise both compliance dates
- On page 15 and 16, create new Tasks 3a and 3b for offsite vapor intrusion investigation
- On page 16, renumber Task 4a and 4b (now Tasks 5a and 5b) and include new compliance dates
- On pages 16-18, renumber remaining Tasks

Any written comments must be submitted to the Regional Water Board Offices by March 9, 2018. Written comments submitted after this date will not be considered by the Regional Water Board. Following the comment period, Regional Water Board staff will consider comments received. Barring significant comments, the Order will be issued administratively by the Executive Officer.

File No.: 01S0762 Page 2 of 2

If you have any questions, please contact Mr. Martin Musonge of my staff at (510) 622-2396 or e-mail to Martin.Musonge@waterboards.ca.gov.

Sincerely,

Bruce H. Wolfe Executive Officer

Attachments: Revised Tentative Order, Tentative Order, and Site Maps **Copy sent via email with attachments:**

City of Oakland

Attn.: Mr. Miguel Trujillo

Email: MTrujillo@Oaklandnet.com

Alameda County Environmental Health

Services

Attn.: Ms. Dilan Roe

Email: Dilan.Roe@acgov.org

State Water Resources Control Board Underground Storage Tank Cleanup Fund

Email:

USTCleanupFund@waterboards.ca.gov

Counsel of Stuart and Eric Depper

Downey Brand LLP

Attn.: Mr. Donald Sobelman

Email: DSobelman@downeybrand.com

Counsel of Stuart and Eric Depper

Downey Brand LLP

Attn.: Mr. Christopher Rendall-Jackson Email: Crendall-Jackson@downeybrand.com Counsel for Mr. Gregory Bloom/Bloom

Properties

Wack & Wick, LLP Attn.: Mr. Peter Ton, Esq.

Email: PTon@ww-envlaw.com

Mr. Steven Kramer 3820 Manila Avenue Oakland, CA 94609

Email: Huk66@sbcglobal.net

Roux Associates, Inc. Kenneth Kievit

KKievit@rouxinc.com

Counsel for Steven Depper Musick, Peeler & Garrett LLP

Attn.: Mr. Ryan Hiete

Email: R.Hiete@MPGLAW.com

Consultant for Earl Thompson Jr.

Environmental Guidance Attn.: Mr. Tim Becker

Email: TBecker@envguidance.com

Counsel for Earl Thompson, Jr.

Archer Morris

Attn.: Mr. Peter McGaw

Email: PMcGaw@archernorris.com

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

REVISED TENTATIVE ORDER

ADOPTION OF INITIAL SITE CLEANUP REQUIREMENTS for:

STUART DEPPER, ERIC DEPPER, AND GLOVATORIUM, INC.

For the properties with the following Alameda County Assessor Parcel Numbers:

APN: 012-0982-016 APN: 012-0982-010

OAKLAND, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter "Regional Water Board"), finds that:

1. **Site Location:** The Glovatorium (Site) is an approximately 0.45-acre property that contains two commercial parcels. Because of ambiguity over which street addresses apply to which parcels, the Site is defined by parcel numbers. The parcels are described as APN: 012-0982-016 and APN: 012-0982-010, collectively referred to herein as the Site. The Site is located between Manila Avenue and Broadway Street, near the intersection of 38th Street in Oakland (see Figure 1, attached). Surrounding properties are primarily commercial and residential.

2. Site History:

Property Ownership

Robert Depper and his wife, Martha, purchased the Site in 1968. Robert Depper operated the Glovatorium business from 1968 to 1992. Starting in 1982, the Site was owned and operated by Robert Depper as a wholesale dry cleaning plant named Glovatorium, Inc.

In 1996, Robert Depper organized the "Robert Depper Trust" (Trust) and named Martha Depper Trustee and his two sons Stuart Depper and Eric Depper as beneficiaries.

Upon the deaths of Robert and Martha Depper, ownership of the Site transferred to their sons in 2011, and they are the current co-owners of the Site. Stuart Depper and Eric Depper each acquired 49 percent. Ownership of the remaining 2 percent is the subject of ongoing litigation among the heirs.

Operations and Source of Contamination

Six underground storage tanks (USTs) at the Site were used to store Stoddard solvent, fuel oil, and possibly waste oil. The USTs were closed in place in 1997 (Re-evaluation of Preferential Pathways, SOMA Environmental Engineering, Inc. [SOMA Environmental], Nov. 3, 2005, at p. 8). The volumes of the six USTs ranged from 800 gallons to 5,000

gallons (Letter to Stuart Depper, HK2, Inc. /SEMCO [Aug. 1, 1997], p. 1). The approximate locations of the USTs closed in place at the Site are shown in Attachment 2. According to an August 30, 2016 letter from the Dischargers' consultant, Franklin Goldman of Environmental and Hydrogeological Consulting, dry cleaning operations at the Site used Stoddard solvent beginning in 1968 and used perchloroethylene (also known as tetrachloroethylene, PCE, or PERC) from the mid-1980s through 1996 (Letter to Regional Water Board, Franklin Goldman [August 30, 2016], p. 3).

A release occurred at the Site in or before 1990. During a fuel tank and piping inspection at the Site by Petrotek (Glovatorium's contractor) on May 22, 1990, at least one UST was found to be functioning improperly, and a Glovatorium representative provided information that pumping issues from the tanks began in October 1989 (Letter to Eric Depper, Petrotek [May 31, 1990]).

On October 15, 1990, soil and liquid samples were collected at the Site as part of an Oakland Police Department search warrant (Letter to Robert Depper, Alameda County Health Care Services Agency [Alameda County] [January 8, 1991], p.1). Alameda County communicated sampling results to Robert Depper in a January 8, 1991 letter that identified a release of petroleum and Stoddard solvent and determined that "there are clearly leaks or holes (or both) in the underground tank cluster under the floor of the building" (previously referenced document, p. 2). Leak testing of the USTs in 1997 confirmed that there were holes in two of the tanks (Letter to Stuart Depper, HK2, Inc. /SEMCO [August 1, 1997] p. 3).

Operational practices of the dry cleaning machines were also responsible for releases from the Site. The dry cleaning machines were very old and never upgraded during operations at Glovatorium. Former Glovatorium employees have reported that cleaning fluids and wastewater containing dry cleaning fluids were routinely allowed to flow into the sanitary sewer system through floor drains at the Site (Sentencing Memorandum, Alameda County District Attorney's Office [October 6, 1995], p. 7). EBMUD issued a wastewater discharge permit to the Glovatorium, effective March 21, 1992, that prohibited the discharge of dry cleaning waste and required floor and sewer drains previously used to dispose of waste to be sealed in a timely manner and hazardous waste was improperly stored and disposed of at the Site (Sentencing Memorandum, Alameda County District Attorney's Office [October 6, 1995], p. 7).

In 1993, the following constituents of concern were documented in soil and groundwater beneath the Site: petroleum constituents (including benzene, toluene, ethylbenzene, xylenes, Total Petroleum Hydrocarbons-Stoddard solvents (TPH-ss), TPH-diesel, and TPH-gasoline) and chlorinated volatile organic compounds including tetrachloroethene (PCE), and trichloroethene (TCE).

Alameda County Oversight

Alameda County was the lead regulatory agency under the local oversight program from 1989 until 2012. Alameda County inspected the Site in 1989 and issued a notice of violation identifying violations of California Code of Regulations Titles 19, 22, and 23 (Letter to Stuart Depper, Alameda [July 10, 1989]). This was the first in a series of Site inspections that occurred from 1989 through 1994.

Inspectors communicated violations found during the inspections to Stuart and Robert Depper. These violations were related to the improper handling, storage, disposal of hazardous materials, as well as insufficient monitoring and permitting of USTs at the Site (Letters to Stuart Depper, Alameda County [July 10, 1989; May 2, 1990; August 20, 1990; and September 23, 1994]; Letter to Robert Depper, Alameda County [January 8, 1991]).

In 1995, as a result of investigations that took place from 1989 through 1994, Robert Depper pled no contest to charges under the Health and Safety Code for illegally disposing hazardous waste by allowing USTs to leak and disposing of hazardous waste in a dumpster (Sentencing Memorandum, Alameda County District Attorney's Office [October 6, 1995]). Stuart Depper pled no contest to a felony charge under Health and Safety Code for illegally disposing of hazardous waste by allowing USTs to leak (previously referenced document, p.8). In the sentencing Memorandum dated October 6, 1995, Deputy District Attorney Lawrence Blazer cited the following aggravating factors to show that the violations were unusually egregious: (1) the persistent nature of the violations, after repeated warnings; (2) the fact that some of the violations continued to that day; (3) the fact that the defendants, particularly Stuart, had lied to environmental regulators or avoided responsibility; and (4) the extraordinarily hostile attitude of the defendants toward regulators (previously referenced document, p.11)

In 1997, in accordance with an April 28, 1997 Order for Tank Closure and Preliminary Investigation from Alameda County Superior Court, the Site's six USTs and associated piping systems were backfilled with cement-sand slurry or pea gravel and then closed inplace (Order for Tank Closure and Preliminary Investigation, Alameda County District Attorney's Office [April 28, 1997]; Letter to Stuart Depper; HK2, Inc./SEMCO [August 1, 1997] p. 2). Four of the closed tanks are located inside a building at the Site, and two are located under the sidewalk on 38th Street.

In 1998 through 2001, GeoSolve, LLC, LFR Levine-Fricke, and SOMA Environmental Engineering, Inc. (Contractors for Glovatorium) conducted remedial investigations at the Site (Second Phase Subsurface Investigation Report of Hydrocarbons, GeoSolve, LLC [October13, 1998]; Results of Utility Survey and Work Plan for Soil and Grab Groundwater Investigation, LFR Levine-Fricke [May 6, 1999]; Workplan to Conduct Additional Investigation at the Former Glovatorium, SOMA Environmental [June 15, 2001]). Investigation activities included a groundwater monitoring and sampling program.

On September 30, 2004, Stuart Depper submitted the first request for Site closure (Human Health Risk Assessment and Request for Site Closure at the Former Glovatorium Site, SOMA Environmental [September 30, 2004]). Alameda County rejected the closure request because, contrary to SOMA Environmental assertions and evidence, (1) the VOC plumes did not appear to be shrinking, (2) well yield alone was insufficient to show that groundwater below the Site should not be classified as drinking water source, (3) groundwater modeling results were inconclusive, (4) the uncertainty analysis was insufficient, and (5) soil and groundwater remediation may be necessary at the Site (Letter to Stuart Depper, Alameda County [June 21, 2005] pp 3-4).

On November 3, 2005, SOMA Environmental Engineering, Contractor for the Dischargers, submitted a report concluding that "a 54-inch storm drain and main sanitary sewer line along Manila Avenue are among those structures that could act as preferential flow pathways" for transport of the discharge offsite. (Re-evaluation of Preferential Pathways, SOMA Environmental [Nov. 3, 2015], at p. 20).

From 2002 through 2012, remediation activities at the Site included (1) removal of free product from monitoring wells and (2) operation of a multi-phase extraction system to treat soil (vapor) and groundwater (First Semi-Annual 2012 Groundwater Monitoring and Interim Remedial Action Report, SOMA Environmental [May 1, 2012], at pp. 5-6). From September 2008 through April 2012, approximately 274,000 gallons of groundwater were treated and discharged into the EBMUD sewer system under permits from EBMUD (Second Semi-Annual 2012 Self-Monitoring Report, SOMA Environmental [Jan. 16, 2013], at p. 5).

