Lahontan Regional Water Quality Control Board

February 28, 2025

To: Trestle South Tahoe LLC, Hurzel Properties, LLC, John O. Hurzel Family 1992 Trust, John O. Hurzel and Hattie Hurzel Family 1992 Trust, and Wing Tow Ong

Revised Cleanup and Abatement Order No. R6-2025-0005 Requiring Trestle South Tahoe LLC, Hurzel Properties, LLC, John O. Hurzel Family 1992 Trust, John O. Hurzel and Hattie Hurzel Family 1992 Trust, and Wing Tow Ong to Assess, Cleanup, and Abate Waste Discharged to Waters of the State Pursuant to California Water Code Sections 13267 and 13304 at 961 Emerald Bay Road, South Lake Tahoe, El Dorado County

Enclosed is Revised Cleanup and Abatement Order No. R6-2025-0005 (Order) issued to Trestle South Tahoe LLC, Hurzel Properties, LLC, John O. Hurzel Family 1992 Trust, John O. Hurzel and Hattie Hurzel Family 1992 Trust, and Wing Tow Ong (collectively "Dischargers") for the Former Norma's Cleaners (Site) previously located at 961 Emerald Bay Road in South Lake Tahoe, El Dorado County. This Order requires the submittal of technical and monitoring reports and other actions with associated compliance dates. This matter requires immediate attention.

If you have questions regarding the Order, please contact Anna Garcia at (760) 243-4261 or (anna.garcia@waterboards.ca.gov).

Jan M. Zimmerman, PG
Supervising Engineering Geologist

Enclosure: CAO No. R6-2025-0005 Former Normas Cleaners

cc w/Enc. (via email only): Former Norma's Cleaners CAO Mail Distribution List

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
REVISED CLEANUP AND ABATEMENT ORDER NO. R6-2025-0005
REQUIRING

TRESTLE SOUTH TAHOE, LLC
HURZEL PROPERTIES, LLC
JOHN O. HURZEL FAMILY 1992 TRUST
JOHN O. HURZEL AND HATTIE HURZEL FAMILY 1992 TRUST
JOHN HURZEL AND HATTIE HURZEL
WING TOW ONG

TO ASSESS, CLEANUP, AND ABATE
WASTE DISCHARGED TO WATERS OF THE STATE PURSUANT TO CALIFORNIA WATER CODE SECTIONS 13267 AND 13304

FORMER NORMA'S CLEANERS
ASSESSORS PARCEL NO. (APN) 023-191-21-100
961 EMERALD BAY ROAD (FORMERLY 949 EMERALD BAY ROAD)
SOUTH LAKE TAHOE, CA
SITE CLEANUP PROGRAM NO. T6S044
GEOTRACKER GLOBAL NO. SL0601790916

This Revised Cleanup and Abatement Order (CAO) No. R6-2025-0005 (Order) is issued to Trestle South Tahoe LLC, Hurzel Properties, LLC, John O. Hurzel Family 1992 Trust, John O. Hurzel and Hattie Hurzel Family 1992 Trust, and Wing Tow Ong based on provisions of Water Code sections 13267 and 13304, which authorize the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) to issue this Cleanup and Abatement Order and require the submittal of technical and monitoring reports.

The Lahontan Water Board finds that:

OVERVIEW

1. **Discharger(s):** Trestle South Tahoe LLC (Trestle), Hurzel Properties, LLC, John O. Hurzel Family 1992 Trust, John O. Hurzel and Hattie Hurzel Family 1992 Trust, and Wing Tow Ong are identified as "Dischargers" due to their or their predecessors:

    - Current or prior ownership of the property located at 961 Emerald Bay Road (formerly 949 Emerald Bay Road), South Lake Tahoe, during a time when a waste discharge occurred, and/or

    - Current or prior operations at the Former Norma's Cleaners resulted in the discharge of wastes, including the volatile organic compounds (VOCs) perchloroethylene (PCE) and PCE degradation compounds trichloroethylene (TCE), cis-1,2 dichloroethylene (cis-1,2 DCE), trans-1,2 dichloroethylene

(trans-1,2 DCE), 1,1 dichloroethylene (1,1 DCE), and vinyl chloride (collectively referred to as the contaminants of concern [COCs]), to the environment.

As detailed in this Order, Dischargers have caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the State, which creates, or threatens to create, a condition of pollution or nuisance. The presence of high levels of contamination in groundwater and soil vapor and the threat of vapor intrusion caused by these contaminants constitutes a public nuisance per se because the pollution occurred as a result of discharges of wastes in violation of the Water Code.