During its operation, the multi-phase extraction system (MPE) removed approximately 8,110 pounds of volatile organic compounds (as Stoddard solvents) from Site groundwater (First Semi-Annual 2012 Groundwater Monitoring and Interim Remedial Action Report, SOMA Environmental [May 1, 2012], at p. 19). This treatment system has remained offline since April 6, 2012 (Second Semi-Annual 2012 Self-Monitoring Report, SOMA Environmental [Jan. 16, 2013], at p. 6).

SOMA submitted a *Workplan to Delineate Extent of Free Product and Conduct Soil Vapor Sampling* on January 26, 2011, and an addendum to the workplan on March 28, 2011, (collectively, the Workplan) to address increasing thickness of petroleum free product observed in well MPE-2 (from 0.24 feet in February 2010 to 2.44 feet in August 2010) and well MPE-3 (from 0.34 feet in February 2010 to 0.84 feet in August 2010). On April 27, 2011, Alameda County approved the Workplan, which included four tasks: 1) permit acquisition, health and safety plan preparation and subsurface utility clearance; (2) soil boring advancement; (3) soil vapor study; and (4) report preparation. The Workplan has not been implemented.

On September 19, 2011, through his consultant, Stuart Depper submitted a second request to close the Site (Letter to Alameda County, Franklin Goldman [Sept. 19, 2011]). Alameda County denied the request, stating, "Given the site conditions, it is clear that additional work is needed at this site and that a request for closure is not appropriate" (Letter to Stuart Depper, Alameda County [Nov. 16, 2011], at p. 1).

On November 18, 2011, Stuart Depper petitioned the State Water Resources Control Board (State Water Board) for UST site closure. On January 26, 2012, Alameda County responded to a State Water Board request for information, highlighting the work that still needed to be done at the Site, which included, among other findings, the need to conduct additional free product removal and soil vapor sampling, as well as the need to address the potential for rebound and the generation of daughter products (Letter to State Water Board, Alameda County [Jan. 26, 2012], at pp. 2-3). In this letter, Alameda County noted that, in its review of the Petition, it found "that the justifications presented lack technical merit and in several cases are misleading, incomplete, or erroneous!" and the Petition

Commented [MM1]: Deleted redundant inverted closed

demonstrates an inordinate degree of bias in its technical evaluations that is not commensurate with accepted industry practice" (previously referenced document at p. 1). Stuart Depper withdrew this petition for UST site closure in an April 20, 2013, letter to Ben Heninburg Heningburg of the State Water Board.

Regional Water Board Oversight

On May 31, 2012, Alameda County transferred the Glovatorium case to the Regional Water Board, which then began to actively regulate activities at the Site.

In 2012, free product at the Site was analyzed and determined to be predominately Stoddard solvent (a type of petroleum hydrocarbon) (Letter to Regional Water Board, Franklin J. Goldman [Dec. 27, 2012], at p. 1). Franklin Goldman continued monitoring groundwater wells at the Site from 2012 through March 2015, reporting that concentrations of chlorinated volatile organic compounds and petroleum hydrocarbons in groundwater were substantially above vapor risk levels and drinking water standards (Final Groundwater Monitoring Report of Hydrocarbons Related to the Underground Storage Tanks, Franklin Goldman [Mar. 20, 2015]).

On October 2, 2013, Franklin Goldman submitted a third Site closure request under the Low-Threat Underground Storage Tank Closure Policy (Letter to Regional Water Board, Franklin Goldman [October 2, 2013]). Regional Water Board staff did not respond to the case closure request within 60 days. On December 12, 2013, Stuart Depper filed a case closure petition requesting State Water Board Review.

Regional and State Water Board staff subsequently visited the Site on April 24, 2014, and met with Stuart Depper, Steven Depper (representing Martha Depper), and Franklin Goldman to discuss Site cleanup (Board Storm Water Screening Inspection Form, Regional Water Board [Apr. 24, 2014]).

On May 28, 2014, Regional Water Board staff issued a letter to Stuart Depper rejecting the third request for Site closure for reasons that included (1) a lack of data to substantiate that the petroleum and PCE groundwater contaminant plumes are stable or decreasing in areal extent, and (2) a lack of data to determine whether there has been a significant post-remediation rebound of petroleum and solvent compounds in groundwater. The May 28, 2014 letter also required Stuart Depper to submit a technical report pursuant to Water Code section 13267 to address impediments to case closure and to update the Site's Conceptual Site Model. The letter restated the need for four consecutive quarters of groundwater sampling and analysis to determine plume stability and evaluate rebound.

State Water Board staff reviewed the Regional Water Board staff decision to deny case closure, stating in its August 12, 2014 response, "requirements for case closure have not been met at this time and, therefore, closure of the UST case is not appropriate. Current Site conditions support a potential threat to human health, safety, and the environment. At this point in time, insufficient data are available to determine that corrective action ensures the protection of human health, safety, and the environment. Case closure is inappropriate at this time" (Letter to Stuart Depper, State Water Board [Aug. 12, 2014], at p. 4).

Commented [MM2]: Updated Spelling

On March 5, 2015, Regional Water Board Assistant Executive Officer Dyan Whyte sent a notice of violation to Stuart Depper because he failed to submit the technical report required in the May 28, 2014 letter.

On March 31, 2015, Franklin Goldman submitted a letter on behalf of the Dischargers containing a technical report and a fourth request for Site closure (Request for Closure, Update of Conceptual Site Model, and Technical Reporting to Substantiate Plume Stability and Regional Board Impediments to Closure Associated with the UST Investigation Area, Franklin Goldman [Mar. 31, 2015]). This communication referenced recent groundwater monitoring data, including the data for the prior three consecutive quarters. On May 7, 2015, Franklin Goldman submitted an annex to the March 31, 2015 communication that further discussed monitoring efforts and the Dischargers' request for Site closure (Annex to Technical Report dated March 31, 2015, Regarding the Former Glovatorium, Franklin Goldman [May 7, 2015]).

On May 28, 2015, Regional Water Board staff issued the Dischargers a tentative Cleanup and Abatement Order (tentative CAO) pursuant to Water Code section 13304. The tentative CAO summarized the Site's regulatory status and proposed cleanup requirements. Tentative CAO findings established the need to further characterize petroleum compounds and chlorinated solvents remaining in soil, soil vapor, and groundwater at the Site. The first two of nine tasks in the tentative CAO required completion of a conduit study to characterize pollutant migration and accumulation in subsurface utilities (Section C, Task 1) and a public participation plan for the remedial action and case closure process (Section C, Task 2). In a June 11, 2015 letter to the Regional Water Board, the Dischargers requested a 60-day extension to the original June 30, 2015, deadline for submitting comments on the tentative CAO. On July 17, 2015, the Regional Water Board Executive Officer approved the request, extending the deadline to August 31, 2015. The tentative CAO was not finalized, due to the significant time needed to address the Dischargers' comments concerning named parties (including parties at nearby upgradient parcels).

The Regional Water Board Executive Officer also issued the Dischargers a requirement for technical reports pursuant to Water Code section 13267 (13267 Order) on July 17, 2015. The 13267 Order required the Dischargers to complete the first two tasks in the tentative CAO, expediting the tasks prior to the preparation of a remedial action plan. Specifically, the 13267 Order required the Dischargers to submit a technical report documenting the completion of a conduit study (Task 1) and a public participation plan for the Site (Task 2) by August 31, 2015. The Dischargers failed to submit a complete conduit study and public participation plan for the Site. Regional Water Board staff issued two notices of violation informing the Dischargers of these violations and potential penalties and the Dischargers have yet to comply.

3. **Adjacent and Nearby Sites:** The Earl Thompson property (Regional Water Board case No. 01-2412) is a 0.2-acre site located at 316 38th Street, Oakland. This property is located cross-gradient and to the east of the Site. TPH-ss was stored and used for dry cleaning purposes at the Earl Thompson property, between 1911 through the 1970s. TPH-ss was stored in three USTs located along 38th Street. TPH-ss were also detected in soil and groundwater at this site. The USTs were closed in place in 2008 under Oakland Fire

Department oversight. The tanks were closed in place based on of the tanks' close proximity to high voltage lines that made removal impossible. These USTs are the only known potential source of hydrocarbon release from the Earl Thompson property. Soil and soil vapor are not yet fully characterized at the Earl Thompson property. Additional remedial investigation has been required at the Earl Thompson property.

Oakland Masonic owns the 3903/3901 Broadway property, which is located upgradient and northeast of the Site. American Red Cross leases the 3901 property from Oakland Masonic. The American Red Cross installed an aboveground storage (AST) diesel tank in 1999. The tank is located within a concrete berm and there has never been a reported release from the diesel AST. There is no evidence that Oakland Masonic has ever stored TPH-ss, chlorinated solvents. There is no evidence that this AST is responsible for contamination at the Site.

A Unocal Service Station at 3943 Broadway is located cross-gradient and approximately 150 feet north of the Site. This site (case No.: 01-1596) has confirmed releases of petroleum hydrocarbons and fuel oxygenates to soil and groundwater. It is currently an active case. There is insufficient evidence to determine whether fuel-related constituents from this gas station commingled with contamination at the Site.

4. Named Dischargers: Stuart Depper became an owner of the Site around March 2011, receiving 49 percent ownership share as part of a Settlement Agreement according to the second amendment of the Martha R. Depper Living Trust (Letter to Regional Water Board, Harris, Hamman & Glick [May 24, 2017]). Prior to ownership, Stuart Depper was an operator at the Site from approximately 1989 through 1995 (Letter to Regional Water Board, Franklin Goldman [August 30, 2016]). Stuart Depper is named as a discharger because he currently co-owns the Site property and operated the dry cleaning business at the Site which discharged cleaning solvents and has an ongoing discharge of pollutants. He has knowledge of the discharge and activities that caused the discharge, and has the legal ability to control the discharge.

Eric Depper became an owner of the Site around March 2011, receiving 49 percent ownership share as part of a Settlement Agreement according to the second amendment of the Martha R. Depper Living Trust (Letter to Regional Water Board, Harris, Hamman & Glick [May 24, 2017]). Eric Depper conducted dry cleaning operations at the Site prior to ownership. Eric Depper owned and operated Professional Industrial Services at the Site starting in 1993 and was a route truck driver for Glovatorium from 1989 through 1992 (Letter to Regional Water Board, Franklin Goldman [November 27, 2015]). Eric Depper is named as a discharger because he currently co-owns the Site property and operated a dry cleaning business at the Site which discharged cleaning solvents and has an ongoing discharge of pollutants. He has knowledge of the discharge and activities that caused the discharge, and has the legal ability to control the discharge.

Glovatorium, Inc., is a named discharger because it discharged pollutants to soil and groundwater at the Site.

Steven Depper (Robert Depper's third son) is not named a discharger because he was not deeded the Oakland properties by Robert Depper. There are also no records indicating

Steven Depper was an operator of the Site or that he was an owner of the Site. Between 1974 and 1988, Steven Depper was the general manager of the Glovatorium, Inc., but did not operate the Site.

Martha Depper and Robert Depper are not named as dischargers because they passed away in 2015 and 2001, respectively.

The Regional Water Board has required parties at adjacent and upgradient properties to submit site history reports to determine if past activities on these properties could have contributed to contamination found at the Site. Based on a review of these site history reports and other evidence, the Regional Water Board finds no substantial evidence that adjacent and upgradient properties contributed to contamination found at the Site.

If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the Site where it entered or could have entered waters of the state, Regional Water Board staff will consider adding those parties' names to this Order.

- 5. **Regulatory Status:** Regulatory oversight of the Site was transferred from Alameda County to the Regional Water Board on May 31, 2012. The Site is subject to a section 13267 order dated July 17, 2015, but is not subject to a section 13304 order.
- 6. **Site Hydrogeology:** The Site is located on the alluvial plain between the San Francisco Bay shoreline and the Oakland Hills. Surface sediments in the Site's vicinity consist of Holocene alluvial deposits representative of an alluvial fan depositional environment. These deposits consist of brown, medium-dense sand that tend to fines upward to sandy or silty clay. The pattern of stream channel deposition results in a three-dimensional network of coarse-grained sediments interspersed with finer-grained silts and clays. The individual units tend to be discontinuous lenses aligned parallel to the axis of the former stream flow direction or north-south of the Site. The sediments encountered in soil borings are predominantly fine to medium grained sand, coarse sand, gravel, silty clay, sandy clay, gravelly clay and clayey silt.
- 7. **Hydrology:** Groundwater at the Site is shallow, with average depths to groundwater varying seasonally between 4 and 14 feet below the ground surface, and flows through the Site from the northeast toward the southwest (Re-evaluation of Preferential Pathways, report by SOMA Environmental Engineering, Inc. (SOMA Environmental, November 2005). Subsurface utilities at the Site, including a storm drain culvert and a sanitary sewer pipeline (Attachment 2) have been identified as possible conduits (SOMA Environmental 2005) acting as preferential pathways for contaminants. The storm drain is a 54-inch, nominal diameter utility that passes through the Site from Manila Avenue to the west to 38th Street to the south; the top of the storm drain ranges in depth from approximately 8.5 to 13.2 feet below ground surface. The sanitary sewer pipeline is a 10-inch, nominal diameter utility that connects floor drains at the Site to the main sewer pipeline on Manila Avenue. The sanitary sewer line at the Site is located at depths between approximately 2 to 5 feet below ground surface.

The nearest surface water body downgradient of the Site is Lake Merritt. Lake Merritt lies approximately 1.1 miles to the south of the Site. The nearest public supply well is located approximately 4.6 miles to the east of the Site. Neither the well nor the lake are used for municipal water supply, as East Bay Municipal Water District (EBMUD) provides water to the area.

 Remedial Investigation: To date, soil and groundwater remedial investigations have been conducted at the Site by various consultants beginning in 1990 until 2009. Based on those investigations, the maximum detected concentrations of contaminants are summarized in Table 1 below:

Table 1: Historical Maximum Contaminant Concentrations by Medium

Contaminant	Groundwater (µg/l)	Soil (mg/kg)
PCE	2,800	320,000
TCE	340	0.48
Cis – 1,2 Dichloroethylene	1,200	1.0
Vinyl chloride	0.001	< 0.096
TPH-ss	9,400,000	91,000
TPH-diesel	1,300,000	2,100
TPH-gasoline	6,000	19,000
Benzene	0.002	< 0.0049
Methyl tert-butyl ether	170	0.044
(MtBE)		

Concentrations of both chlorinated volatile organic compounds and petroleum hydrocarbons in groundwater are substantially above the drinking water standards. For example, the drinking water quality standard or maximum contaminant level (MCL) for PCE and TCE is $5\mu g/L$. The MCL for cis -1.2 DCE is $6.0 \mu g/l$ and the USEPA health advisory for TPH-diesel and TPH-gasoline is $100 \mu g/l$.

A soil vapor study was conducted in 2004 to evaluate the presence of chlorinated volatile organic compounds in soil vapor south west of the Site, next to the two nearby residences. This investigation concluded that the vadose zone beneath the residential units is not conducive to migration of the contaminant vapors, due to the low permeability of subsurface soils. However, the presumption that a clay cap is continuous offsite and onsite does not accurately reflect the Site's stratigraphic data, nor is it consistent with the expected conditions based on the alluvial depositional environment and the likelihood that portions of the Site include fill material. Boring logs B-1, B-7, and B-12 indicate that there is an average depth of 8 feet of fine to medium grain sand, coarse sand, and gravel below ground surface within these borings, respectively (GeoSolv LLC, 1998). The inability to collect soil vapor samples from a designated depth is not sufficient to assume that a potential for vapor intrusion does not exist without attempting to conduct sub-slab vapor sampling or side-step the sampling location. To date soil vapor has not been collected at the Site or offsite.

The remedial investigation is not complete. To date, soil vapor sampling data has not been collected below the Site and its vicinity. This data gap needs to be filled, to determine if additional source area investigation and remediation must be implemented at the Site to reduce the threat to water quality, public health, and the environment posed by the discharge of waste.

Additional evaluation of source areas and definition of the vertical and lateral extent of the constituents of concern in soil, soil vapor, and groundwater is also needed. In addition, a conduit study (pollutant preferential pathway study) is needed, due to the initial evidence of preferential pathways in the subsurface and the potential for those pathways to affect contaminant migration.

9. **Interim Remedial Measures**: Removal of free product (FP), predominantly TPH-ss, began in 2002 from well SOMA-4 and was accomplished with a skimmer pump. In August 2004, SOMA, consultant to Glovatorium, Inc. converted borings B-3 and B-8 (Figure 2, attached) into wells for removal of FP and later a pneumatic pump was introduced to remove FP from wells B-8R, B-10R, MPE-2, MPE-5, and SOMA 4R (Figure 2, attached).

Operation of a Multi-Phase Extraction (MPE) soil vapor and groundwater extraction system was conducted from 2008 through 2012. The MPE system extracted approximately 8,100 pounds of TPH-ss during system operations. The MPE operations were discontinued in 2013 as the Dischargers decided to rely on natural attenuation to degrade the constituents of concern.

The 2012 - 2015 groundwater monitoring data included in Table 2 below indicates that contaminant concentrations were lower following the discontinuation of interim remediation and a remedial option has not been implemented. In addition, this groundwater sampling data was only collected at a subset of monitoring wells and do not reflect a comprehensive distribution of the constituents of concern in groundwater at the Site and its vicinity. Also, the very high concentrations of TPH-ss in groundwater suggest the continued presence of free product at and near the Site, which needs additional delineation and remediation. The solubility limit of TPH-ss is low, only 5 ug/l, suggesting that free product is likely based on the 2015 data. Since the Dischargers have not implemented a remedial option, we are unable to determine if the contaminant plumes emanating from the Site are stable, therefore, a remedial option needs to be implemented. A recent report received including 2016 data has not been analyzed at the time of this writing based on the absence of quality assurance and quality control data.

Table 2: Maximum Contaminant Concentration Trends in Select Groundwater Monitoring Wells during and Following Interim Remediation

Contaminant	2012	2013	2014	2015
in	Maximum	Maximum	Maximum	Maximum
Groundwater	Contaminant	Contaminant	Contaminant	Contaminant
	Concentration	Concentration	Concentration	Concentration
	During	Post -	Post -	Post -
	Remediation	Remediation	Remediation	Remediation
	(µg/l)	(µg/l)	$(\mu g/l)$	(μg/l)
PCE	120	ND^2	170	90
TCE	360	ND ²	99	24
Cis – 1,2 DCE	1,800	28	1,300	1,200
Vinyl chloride	11	8.6	76	35
TPH-ss	230,000	100,000	22,000	8,100
TPH-diesel	N/A1	N/A³	N/A³	N/A³
TPH-gasoline	340,0001	N/A³	N/A³	N/A³
Benzene	0.5	ND ²	1.6	0.6
MtBE	15	ND ²	170	120

¹ The analyzed chromatographs for TPH-diesel and TPH-gasoline did not exactly match the standard diesel and gasoline chromatographs.

Recent (2015) concentrations of contaminants in soil, groundwater, and soil vapor still significantly exceed applicable cleanup levels, as shown in Table 3.

Table 3: Soil, Groundwater, and Soil Vapor Contamination 2015 Analysis

	Soil (mg/kg)		Groundwater (µg/L)		Soil Vapor (µg/m³)	
Contaminant	Maximum Level at the Site ¹	Residential / Commercial Shallow Soil Direct Exposure Human Health Risk Levels ²	Maximum Level at the Site ³	Groundwater MCL ⁴	Maximum Level at the Site ¹	Residential / Commercial Soil Gas Vapor Intrusion Human Health Risk Levels ²
PCE	0.708	0.6/2.7	90	5	116,583	240/2,100
TCE	0.0094	1.2/8.0	24	5	2,476	240/3,000
TPHss	5	160/820	8,100	150 ⁶	5	68,000/570,000
cis-1,2- Dichloroethylene	0.0067	19/90	1,200	6	ND ⁷	4,200/35,000

 $\textbf{Bold} \ \text{text highlights reported contaminant concentrations above acceptable contamination levels}.$

 $^{^2}$ ND: Not detected above the laboratory detection limit of 0.0005 $\mu g/l.$

³ N/A: Not Available. This analyte was not analyzed.

Soil samples were collected from the Site on November 11, 2015. Soil vapor samples were collected from the Site on November 23, 2015. Soil and soil vapor analysis results were reported to the Regional Water Board in a January 30, 2016, communication (Shallow Soil Sampling and Sub-slab Soil Gas Investigation and Human Health Risk Assessment of Chlorinated Solvents & Request for UST Site Closure).

^{2.} Value from Regional Water Board ESL Workbook (Tier 1 ESLs Summary Tables), February 2016 Rev.

- Groundwater samples were collected most recently from the Site on March 3, 2015. Analysis results were reported to the Regional Water Board in a March 20, 2015, report (Final Groundwater Report of Hydrocarbons Related to the Underground Storage Tanks).
- 4. MCL = Maximum Contaminant Level
- 5. TPHss not tested
- MCL for TPHss not available. The value shown is the human health based number calculated for exposure to TPHss contaminated tap water.
- 7. ND = Not Detectable

The Dischargers need to substantiate and verify that the contaminant plumes are stable or decreasing in areal extent. Additionally, the Dischargers need to determine if additional secondary source removal is needed. This information is necessary because it will also assist in determining if a long-term monitoring program is needed to check for plume stability and contaminant rebound.

10. Basin Plan: The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board, Office of Administrative Law and the United States Environmental Protection Agency, where required.

The potential beneficial uses of groundwater underlying and adjacent to the Site include:

- Municipal and domestic water supply
- b. Industrial process water supply
- c. Industrial service water supply
- d. Agricultural water supply

At present, there are no known uses of the shallow groundwater zone underlying the Site or in the immediate area for the above purposes.

The existing and potential beneficial uses of Lake Merritt include:

- a. Industrial process supply or service supply
- b. Wildlife habitat
- c. Fish migration and spawning
- d. Estuarine habitat
- e. Shellfish harvesting
- f. Preservation of rare and endangered species
- 11. **Other Regional Water Board Policies:** Regional Water Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.

Regional Water Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels. No exceptions apply to the Site.

12. **State Water Board Policies:** State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* applies to this discharge. It requires maintenance of background levels of water quality unless a lesser water quality is consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in exceedance of applicable water quality objectives. This Order and its requirements are consistent with Resolution No. 68-16.

State Water Board Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under California Water Code (Water Code)*Section 13304 applies to this discharge. It directs the Regional Water Boards to set cleanup levels equal to background water quality or the best water quality, which is reasonable, if background levels cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. The remedial action plan will assess the feasibility of attaining background levels of water quality. This Order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

- 13. **Preliminary Cleanup Goals:** Pending the establishment of site-specific cleanup levels, preliminary cleanup goals are needed for the purpose of conducting remedial investigation and interim remedial actions. These goals should address all relevant media (e.g., groundwater, soil, soil vapor, and indoor air) and all relevant concerns (e.g., groundwater, soil, soil vapor, and indoor air) and all relevant concerns (e.g., groundwater ingestion, migration of groundwater to surface waters, and vapor intrusion).
- 14. Basis for a 13304 and 13267 Order: Water Code section 13304 authorizes the Regional Water Board to issue orders requiring a discharger to cleanup and abate waste, where the discharger has caused or permitted waste to be discharged, or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

As discussed above, each of the named dischargers has caused or permitted waste to be discharged or deposited into the waters of the State, and such discharge creates and threatens to create conditions of pollution and nuisance.