2. **Location:** The Site is located at Assessor's Parcel Number (APN) APN 023-191-21-100 at 961 Emerald Bay Road, South Lake Tahoe, California (formerly referred to as 949 Emerald Bay Road). Figure 1, *Site Location Map*, attached hereto and incorporated herein by reference, depicts the location of the Site. Additionally, Figure 2, *Annotated Site Conditions and Existing Utilities*, attached hereto and incorporated herein, depicts the buildings currently and formerly occupying the Site and the immediate surrounding area. Land use setting in the vicinity of the Site is commercial. Residential areas are located downgradient from the Site approximately 600 feet to the northwest near the intersection of James Avenue and 5th Street. The Site is located approximately 1,000 feet northeast of the former Lake Tahoe Laundry Works Site (Figure 3, *Lake Tahoe Laundry Works Site Plan and Vicinity*), which is located at the head of the regional PCE plume that extends from Lake Tahoe Boulevard to the Tahoe Keys (Figure 4, *Annotated Dissolved PCE in Groundwater Plume Map).* The area of the Lake Tahoe Basin adjacent to and downgradient from the Site relies on groundwater as its primary source of drinking water.[1]

3. **Site Description and Activities:** 949 Emerald Bay Road was the location of Norma's Cleaners (Site) which operated from approximately 1969 through 1977 (Figure 5, *Laundromat Floor Plan*). In 2014, the shopping center was redeveloped, which involved the demolition of the former building where the dry cleaner operated and the construction of a new commercial building. At that time, the Site address changed from 949 Emerald Bay Road to 961 Emerald Bay Road. The Site is currently owned by Trestle and occupied by a BevMo! retail outlet.

4. **Site History and Ownership:** The historical Site ownership and operations are summarized in Table 1 below.

[1] South Tahoe Public Utility District, 2020. Tahoe South Subbasin (6-005.01) Annual Report 2019 Water Year, April 27, page 8

Table 1 – Site Ownership and Operations History

APPROXIMATE PERIOD	NAME	TYPE
1964-1971	Wing Tow Ong	Property Owner
1971-1992	John Hurzel and Hattie Hurzel	Property Owner
1992-1998	Hurzel Family 1992 Trust	Property Owner
1998-2010	Hurzel Properties, LLC	Property Owner
2010-present	Trestle South Tahoe, LLC	Property Owner
1969-1977	Norma's Cleaners	Operator

5. **Chemical Usage:** Depositions from Mrs. Norma Thayer, former owner of Norma's Cleaners, technical reports, regulatory correspondence, public comments, and other documents available in the case file indicate that PCE, a chlorinated solvent, was stored and used in a coin operated dry cleaning unit (DCU) at the Site from approximately 1969 to 1977.

EVIDENCE OF WASTE DISCHARGE AND BASIS FOR SECTION 13304 ORDER

The above sections summarize the ownership and document chemical usage at the Site. The following evidence indicates waste discharges occurred:

6. **Observations of Waste Discharges:** Discharges occurred as a result of spills and leaks associated with operation of the DCU and/or delivery of the PCE dry cleaning solvent. A May 30, 2008 *Site Investigation Report* prepared by Secor International Incorporated (Secor) detailed the probable release history which is described below:

    a. *"Based on a review of previous reports prepared as a result of site investigations and historical research conducted at the site, the probable release history is most likely the result of PCE residue that was generated during the dry cleaning process and the method used to deliver the dry cleaning solvent to the dry cleaning machine located in the building. An interview conducted with the former owner of the dry cleaning establishment, Ms. Norma Thayer (MACTEC, August 2003), indicated that the facility operated one dry cleaning machine from approximately 1969 to 1977. Residue from the dry cleaning process was collected by draining to a sealed plastic bucket that was located on the floor next to the dry cleaning machine. Disposal of the residue included either being placed into the trash dumpster for disposal with normal trash products, or occasionally the PCE vendor would take the residue if the bucket was full when the PCE delivery was made. The dry cleaning machine was re-filled with PCE on an as-needed basis. A private PCE supplier would refill the PCE tank about once every three months. A volume of five to ten gallons would be required to recharge the machine. Re-filling the dry cleaning machine with PCE was performed by the supplier. The refilling routine included running a hose from the supply truck to the*

machine and pumping PCE into the holding tank. The pump was located on the supply truck, and a meter was present on the supply truck to record the volume delivered. The supply truck had a mounted bulk PCE tank with a distribution hose that was hard plumbed to the meter and tank. The supply truck typically parked in the vicinity of the boiler room exterior door on the northwest side of the facility. The hose was run through the boiler room to the dry cleaning machine, a distance of approximately 50 feet. Suspected releases from the delivery truck hose and fittings during and after filling events over the course of the eight-year dry cleaner operation most likely created the source of PCE still present at the site today."