Water Code section 13267 provides that the Regional Water Board may require a person who has discharged or is suspected of having discharged, to furnish technical or monitoring reports. The burden, including costs, of producing the reports required in this Order bears a reasonable relationship to the need for the reports and the benefits to be obtained. As described herein, the residual contamination at the site potentially causes a threat to human health and the environment. Additional investigation and reports of those results are therefore necessary.

15. **Cost Recovery:** Pursuant to Water Code section 13304, the dischargers are hereby notified that the Regional Water Board is entitled to, and may seek reimbursement for all reasonable costs actually incurred by the Regional Water Board to investigate

unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.

- 16. California Safe Drinking Water Policy: It is the policy of the State of California that, every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
- 17. California Environmental Quality Act (CEQA): This action is an order to enforce the laws and regulations administered by the Regional Water Board. As such, this action is categorically exempt from the provisions of CEQA pursuant to California Code of Regulations, Title 13 section 15321.
- 18. Notification: The Regional Water Board has notified the dischargers and all interested agencies and persons of its intent under Water Code section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.
- 19. **Public Hearing:** The Regional Water Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to sections 13304 and 13267 of the Water Code, that the dischargers (or their agents, successors, or assigns) shall cleanup and abate the effects described in the above findings and provide technical reports as follows:

A. PROHIBITIONS

- The discharge of wastes or hazardous substances in a manner that will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
- 2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.
- 3. Activities associated with the subsurface investigation and cleanup that will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. PRELIMINARY CLEANUP GOALS

The following preliminary cleanup goals shall be used to guide remedial investigation and interim remedial actions, pending establishment of site-specific cleanup levels.

a. Groundwater: Applicable screening levels such as the Regional Water Board's Environmental Screening Levels (ESLs) document. Groundwater screening levels shall incorporate at least the following exposure pathways: groundwater ingestion and vapor

¹ See Regional Water Board webpage: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml **Commented [MM3]:** Delete this finding since we propose to issue the order administratively without a Board hearing.

intrusion to indoor air. For groundwater ingestion, use applicable water quality objectives (e.g. lower of primary and secondary maximum contaminant levels, or MCLs) or, in the absence of a chemical-specific objective, equivalent drinking water levels based on toxicity and taste and odor concerns.

- b. Soil: Applicable screening levels such as the ESLs document. Soil screening levels are intended to address a full range of exposure pathways, including direct exposure, nuisance, and leaching to groundwater. For purposes of this subsection, the discharger shall assume that groundwater is a potential source of drinking water.
- c. Soil vapor: Applicable screening levels such as the ESLs document. Soil vapor screening levels are intended to address the vapor intrusion to indoor air pathway.
- d. Indoor air: Applicable screening levels such as the ESLs document. Indoor air screening levels are intended to address the vapor intrusion to indoor air pathway.

C. TASKS

1. PUBLIC PARTICIPATION PLAN

COMPLIANCE DATE: March 30, 2018

Submit a technical report acceptable to the Executive Officer to ensure adequate public participation will be undertaken at key steps in the remedial action process leading to case closure.

2. COMPLETION OF CONDUIT STUDY

COMPLIANCE DATE: April 30, 2018

Submit a technical report acceptable to the Executive Officer documenting completion of an up-to-date conduit study. A conduit study is required to evaluate the role of subsurface utilities in the migration or accumulation of the constituents of concern in the subsurface.

3a. OFFSITE VAPOR INTRUSION INVESTIGATION WORKPLAN

COMPLIANCE DATE: May 31, 2018

Submit a technical report acceptable to the Executive Officer containing a work plan for an offsite vapor intrusion investigation and contingencies for conducting an offsite indoor air investigation.

3b. COMPLETION OF OFFSITE VAPOR INTRUSION INVESTIGATION REPORT

COMPLIANCE DATE: August 31, 2018

Complete tasks in the Task 3a workplan and submit a technical report acceptable to the Executive Officer documenting their completion.

Commented [MM4]: Switched these two tasks and revised task deadlines (both were previously 2/28/18).

Commented [MM5]: New offsite vapor intrusion investigation workplan/report tasks.

4a. REMEDIAL INVESTIGATION WORKPLAN

COMPLIANCE DATE: May 31, 2018

Submit a work plan acceptable to the Executive Officer for an onsite soil, soil vapor, and groundwater and offsite soil and groundwater investigations. The work plan should address the removal of secondary sources of contamination, define the vertical and lateral extent of the constituents of concern in soil, soil vapor, and groundwater. The work plan shall consider all relevant contaminants, media (soil, soil vapor, and groundwater), exposure pathways, and receptors. The workplan shall also include a building survey and contingencies for conducting an onsite indoor air investigation. It shall be designed so that its implementation produces site data needed to assess contamination threats to human health and the environment. The workplan shall specify investigation methods and a proposed implementation time schedule. Work may be phased to allow the investigation to proceed efficiently, provided that this does not delay compliance. This workplan may be submitted in combination with Task 3a above.

4b. COMPLETION OF REMEDIAL INVESTIGATION REPORT

COMPLIANCE DATE: March 29, 2019

Complete tasks in the Task 4a workplan and submit a technical report acceptable to the Executive Officer documenting their completion. The technical report shall define the onsite and offsite vertical and lateral extent of pollution to preliminary cleanup goals.

5a. REMEDIAL INVESTIGATION WORKPLAN (ADDITIONAL PHASE)

COMPLIANCE DATE: 90 days after required by Executive Officer

Submit a workplan acceptable to the Executive Officer to complete the definition of the vertical and lateral extent of subsurface pollution. The workplan shall consider all relevant contaminants, media (soil, soil gas, and groundwater), exposure pathways, and receptors. The workplan shall also include a building survey and indoor air investigation. It shall be designed so that its implementation shall produce site data needed to assess contamination threat to human health and the environment. The workplan shall specify investigation methods and a proposed time schedule. The Executive Officer will require this workplan if the previous phase of the remedial investigation complied with the approved workplan but did not adequately define the vertical and lateral extent of soil, soil vapor, and groundwater pollution (e.g., preliminary cleanup goals were exceeded at the most distant groundwater sampling points).

5b. COMPLETION OF REMEDIAL INVESTIGATION REPORT (ADDITIONAL PHASE)

COMPLIANCE DATE: According to schedule in task 5a approved by the Executive Officer

Commented [MM6]: Modified the scope of this task to exclude the offsite vapor intrusion task, revised the deadline (was 3/29/18), and renumbered the task (was 3a).

Commented [MM7]: Revised the deadline (was 12/30/18) and renumbered the task (was 3b).

Complete tasks in the Task 5a workplan and submit a technical report acceptable to the Executive Officer documenting their completion. The technical report shall define the vertical and lateral extent of pollution down to preliminary cleanup goals.

Commented [MM8]: Renumbered the tasks (was 4a and 4h)

6. RISK ASSESSMENT WORKPLAN

COMPLIANCE DATE: 90 days after required by Executive Officer

Submit a workplan acceptable to the Executive Officer for preparation of either a screening level evaluation or a site-specific risk assessment. The workplan shall include a conceptual site model (i.e., identify contaminants, media, pathways, and receptors where Site contaminants pose a potential threat to human health or the environment). If a screening level evaluation is selected, the workplan shall identify which screening levels will be used and demonstrate that they address all relevant pathways and receptors for the Site. The Executive Officer will require a workplan after completion of remedial investigation.

Commented [MM9]: Renumbered the task (was 5)

7. COMPLETION OF HUMAN HEALTH RISK ASSESSMENT

COMPLIANCE DATE: According to schedule in task 6 approved by the Executive Officer

Complete tasks in the Task 6 workplan and submit a technical report acceptable to the Executive Officer documenting their completion. The report shall comprise either a screening level evaluation or a site-specific risk assessment. The results of this report will help establish acceptable exposure levels, to be used in developing remedial alternatives in task 9 below.

Commented [MM10]: Renumbered the task (was 6).

8. INTERIM REMEDIAL ACTION WORKPLAN

COMPLIANCE DATE: 45 days after required by Executive Officer

Submit a workplan acceptable to the Executive Officer to evaluate interim remedial action alternatives for soil, soil vapor, and groundwater contamination and recommend alternatives for implementation onsite and/or offsite. The workplan shall specify a proposed time schedule for implementation of interim remedial actions. The Executive Officer will require this workplan if Site contamination poses a potential threat to human health (e.g., indoor air concentrations are above ESLs for the contaminants of concern).

Commented [MM11]: Renumbered the task (was 7).

9. COMPLETION OF INTERIM REMEDIAL ACTIONS

COMPLIANCE DATE: According to schedule in task 8 approved by the Executive Officer

Submit a technical report acceptable to the Executive Officer documenting completion of the Task 8 workplan. For ongoing actions, such as soil vapor extraction, groundwater extraction, or mitigation of impacts to an offsite domestic or agricultural well, the report shall document start-up, monitoring, and ongoing operations as opposed to completion.

Commented [MM12]: Renumbered the task (was 8)...

10. REMEDIAL ACTION PLAN INCLUDING DRAFT CLEANUP LEVELS

COMPLIANCE DATE: 90 days after Executive Officer approval of Task 9

Submit a technical report acceptable to the Executive Officer containing:

- a. Summary of the remedial investigation
- b. Evaluation of the installed interim remedial actions measures
- c. Feasibility study evaluating alternative final remedial actions
- d. Summary of risk assessment
- e. Recommended final remedial actions and cleanup standards
- f. Implementation tasks and time schedule

Item c shall include projections of cost, effectiveness, benefits, and impact on public health, welfare, and the environment of each alternative action.

Items a through c shall be consistent with the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), CERCLA guidance documents with respect to remedial investigations and feasibility studies, Health and Safety Code section 25356.1(c), and State Water Board Resolution No. 92-49 as amended ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code section 13304").

Item e shall consider the preliminary cleanup goals for soil and groundwater identified in Finding 13 and shall address the attainability of background levels of water quality (see Finding 12).

11. DELAYED COMPLIANCE

If the dischargers are delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the dischargers shall promptly notify the Executive Officer, and the Regional Water Board or Executive Officer may consider revision to this Order.

D. PROVISIONS

- No Nuisance: The storage, handling, treatment, or disposal of polluted soil or groundwater, shall not create a nuisance as defined in Water Code section 13050, subdivision (m).
- Good Operations and Maintenance (O&M): The Dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.
- 3. Cost Recovery: The Dischargers are liable, pursuant to Water Code section 13304, to the Regional Board for all reasonable costs actually incurred by the Regional Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effect thereof, or other remedial action, required by this Order.

Commented [MM13]: Renumbered the task (was 9).

Commented [MM14]: Inserted s for plural form.

The Site addressed by this Order is enrolled in a State Water Board-managed reimbursement program. Reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

- 4. Access to Site and Records: In accordance with Water Code section 13267, subdivision (c), the Dischargers shall permit the Regional Water Board or its authorized representative:
 - a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - Access to copy any records required to be kept under the requirements of this Order.
 - Inspection of any monitoring or remediation facilities installed in response to this Order
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.
- 5. **Self-Monitoring Program:** The Dischargers shall comply with any Self-Monitoring Program as may be established by the Executive Officer.
- 6. **Contractor / Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.
- 7. Lab Qualifications: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Regional Water Board using approved United States Environmental Protection Agency methods for the type of analysis to be performed. Quality Assurance/Quality Control records shall be maintained for Regional Water Board review. This provision does not apply to analyses that can only reasonably be conducted onsite (e.g. temperature).
- 8. **Document Distribution:** Copies of all correspondence, technical reports and other documents pertaining to compliance with this Order shall be provided to the following agencies:
 - · Regional Water Board
 - City of Oakland Fire Department
 - Alameda County Department of Environmental Health Services

The Executive Officer may modify this distribution list as needed.

Electronic copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be uploaded to the State Water Board's GeoTracker database within five business days after submittal to the Regional Water Board. Guidance for electronic information submittal is available at: http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal

- 9. Reporting Changed Owner or Operator: The Dischargers shall file a technical report on any changes in contact information, Site occupancy or ownership associated with the property described in this Order. An amendment to this Order would be necessary to transfer this Order requirements to the new owner.
- 10. Reporting of Hazardous Substance Release: If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the dischargers shall report such discharge to the Regional Water Board by calling (510) 622-2369.

A written report shall be filed with the Regional Water Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the California Emergency Management Agency required pursuant to the Health and Safety Code.

- 11. **Periodic Order Review:** The Regional Water Board will review this Order periodically and may revise it when necessary. The Dischargers may request revisions and upon review the Executive Officer may recommend that the Regional Water Board revise these requirements.
- 12. **Rescission of Section 13267 Order:** The 13267 order dated July 17, 2015, is hereby rescinded upon the effective date of this Order, except for enforcement purposes.

I, Bruce H. Wolfe, Executive Officer, do here	by certify that the foregoing is a full, true, and
correct copy of an Order adopted by the Califo	ornia Regional Water Quality Control Board, San
Francisco Bay Region, on	

Bruce H. Wolfe Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments:

Figure 1: General Vicinity Map

Figure 2: Site Map showing Locations of Monitoring Wells, Soil Borings, and Preferential Flow Pathways

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

TENTATIVE ORDER

ADOPTION OF INITIAL SITE CLEANUP REQUIREMENTS for:

STUART DEPPER, ERIC DEPPER, AND GLOVATORIUM, INC.

For the properties with the following Alameda County Assessor Parcel Numbers:

APN: 012-0982-016 APN: 012-0982-010

OAKLAND, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter "Regional Water Board"), finds that:

1. **Site Location:** The Glovatorium (Site) is an approximately 0.45-acre property that contains two commercial parcels. Because of ambiguity over which street addresses apply to which parcels, the Site is defined by parcel numbers. The parcels are described as APN: 012-0982-016 and APN: 012-0982-010, collectively referred to herein as the Site. The Site is located between Manila Avenue and Broadway Street, near the intersection of 38th Street in Oakland (see Figure 1, attached). Surrounding properties are primarily commercial and residential.

2. Site History:

Property Ownership

Robert Depper and his wife, Martha, purchased the Site in 1968. Robert Depper operated the Glovatorium business from 1968 to 1992. Starting in 1982, the Site was owned and operated by Robert Depper as a wholesale dry cleaning plant named Glovatorium, Inc.

In 1996, Robert Depper organized the "*Robert Depper Trust*" (Trust) and named Martha Depper Trustee and his two sons Stuart Depper and Eric Depper as beneficiaries.

Upon the deaths of Robert and Martha Depper, ownership of the Site transferred to their sons in 2011, and they are the current co-owners of the Site. Stuart Depper and Eric Depper each acquired 49 percent. Ownership of the remaining 2 percent is the subject of ongoing litigation among the heirs.

Operations and Source of Contamination

Six underground storage tanks (USTs) at the Site were used to store Stoddard solvent, fuel oil, and possibly waste oil. The USTs were closed in place in 1997 (Re-evaluation of Preferential Pathways, SOMA Environmental Engineering, Inc. [SOMA Environmental], Nov. 3, 2005, at p. 8). The volumes of the six USTs ranged from 800 gallons to 5,000

gallons (Letter to Stuart Depper, HK2, Inc. /SEMCO [Aug. 1, 1997], p. 1). The approximate locations of the USTs closed in place at the Site are shown in Attachment 2. According to an August 30, 2016 letter from the Dischargers' consultant, Franklin Goldman of Environmental and Hydrogeological Consulting, dry cleaning operations at the Site used Stoddard solvent beginning in 1968 and used perchloroethylene (also known as tetrachloroethylene, PCE, or PERC) from the mid-1980s through 1996 (Letter to Regional Water Board, Franklin Goldman [August 30, 2016], p. 3).

A release occurred at the Site in or before 1990. During a fuel tank and piping inspection at the Site by Petrotek (Glovatorium's contractor) on May 22, 1990, at least one UST was found to be functioning improperly, and a Glovatorium representative provided information that pumping issues from the tanks began in October 1989 (Letter to Eric Depper, Petrotek [May 31, 1990]).

On October 15, 1990, soil and liquid samples were collected at the Site as part of an Oakland Police Department search warrant (Letter to Robert Depper, Alameda County Health Care Services Agency [Alameda County] [January 8, 1991], p.1). Alameda County communicated sampling results to Robert Depper in a January 8, 1991 letter that identified a release of petroleum and Stoddard solvent and determined that "there are clearly leaks or holes (or both) in the underground tank cluster under the floor of the building" (previously referenced document, p. 2). Leak testing of the USTs in 1997 confirmed that there were holes in two of the tanks (Letter to Stuart Depper, HK2, Inc. /SEMCO [August 1, 1997] p. 3).

Operational practices of the dry cleaning machines were also responsible for releases from the Site. The dry cleaning machines were very old and never upgraded during operations at Glovatorium. Former Glovatorium employees have reported that cleaning fluids and wastewater containing dry cleaning fluids were routinely allowed to flow into the sanitary sewer system through floor drains at the Site (Sentencing Memorandum, Alameda County District Attorney's Office [October 6, 1995], p. 7). EBMUD issued a wastewater discharge permit to the Glovatorium, effective March 21, 1992, that prohibited the discharge of dry cleaning waste and required floor and sewer drains previously used to dispose of waste to be sealed in a timely manner and hazardous waste was improperly stored and disposed of at the Site (Sentencing Memorandum, Alameda County District Attorney's Office [October 6, 1995], p. 7).

In 1993, the following constituents of concern were documented in soil and groundwater beneath the Site: petroleum constituents (including benzene, toluene, ethylbenzene, xylenes, Total Petroleum Hydrocarbons-Stoddard solvents (TPH-ss), TPH-diesel, and TPH-gasoline) and chlorinated volatile organic compounds including tetrachloroethene (PCE), and trichloroethene (TCE).

Alameda County Oversight

Alameda County was the lead regulatory agency under the local oversight program from 1989 until 2012. Alameda County inspected the Site in 1989 and issued a notice of violation identifying violations of California Code of Regulations Titles 19, 22, and 23 (Letter to Stuart Depper, Alameda [July 10, 1989]). This was the first in a series of Site inspections that occurred from 1989 through 1994.

Inspectors communicated violations found during the inspections to Stuart and Robert Depper. These violations were related to the improper handling, storage, disposal of hazardous materials, as well as insufficient monitoring and permitting of USTs at the Site (Letters to Stuart Depper, Alameda County [July 10, 1989; May 2, 1990; August 20, 1990; and September 23, 1994]; Letter to Robert Depper, Alameda County [January 8, 1991]).

In 1995, as a result of investigations that took place from 1989 through 1994, Robert Depper pled no contest to charges under the Health and Safety Code for illegally disposing hazardous waste by allowing USTs to leak and disposing of hazardous waste in a dumpster (Sentencing Memorandum, Alameda County District Attorney's Office [October 6, 1995]). Stuart Depper pled no contest to a felony charge under Health and Safety Code for illegally disposing of hazardous waste by allowing USTs to leak (previously referenced document, p.8). In the sentencing Memorandum dated October 6, 1995, Deputy District Attorney Lawrence Blazer cited the following aggravating factors to show that the violations were unusually egregious: (1) the persistent nature of the violations, after repeated warnings; (2) the fact that some of the violations continued to that day; (3) the fact that the defendants, particularly Stuart, had lied to environmental regulators or avoided responsibility; and (4) the extraordinarily hostile attitude of the defendants toward regulators (previously referenced document, p.11)

In 1997, in accordance with an April 28, 1997 Order for Tank Closure and Preliminary Investigation from Alameda County Superior Court, the Site's six USTs and associated piping systems were backfilled with cement-sand slurry or pea gravel and then closed inplace (Order for Tank Closure and Preliminary Investigation, Alameda County District Attorney's Office [April 28, 1997]; Letter to Stuart Depper; HK2, Inc./SEMCO [August 1, 1997] p. 2). Four of the closed tanks are located inside a building at the Site, and two are located under the sidewalk on 38th Street.

In 1998 through 2001, GeoSolve, LLC, LFR Levine-Fricke, and SOMA Environmental Engineering, Inc. (Contractors for Glovatorium) conducted remedial investigations at the Site (Second Phase Subsurface Investigation Report of Hydrocarbons, GeoSolve, LLC [October13, 1998]; Results of Utility Survey and Work Plan for Soil and Grab Groundwater Investigation, LFR Levine-Fricke [May 6, 1999]; Workplan to Conduct Additional Investigation at the Former Glovatorium, SOMA Environmental [June 15, 2001]). Investigation activities included a groundwater monitoring and sampling program.

On September 30, 2004, Stuart Depper submitted the first request for Site closure (Human Health Risk Assessment and Request for Site Closure at the Former Glovatorium Site, SOMA Environmental [September 30, 2004]). Alameda County rejected the closure request because, contrary to SOMA Environmental assertions and evidence, (1) the VOC plumes did not appear to be shrinking, (2) well yield alone was insufficient to show that groundwater below the Site should not be classified as drinking water source, (3) groundwater modeling results were inconclusive, (4) the uncertainty analysis was insufficient, and (5) soil and groundwater remediation may be necessary at the Site (Letter to Stuart Depper, Alameda County [June 21, 2005] pp 3-4).

On November 3, 2005, SOMA Environmental Engineering, Contractor for the Dischargers, submitted a report concluding that "a 54-inch storm drain and main sanitary sewer line along Manila Avenue are among those structures that could act as preferential flow pathways [for transport of the discharge offsite]." (Re-evaluation of Preferential Pathways, SOMA Environmental [Nov. 3, 2015], at p. 20).

From 2002 through 2012, remediation activities at the Site included (1) removal of free product from monitoring wells and (2) operation of a multi-phase extraction system to treat soil (vapor) and groundwater (First Semi-Annual 2012 Groundwater Monitoring and Interim Remedial Action Report, SOMA Environmental [May 1, 2012], at pp. 5-6). From September 2008 through April 2012, approximately 274,000 gallons of groundwater were treated and discharged into the EBMUD sewer system under permits from EBMUD (Second Semi-Annual 2012 Self-Monitoring Report, SOMA Environmental [Jan. 16, 2013], at p. 5).

During its operation, the multi-phase extraction system (MPE) removed approximately 8,110 pounds of volatile organic compounds (as Stoddard solvents) from Site groundwater (First Semi-Annual 2012 Groundwater Monitoring and Interim Remedial Action Report, SOMA Environmental [May 1, 2012], at p. 19). This treatment system has remained offline since April 6, 2012 (Second Semi-Annual 2012 Self-Monitoring Report, SOMA Environmental [Jan. 16, 2013], at p. 6).

SOMA submitted a *Workplan to Delineate Extent of Free Product and Conduct Soil Vapor Sampling* on January 26, 2011, and an addendum to the workplan on March 28, 2011, (collectively, the Workplan) to address increasing thickness of petroleum free product observed in well MPE-2 (from 0.24 feet in February 2010 to 2.44 feet in August 2010) and well MPE-3 (from 0.34 feet in February 2010 to 0.84 feet in August 2010). On April 27, 2011, Alameda County approved the Workplan, which included four tasks: 1) permit acquisition, health and safety plan preparation and subsurface utility clearance; (2) soil boring advancement; (3) soil vapor study; and (4) report preparation. The Workplan has not been implemented.

On September 19, 2011, through his consultant, Stuart Depper submitted a second request to close the Site (Letter to Alameda County, Franklin Goldman [Sept. 19, 2011]). Alameda County denied the request, stating, "Given the site conditions, it is clear that additional work is needed at this site and that a request for closure is not appropriate" (Letter to Stuart Depper, Alameda County [Nov. 16, 2011], at p. 1).

On November 18, 2011, Stuart Depper petitioned the State Water Resources Control Board (State Water Board) for UST site closure. On January 26, 2012, Alameda County responded to a State Water Board request for information, highlighting the work that still needed to be done at the Site, which included, among other findings, the need to conduct additional free product removal and soil vapor sampling, as well as the need to address the potential for rebound and the generation of daughter products (Letter to State Water Board, Alameda County [Jan. 26, 2012], at pp. 2-3). In this letter, Alameda County noted that, in its review of the Petition, it found "that the justifications presented lack technical merit and in several cases are misleading, incomplete, or erroneous" and the Petition

demonstrates an inordinate degree of bias in its technical evaluations that is not commensurate with accepted industry practice" (previously referenced document at p. 1). Stuart Depper withdrew this petition for UST site closure in an April 20, 2013, letter to Ben Heninburg of the State Water Board.

Regional Water Board Oversight

On May 31, 2012, Alameda County transferred the Glovatorium case to the Regional Water Board, which then began to actively regulate activities at the Site.

In 2012, free product at the Site was analyzed and determined to be predominately Stoddard solvent (a type of petroleum hydrocarbon) (Letter to Regional Water Board, Franklin J. Goldman [Dec. 27, 2012], at p. 1). Franklin Goldman continued monitoring groundwater wells at the Site from 2012 through March 2015, reporting that concentrations of chlorinated volatile organic compounds and petroleum hydrocarbons in groundwater were substantially above vapor risk levels and drinking water standards (Final Groundwater Monitoring Report of Hydrocarbons Related to the Underground Storage Tanks, Franklin Goldman [Mar. 20, 2015]).

On October 2, 2013, Franklin Goldman submitted a third Site closure request under the Low-Threat Underground Storage Tank Closure Policy (Letter to Regional Water Board, Franklin Goldman [October 2, 2013]). Regional Water Board staff did not respond to the case closure request within 60 days. On December 12, 2013, Stuart Depper filed a case closure petition requesting State Water Board Review.

Regional and State Water Board staff subsequently visited the Site on April 24, 2014, and met with Stuart Depper, Steven Depper (representing Martha Depper), and Franklin Goldman to discuss Site cleanup (Board Storm Water Screening Inspection Form, Regional Water Board [Apr. 24, 2014]).

On May 28, 2014, Regional Water Board staff issued a letter to Stuart Depper rejecting the third request for Site closure for reasons that included (1) a lack of data to substantiate that the petroleum and PCE groundwater contaminant plumes are stable or decreasing in areal extent, and (2) a lack of data to determine whether there has been a significant post-remediation rebound of petroleum and solvent compounds in groundwater. The May 28, 2014 letter also required Stuart Depper to submit a technical report pursuant to Water Code section 13267 to address impediments to case closure and to update the Site's Conceptual Site Model. The letter restated the need for four consecutive quarters of groundwater sampling and analysis to determine plume stability and evaluate rebound.

State Water Board staff reviewed the Regional Water Board staff decision to deny case closure, stating in its August 12, 2014 response, "requirements for case closure have not been met at this time and, therefore, closure of the UST case is not appropriate. Current Site conditions support a potential threat to human health, safety, and the environment. At this point in time, insufficient data are available to determine that corrective action ensures the protection of human health, safety, and the environment. Case closure is inappropriate at this time" (Letter to Stuart Depper, State Water Board [Aug. 12, 2014], at p. 4).

On March 5, 2015, Regional Water Board Assistant Executive Officer Dyan Whyte sent a notice of violation to Stuart Depper because he failed to submit the technical report required in the May 28, 2014 letter.

On March 31, 2015, Franklin Goldman submitted a letter on behalf of the Dischargers containing a technical report and a fourth request for Site closure (Request for Closure, Update of Conceptual Site Model, and Technical Reporting to Substantiate Plume Stability and Regional Board Impediments to Closure Associated with the UST Investigation Area, Franklin Goldman [Mar. 31, 2015]). This communication referenced recent groundwater monitoring data, including the data for the prior three consecutive quarters. On May 7, 2015, Franklin Goldman submitted an annex to the March 31, 2015 communication that further discussed monitoring efforts and the Dischargers' request for Site closure (Annex to Technical Report dated March 31, 2015, Regarding the Former Glovatorium, Franklin Goldman [May 7, 2015]).

On May 28, 2015, Regional Water Board staff issued the Dischargers a tentative Cleanup and Abatement Order (tentative CAO) pursuant to Water Code section 13304. The tentative CAO summarized the Site's regulatory status and proposed cleanup requirements. Tentative CAO findings established the need to further characterize petroleum compounds and chlorinated solvents remaining in soil, soil vapor, and groundwater at the Site. The first two of nine tasks in the tentative CAO required completion of a conduit study to characterize pollutant migration and accumulation in subsurface utilities (Section C, Task 1) and a public participation plan for the remedial action and case closure process (Section C, Task 2). In a June 11, 2015 letter to the Regional Water Board, the Dischargers requested a 60-day extension to the original June 30, 2015, deadline for submitting comments on the tentative CAO. On July 17, 2015, the Regional Water Board Executive Officer approved the request, extending the deadline to August 31, 2015. The tentative CAO was not finalized, due to the significant time needed to address the Dischargers' comments concerning named parties (including parties at nearby upgradient parcels).

The Regional Water Board Executive Officer also issued the Dischargers a requirement for technical reports pursuant to Water Code section 13267 (13267 Order) on July 17, 2015. The 13267 Order required the Dischargers to complete the first two tasks in the tentative CAO, expediting the tasks prior to the preparation of a remedial action plan. Specifically, the 13267 Order required the Dischargers to submit a technical report documenting the completion of a conduit study (Task 1) and a public participation plan for the Site (Task 2) by August 31, 2015. The Dischargers failed to submit a complete conduit study and public participation plan for the Site. Regional Water Board staff issued two notices of violation informing the Dischargers of these violations and potential penalties and the Dischargers have yet to comply.

3. **Adjacent and Nearby Sites:** The Earl Thompson property (Regional Water Board case No. 01-2412) is a 0.2-acre site located at 316 38th Street, Oakland. This property is located cross-gradient and to the east of the Site. TPH-ss was stored and used for dry cleaning purposes at the Earl Thompson property between 1911 through the 1970s. TPH-ss was stored in three USTs located along 38th Street. TPH-ss were also detected in soil and groundwater at this site. The USTs were closed in place in 2008 under Oakland Fire

Department oversight. The tanks were closed in place based on of the tanks' close proximity to high voltage lines that made removal impossible. These USTs are the only known potential source of hydrocarbon release from the Earl Thompson property. Soil and soil vapor are not yet fully characterized at the Earl Thompson property. Additional remedial investigation has been required at the Earl Thompson property.

Oakland Masonic owns the 3903/3901 Broadway property, which is located upgradient and northeast of the Site. American Red Cross leases the 3901 property from Oakland Masonic. The American Red Cross installed an aboveground storage (AST) diesel tank in 1999. The tank is located within a concrete berm and there has never been a reported release from the diesel AST. There is no evidence that Oakland Masonic has ever stored TPH-ss, chlorinated solvents. There is no evidence that this AST is responsible for contamination at the Site.

A Unocal Service Station at 3943 Broadway is located cross-gradient and approximately 150 feet north of the Site. This site (case No.: 01-1596) has confirmed releases of petroleum hydrocarbons and fuel oxygenates to soil and groundwater. It is currently an active case. There is insufficient evidence to determine whether fuel-related constituents from this gas station commingled with contamination at the Site.

4. **Named Dischargers:** Stuart Depper became an owner of the Site around March 2011, receiving 49 percent ownership share as part of a Settlement Agreement according to the second amendment of the Martha R. Depper Living Trust (Letter to Regional Water Board, Harris, Hamman & Glick [May 24, 2017]). Prior to ownership, Stuart Depper was an operator at the Site from approximately 1989 through 1995 (Letter to Regional Water Board, Franklin Goldman [August 30, 2016]). Stuart Depper is named as a discharger because he currently co-owns the Site property and operated the dry cleaning business at the Site which discharged cleaning solvents and has an ongoing discharge of pollutants. He has knowledge of the discharge and activities that caused the discharge, and has the legal ability to control the discharge.

Eric Depper became an owner of the Site around March 2011, receiving 49 percent ownership share as part of a Settlement Agreement according to the second amendment of the Martha R. Depper Living Trust (Letter to Regional Water Board, Harris, Hamman & Glick [May 24, 2017]). Eric Depper conducted dry cleaning operations at the Site prior to ownership. Eric Depper owned and operated Professional Industrial Services at the Site starting in 1993 and was a route truck driver for Glovatorium from 1989 through 1992 (Letter to Regional Water Board, Franklin Goldman [November 27, 2015]). Eric Depper is named as a discharger because he currently co-owns the Site property and operated a dry cleaning business at the Site which discharged cleaning solvents and has an ongoing discharge of pollutants. He has knowledge of the discharge and activities that caused the discharge, and has the legal ability to control the discharge.

Glovatorium, Inc., is a named discharger because it discharged pollutants to soil and groundwater at the Site.

Steven Depper (Robert Depper's third son) is not named a discharger because he was not deeded the Oakland properties by Robert Depper. There are also no records indicating

Steven Depper was an operator of the Site or that he was an owner of the Site. Between 1974 and 1988, Steven Depper was the general manager of the Glovatorium, Inc., but did not operate the Site.

Martha Depper and Robert Depper are not named as dischargers because they passed away in 2015 and 2001, respectively.

The Regional Water Board has required parties at adjacent and upgradient properties to submit site history reports to determine if past activities on these properties could have contributed to contamination found at the Site. Based on a review of these site history reports and other evidence, the Regional Water Board finds no substantial evidence that adjacent and upgradient properties contributed to contamination found at the Site.

If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the Site where it entered or could have entered waters of the state, Regional Water Board staff will consider adding those parties' names to this Order.

- 5. **Regulatory Status:** Regulatory oversight of the Site was transferred from Alameda County to the Regional Water Board on May 31, 2012. The Site is subject to a section 13267 order dated July 17, 2015, but is not subject to a section 13304 order.
- 6. **Site Hydrogeology:** The Site is located on the alluvial plain between the San Francisco Bay shoreline and the Oakland Hills. Surface sediments in the Site's vicinity consist of Holocene alluvial deposits representative of an alluvial fan depositional environment. These deposits consist of brown, medium-dense sand that tend to fines upward to sandy or silty clay. The pattern of stream channel deposition results in a three-dimensional network of coarse-grained sediments interspersed with finer-grained silts and clays. The individual units tend to be discontinuous lenses aligned parallel to the axis of the former stream flow direction or north-south of the Site. The sediments encountered in soil borings are predominantly fine to medium grained sand, coarse sand, gravel, silty clay, sandy clay, gravelly clay and clayey silt.
- 7. **Hydrology:** Groundwater at the Site is shallow, with average depths to groundwater varying seasonally between 4 and 14 feet below the ground surface, and flows through the Site from the northeast toward the southwest (Re-evaluation of Preferential Pathways, report by SOMA Environmental Engineering, Inc. (SOMA Environmental, November 2005). Subsurface utilities at the Site, including a storm drain culvert and a sanitary sewer pipeline (Attachment 2) have been identified as possible conduits (SOMA Environmental 2005) acting as preferential pathways for contaminants. The storm drain is a 54-inch, nominal diameter utility that passes through the Site from Manila Avenue to the west to 38th Street to the south; the top of the storm drain ranges in depth from approximately 8.5 to 13.2 feet below ground surface. The sanitary sewer pipeline is a 10-inch, nominal diameter utility that connects floor drains at the Site to the main sewer pipeline on Manila Avenue. The sanitary sewer line at the Site is located at depths between approximately 2 to 5 feet below ground surface.

(MtBE)

The nearest surface water body downgradient of the Site is Lake Merritt. Lake Merritt lies approximately 1.1 miles to the south of the Site. The nearest public supply well is located approximately 4.6 miles to the east of the Site. Neither the well nor the lake are used for municipal water supply, as East Bay Municipal Water District (EBMUD) provides water to the area.

8. **Remedial Investigation:** To date, soil and groundwater remedial investigations have been conducted at the Site by various consultants beginning in 1990 until 2009. Based on those investigations, the maximum detected concentrations of contaminants are summarized in Table I below:

Contaminant	Groundwater (µg/l)	Soil (mg/kg)
PCE	2,800	320,000
TCE	340	0.48
Cis – 1,2 Dichloroethylene	1,200	1.0
Vinyl chloride	0.001	< 0.096
TPH-ss	9,400,000	91,000
TPH-diesel	1,300,000	2,100
TPH-gasoline	6,000	19,000
Benzene	0.002	< 0.0049
Methyl tert-butyl ether	170	0.044

Table 1: Historical Maximum Contaminant Concentrations by Medium

Concentrations of both chlorinated volatile organic compounds and petroleum hydrocarbons in groundwater are substantially above the drinking water standards. For example, the drinking water quality standard or maximum contaminant level (MCL) for PCE and TCE is $5\mu g/L$. The MCL for cis -1,2 DCE is $6.0 \mu g/l$ and the USEPA health advisory for TPH-diesel and TPH-gasoline is $100 \mu g/l$.

A soil vapor study was conducted in 2004 to evaluate the presence of chlorinated volatile organic compounds in soil vapor south west of the Site, next to the two nearby residences. This investigation concluded that the vadose zone beneath the residential units is not conducive to migration of the contaminant vapors, due to the low permeability of subsurface soils. However, the presumption that a clay cap is continuous offsite and onsite does not accurately reflect the Site's stratigraphic data, nor is it consistent with the expected conditions based on the alluvial depositional environment and the likelihood that portions of the Site include fill material. Boring logs B-1, B-7, and B-12 indicate that there is an average depth of 8 feet of fine to medium grain sand, coarse sand, and gravel below ground surface within these borings, respectively (GeoSolv LLC, 1998). The inability to collect soil vapor samples from a designated depth is not sufficient to assume that a potential for vapor intrusion does not exist without attempting to conduct sub-slab vapor sampling or side-step the sampling location. To date soil vapor has not been collected at the Site or offsite.

The remedial investigation is not complete. To date, soil vapor sampling data has not been collected below the Site and its vicinity. This data gap needs to be filled, to determine if additional source area investigation and remediation must be implemented at the Site to reduce the threat to water quality, public health, and the environment posed by the discharge of waste.

Additional evaluation of source areas and definition of the vertical and lateral extent of the constituents of concern in soil, soil vapor, and groundwater is also needed. In addition, a conduit study (pollutant preferential pathway study) is needed, due to the initial evidence of preferential pathways in the subsurface and the potential for those pathways to affect contaminant migration.

9. **Interim Remedial Measures**: Removal of free product (FP), predominantly TPH-ss, began in 2002 from well SOMA-4 and was accomplished with a skimmer pump. In August 2004, SOMA, consultant to Glovatorium, Inc. converted borings B-3 and B-8 (Figure 2, attached) into wells for removal of FP and later a pneumatic pump was introduced to remove FP from wells B-8R, B-10R, MPE-2, MPE-5, and SOMA 4R (Figure 2, attached).

Operation of a Multi-Phase Extraction (MPE) soil vapor and groundwater extraction system was conducted from 2008 through 2012. The MPE system extracted approximately 8,100 pounds of TPH-ss during system operations. The MPE operations were discontinued in 2013 as the Dischargers decided to rely on natural attenuation to degrade the constituents of concern.

The 2012 - 2015 groundwater monitoring data included in Table 2 below indicates that contaminant concentrations were lower following the discontinuation of interim remediation and a remedial option has not been implemented. In addition, this groundwater sampling data was only collected at a subset of monitoring wells and do not reflect a comprehensive distribution of the constituents of concern in groundwater at the Site and its vicinity. Also, the very high concentrations of TPH-ss in groundwater suggest the continued presence of free product at and near the Site, which needs additional delineation and remediation. The solubility limit of TPH-ss is low, only 5 ug/l, suggesting that free product is likely based on the 2015 data. Since the Dischargers have not implemented a remedial option, we are unable to determine if the contaminant plumes emanating from the Site are stable, therefore, a remedial option needs to be implemented. A recent report received including 2016 data has not been analyzed at the time of this writing based on the absence of quality assurance and quality control data.

Table 2: Maximum Contaminant Concentration Trends in Select Groundwater Monitoring Wells during and Following Interim Remediation

Contaminant	2012	2013	2014	2015
in	Maximum	Maximum	Maximum	Maximum
Groundwater	Contaminant	Contaminant	Contaminant	Contaminant
	Concentration	Concentration	Concentration	Concentration
	During	Post -	Post -	Post -
	Remediation	Remediation	Remediation	Remediation
	$(\mu g/l)$	$(\mu g/l)$	(µg/l)	(µg/l)
PCE	120	ND ²	170	90
TCE	360	ND ²	99	24
Cis – 1,2 DCE	1,800	28	1,300	1,200
Vinyl chloride	11	8.6	76	35
TPH-ss	230,000	100,000	22,000	8,100
TPH-diesel	N/A¹	N/A³	N/A³	N/A³
TPH-gasoline	340,0001	N/A³	N/A³	N/A³
Benzene	0.5	ND²	1.6	0.6
MtBE	15	ND²	170	120

¹ The analyzed chromatographs for TPH-diesel and TPH-gasoline did not exactly match the standard diesel and gasoline chromatographs.

Recent (2015) concentrations of contaminants in soil, groundwater, and soil vapor still significantly exceed applicable cleanup levels, as shown in Table 3.

Table 3: Soil, Groundwater, and Soil Vapor Contamination 2015 Analysis

	Soil (mg/kg)		Groundwater (µg/L)		Soil Vapor (µg/m ³)	
Contaminant	Maximum Level at the Site ¹	Residential / Commercial Shallow Soil Direct Exposure Human Health Risk Levels ²	Maximum Level at the Site ³	Groundwater MCL ⁴	Maximum Level at the Site ¹	Residential / Commercial Soil Gas Vapor Intrusion Human Health Risk Levels ²
PCE	0.708	0.6/2.7	90	5	116,583	240/2,100
TCE	0.0094	1.2/8.0	24	5	2,476	240/3,000
TPHss	5	160/820	8,100	150 ⁶	5	68,000/570,000
cis-1,2- Dichloroethylene	0.0067	19/90	1,200	6	ND ⁷	4,200/35,000

Bold text highlights reported contaminant concentrations above acceptable contamination levels.

- Soil samples were collected from the Site on November 11, 2015. Soil vapor samples were collected from the Site on November 23, 2015. Soil and soil vapor analysis results were reported to the Regional Water Board in a January 30, 2016, communication (Shallow Soil Sampling and Sub-slab Soil Gas Investigation and Human Health Risk Assessment of Chlorinated Solvents & Request for UST Site Closure).
- 2. Value from Regional Water Board ESL Workbook (Tier 1 ESLs Summary Tables), February 2016 Rev.

² ND: Not detected above the laboratory detection limit of 0.0005 μg/l.

³ N/A: Not Available. This analyte was not analyzed.

- 3. Groundwater samples were collected most recently from the Site on March 3, 2015. Analysis results were reported to the Regional Water Board in a March 20, 2015, report (*Final Groundwater Report of Hydrocarbons Related to the Underground Storage Tanks*).
- 4. MCL = Maximum Contaminant Level
- 5. TPHss not tested
- 6. MCL for TPHss not available. The value shown is the human health based number calculated for exposure to TPHss contaminated tap water.
- 7. ND = Not Detectable

The Dischargers need to substantiate and verify that the contaminant plumes are stable or decreasing in areal extent. Additionally, the Dischargers need to determine if additional secondary source removal is needed. This information is necessary because it will also assist in determining if a long-term monitoring program is needed to check for plume stability and contaminant rebound.

10. **Basin Plan:** The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board, Office of Administrative Law and the United States Environmental Protection Agency, where required.

The potential beneficial uses of groundwater underlying and adjacent to the Site include:

- a. Municipal and domestic water supply
- b. Industrial process water supply
- c. Industrial service water supply
- d. Agricultural water supply

At present, there are no known uses of the shallow groundwater zone underlying the Site or in the immediate area for the above purposes.

The existing and potential beneficial uses of Lake Merritt include:

- a. Industrial process supply or service supply
- b. Wildlife habitat
- c. Fish migration and spawning
- d. Estuarine habitat
- e. Shellfish harvesting
- f. Preservation of rare and endangered species
- 11. **Other Regional Water Board Policies:** Regional Water Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.

Regional Water Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels. No exceptions apply to the Site.

12. **State Water Board Policies:** State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* applies to this discharge. It requires maintenance of background levels of water quality unless a lesser water quality is consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in exceedance of applicable water quality objectives. This Order and its requirements are consistent with Resolution No. 68-16.

State Water Board Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under California Water Code (Water Code)*Section 13304 applies to this discharge. It directs the Regional Water Boards to set cleanup levels equal to background water quality or the best water quality which is reasonable, if background levels cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. The remedial action plan will assess the feasibility of attaining background levels of water quality. This Order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

- 13. **Preliminary Cleanup Goals:** Pending the establishment of site-specific cleanup levels, preliminary cleanup goals are needed for the purpose of conducting remedial investigation and interim remedial actions. These goals should address all relevant media (e.g., groundwater, soil, soil vapor, and indoor air) and all relevant concerns (e.g., groundwater, soil, soil vapor, and indoor air) and all relevant concerns (e.g., groundwater ingestion, migration of groundwater to surface waters, and vapor intrusion).
- 14. **Basis for a 13304 and 13267 Order:** Water Code section 13304 authorizes the Regional Water Board to issue orders requiring a discharger to cleanup and abate waste where the discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

As discussed above, each of the named dischargers has caused or permitted waste to be discharged or deposited into the waters of the State, and such discharge creates and threatens to create conditions of pollution and nuisance.

Water Code section 13267 provides that the Regional Water Board may require a person who has discharged or is suspected of having discharged, to furnish technical or monitoring reports. The burden, including costs, of producing the reports required in this Order bears a reasonable relationship to the need for the reports and the benefits to be obtained. As described herein, the residual contamination at the site potentially causes a threat to human health and the environment. Additional investigation and reports of those results are therefore necessary.

15. **Cost Recovery:** Pursuant to Water Code section 13304, the dischargers are hereby notified that the Regional Water Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Regional Water Board to investigate

unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.

- 16. **California Safe Drinking Water Policy:** It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
- 17. **California Environmental Quality Act (CEQA):** This action is an order to enforce the laws and regulations administered by the Regional Water Board. As such, this action is categorically exempt from the provisions of CEQA pursuant to California Code of Regulations, Title 13 section 15321.
- 18. **Notification:** The Regional Water Board has notified the dischargers and all interested agencies and persons of its intent under Water Code section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.
- 19. **Public Hearing:** The Regional Water Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to sections 13304 and 13267 of the Water Code, that the dischargers (or their agents, successors, or assigns) shall cleanup and abate the effects described in the above findings and provide technical reports as follows:

A. **PROHIBITIONS**

- 1. The discharge of wastes or hazardous substances in a manner that will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
- 2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.
- 3. Activities associated with the subsurface investigation and cleanup that will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. PRELIMINARY CLEANUP GOALS

The following preliminary cleanup goals shall be used to guide remedial investigation and interim remedial actions, pending establishment of site-specific cleanup levels.

a. Groundwater: Applicable screening levels such as the Regional Water Board's Environmental Screening Levels (ESLs) document. Groundwater screening levels shall

¹ See Regional Water Board webpage: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml

incorporate at least the following exposure pathways: groundwater ingestion and vapor intrusion to indoor air. For groundwater ingestion, use applicable water quality objectives (e.g. lower of primary and secondary maximum contaminant levels, or MCLs) or, in the absence of a chemical-specific objective, equivalent drinking water levels based on toxicity and taste and odor concerns.

- b. Soil: Applicable screening levels such as the ESLs document. Soil screening levels are intended to address a full range of exposure pathways, including direct exposure, nuisance, and leaching to groundwater. For purposes of this subsection, the discharger shall assume that groundwater is a potential source of drinking water.
- c. Soil vapor: Applicable screening levels such as the ESLs document. Soil vapor screening levels are intended to address the vapor intrusion to indoor air pathway.
- d. Indoor air: Applicable screening levels such as the ESLs document. Indoor air screening levels are intended to address the vapor intrusion to indoor air pathway.

C. TASKS

1. COMPLETION OF CONDUIT STUDY

COMPLIANCE DATE: February 28, 2018

Submit a technical report acceptable to the Executive Officer documenting completion of an up-to-date conduit study. A conduit study is required to evaluate the role of subsurface utilities in the migration or accumulation of the constituents of concern in the subsurface.

2. PUBLIC PARTICIPATION PLAN

COMPLIANCE DATE: February 28, 2018

Submit a technical report acceptable to the Executive Officer to ensure adequate public participation will be undertaken at key steps in the remedial action process leading to case closure.

3a. REMEDIAL INVESTIGATION WORKPLAN

COMPLIANCE DATE: March 29, 2018

Submit a work plan acceptable to the Executive Officer to evaluate all source areas including, but not limited to illicit connections and illegal discharges. The work plan should address the removal of secondary sources of contamination, define the vertical and lateral extent of the constituents of concern in soil, soil vapor, and groundwater. The workplan shall consider all relevant contaminants, media (soil, soil vapor, and groundwater), exposure pathways, and receptors. The workplan shall also include a building survey and indoor air investigation. It shall be designed so that its implementation shall produce site data needed to assess contamination threat to human health and the environment. The workplan shall specify investigation methods and a

proposed time schedule. Work may be phased to allow the investigation to proceed efficiently, provided that this does not delay compliance.

3b. COMPLETION OF REMEDIAL INVESTIGATION

COMPLIANCE DATE: December 30, 2018

Complete tasks in the Task 3a workplan and submit a technical report acceptable to the Executive Officer documenting their completion. The technical report shall define the vertical and lateral extent of pollution down to preliminary cleanup goals.

4a. REMEDIAL INVESTIGATION WORKPLAN (ADDITIONAL PHASE)

COMPLIANCE DATE: 90 days after required by Executive Officer

Submit a workplan acceptable to the Executive Officer to complete the definition of the vertical and lateral extent of subsurface pollution. The workplan shall consider all relevant contaminants, media (soil, soil gas, and groundwater), exposure pathways, and receptors. The workplan shall also include a building survey and indoor air investigation. It shall be designed so that its implementation shall produce site data needed to assess contamination threat to human health and the environment. The workplan shall specify investigation methods and a proposed time schedule. The Executive Officer will require this workplan if the previous phase of the remedial investigation complied with the approved workplan but did not adequately define the vertical and lateral extent of soil, soil vapor, and groundwater pollution (e.g., preliminary cleanup goals were exceeded at the most distant groundwater sampling points).

4b. COMPLETION OF REMEDIAL INVESTIGATION (ADDITIONAL PHASE)

COMPLIANCE DATE: According to schedule in task 4a approved by the

Executive Officer

Complete tasks in the Task 4a workplan and submit a technical report acceptable to the Executive Officer documenting their completion. The technical report shall define the vertical and lateral extent of pollution down to preliminary cleanup goals.

5. RISK ASSESSMENT WORKPLAN

COMPLIANCE DATE: 90 days after required by Executive Officer

Submit a workplan acceptable to the Executive Officer for preparation of either a screening level evaluation or a site-specific risk assessment. The workplan shall include a conceptual site model (i.e., identify contaminants, media, pathways, and receptors where Site contaminants pose a potential threat to human health or the environment). If a screening level evaluation is selected, the workplan shall identify which screening levels will be used and demonstrate that they address all relevant pathways and receptors for the Site. The Executive Officer will require a workplan after completion of remedial investigation.

6. COMPLETION OF HUMAN HEALTH RISK ASSESSMENT

COMPLIANCE DATE: According to schedule in task 5 approved by the

Executive Officer

Complete tasks in the Task 5 workplan and submit a technical report acceptable to the Executive Officer documenting their completion. The report shall comprise either a screening level evaluation or a site-specific risk assessment. The results of this report will help establish acceptable exposure levels, to be used in developing remedial alternatives in task 9 below.

7. INTERIM REMEDIAL ACTION WORKPLAN

COMPLIANCE DATE: 45 days after required by Executive Officer

Submit a workplan acceptable to the Executive Officer to evaluate interim remedial action alternatives for soil, soil vapor, and groundwater contamination and recommend alternatives for implementation onsite and/or offsite. The workplan shall specify a proposed time schedule for implementation of interim remedial actions. The Executive Officer will require this workplan if Site contamination poses a potential threat to human health (e.g., indoor air concentrations are above ESLs for the contaminants of concern).

8. COMPLETION OF INTERIM REMEDIAL ACTIONS

COMPLIANCE DATE: According to schedule in task 7 approved by the

Executive Officer

Submit a technical report acceptable to the Executive Officer documenting completion of the Task 7 workplan. For ongoing actions, such as soil vapor extraction, groundwater extraction, or mitigation of impacts to an offsite domestic or agricultural well, the report shall document start-up, monitoring, and ongoing operations as opposed to completion.

9. REMEDIAL ACTION PLAN INCLUDING DRAFT CLEANUP LEVELS

COMPLIANCE DATE: 90 days after Executive Officer approval of Task 8

Submit a technical report acceptable to the Executive Officer containing:

- a. Summary of the remedial investigation
- b. Evaluation of the installed interim remedial actions measures
- c. Feasibility study evaluating alternative final remedial actions
- d. Summary of risk assessment
- e. Recommended final remedial actions and cleanup standards
- f. Implementation tasks and time schedule

Item c shall include projections of cost, effectiveness, benefits, and impact on public health, welfare, and the environment of each alternative action.

Items a through c shall be consistent with the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), CERCLA guidance documents with respect to remedial investigations and feasibility studies, Health and Safety Code section 25356.1(c), and State Water Board Resolution No. 92-49 as amended ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code section 13304").

Item e shall consider the preliminary cleanup goals for soil and groundwater identified in Finding 13 and shall address the attainability of background levels of water quality (see Finding 12).

10. **DELAYED COMPLIANCE**

If the dischargers are delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the discharger shall promptly notify the Executive Officer, and the Regional Water Board or Executive Officer may consider revision to this Order.

D. **PROVISIONS**

- 1. **No Nuisance:** The storage, handling, treatment, or disposal of polluted soil or groundwater, shall not create a nuisance as defined in Water Code section 13050, subdivision (m).
- 2. **Good Operations and Maintenance (O&M):** The Dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.
- 3. Cost Recovery: The Dischargers are liable, pursuant to Water Code section 13304, to the Regional Board for all reasonable costs actually incurred by the Regional Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effect thereof, or other remedial action, required by this Order. The Site addressed by this Order is enrolled in a State Water Board-managed reimbursement program. Reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.
- 4. **Access to Site and Records:** In accordance with Water Code section 13267, subdivision (c), the Dischargers shall permit the Regional Water Board or its authorized representative:
 - a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - b. Access to copy any records required to be kept under the requirements of this Order.
 - c. Inspection of any monitoring or remediation facilities installed in response to this

Order.

- d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.
- 5. **Self-Monitoring Program:** The Dischargers shall comply with any Self-Monitoring Program as may be established by the Executive Officer.
- 6. **Contractor / Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.
- 7. **Lab Qualifications:** All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Regional Water Board using approved United States Environmental Protection Agency methods for the type of analysis to be performed. Quality Assurance/Quality Control records shall be maintained for Regional Water Board review. This provision does not apply to analyses that can only reasonably be conducted onsite (e.g. temperature).
- 8. **Document Distribution:** Copies of all correspondence, technical reports and other documents pertaining to compliance with this Order shall be provided to the following agencies:
 - Regional Water Board
 - City of Oakland Fire Department
 - Alameda County Department of Environmental Health Services

The Executive Officer may modify this distribution list as needed.

Electronic copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be uploaded to the State Water Board's GeoTracker database within five business days after submittal to the Regional Water Board. Guidance for electronic information submittal is available at: http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal

- 9. **Reporting Changed Owner or Operator:** The Dischargers shall file a technical report on any changes in contact information, Site occupancy or ownership associated with the property described in this Order. An amendment to this Order would be necessary to transfer this Order requirements to the new owner.
- 10. **Reporting of Hazardous Substance Release:** If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the dischargers shall report such discharge to the Regional Water Board by calling (510) 622-2369.

A written report shall be filed with the Regional Water Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of

effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the California Emergency Management Agency required pursuant to the Health and Safety Code.

- 11. **Periodic Order Review:** The Regional Water Board will review this Order periodically and may revise it when necessary. The Dischargers may request revisions and upon review the Executive Officer may recommend that the Regional Water Board revise these requirements.
- 12. **Rescission of Section 13267 Order:** The 13267 order dated July 17, 2015, is hereby rescinded upon the effective date of this Order, except for enforcement purposes.

I, Bruce H. Wolfe, Executive Officer, do hereby correct copy of an Order adopted by the Californ	•
Francisco Bay Region, on	
	Bruce H. Wolfe
	Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments:

Figure 1: General Vicinity Map

Figure 2: Site Map showing Locations of Monitoring Wells, Soil Borings, and Preferential

Flow Pathways