7. **Investigations:** The following investigation activities have been completed at the Site and by others in the near vicinity:

8. In 2001, on behalf of Hurzel Properties, LLC, Harding ESE conducted a groundwater investigation at the Site. Investigation results revealed that groundwater beneath the Site was impacted with PCE. Concentrations of PCE in all samples collected exceeded the California Maximum Contaminant Level (MCL) for PCE of 5 micrograms per liter (µg/L) with concentrations ranging from 6.6 to 450 µg/L (Figure 6, *Site Plan*). Investigation results revealed that PCE concentrations in groundwater were highest at the water table and decreased with depth which suggested that the Site is a source of PCE contamination.

9. In 2003, on behalf of Hurzel Properties, LLC, MACTEC, Inc. conducted a soil investigation in the vicinity of the former DCU and PCE delivery parking area at the Site. Six soil samples were collected from three boring locations (Figure 5, *Laundromat Floor Plan*) at depths between 0.5 and 4.5 feet below ground surface (bgs). Concentrations of PCE in two soil samples exceeded the San Francisco Bay Regional Water Quality Control Board's Commercial/Industrial Environmental Leaching to Groundwater Environmental Screening Level (ESL) of 0.08 milligrams per kilogram (mg/kg). The maximum concentration of PCE was 0.12 mg/kg at 4.5 feet bgs and was detected near the PCE delivery parking area. These investigation results confirm that unauthorized discharges have occurred in the delivery parking area and in the vicinity of the DCU.

10. During the 2003 MACTEC, Inc. soil investigation, borings B1 and B2 were likely not advanced at the location of the former DCU. As indicated in the 2003 MACTEC, Inc. report, information provided by Norma Thayer indicated, "*the dry cleaning machine was built into a wall that has since been removed and the front of the machine was facing the current main open floor space*" and "*the dry cleaning machine was approximately four feet wide by eight feet long, and five feet tall.*" Figure 5, *Laundromat Floor Plan,* shows the building layout relative to the location of the soil samples collected and Figure 7, *Soil Confirmation Samples in Excavation,* provides illustration of the location of the removed wall described by Norma Thayer. Review of the two figures indicate the former DCU would likely have been located to the

west of location show in Figure 5, *Laundromat Floor Plan* and the B1 and B2 soil sample locations. The nature and extent of contamination around the former DCU remain undefined.

11. In 2007, on behalf of Hurzel Properties, LLC, Secor conducted additional soil and groundwater investigation activities within the Site's property boundary. Of the 36 soil samples collected, PCE was detected in four soil samples, collected from 2 feet bgs, at concentrations ranging from 0.024 mg/kg to 0.19 mg/kg (Figure 8, *Preliminary Soil Concentration Map).* Of the 20 groundwater samples collected, PCE was detected above the MCL in 12 samples (Figure 9, *Preliminary Groundwater Concentration Map*). Groundwater results indicated PCE concentrations in groundwater increased with depth. PCE was detected in shallow groundwater samples at concentrations ranging from 1.4 µg/L to 44 µg/L. PCE concentrations in groundwater were highest in middle zone groundwater samples with concentrations ranging from 140 µg/L to 1,500 µg/L. The distribution of PCE concentrations in groundwater and reported groundwater flow directions and elevations (see Findings 13 and 14), coupled with the locations and depths of known soil contamination, indicate that unauthorized discharges to groundwater have occurred at the Site.

12. In 2007, on behalf of Hurzel Properties, Secor installed four shallow groundwater monitoring wells screened from 9 feet bgs to 24 feet bgs to monitor groundwater prior to, and after, Site remediation activities (Figure 10, *PCE Groundwater Concentration Map*). In 2008, on behalf of Hurzel Properties, Secor replaced one shallow groundwater monitoring well that was inadvertently installed at an adjacent property. Four quarters of groundwater monitoring were conducted in Site monitoring wells from November 2007 to September 2008. Monitoring results indicated that the highest PCE concentrations were detected in an upgradient (a location that is the source of groundwater for another location; similar to upstream) monitoring well with concentrations ranging from 600 µg/L to 1,300 µg/L. PCE concentrations in the other Site monitoring wells ranged from 6.5 µg/L to 400 µg/L during this time. The groundwater results indicated (1) potential discharges from the Site, (2) an upgradient source(s) has contributed to on-Site (i.e., land within the Site's property boundaries, both above and below the ground surface, hereafter "on-Site") groundwater contamination, and (3) the groundwater monitoring well network was not sufficient to evaluate the lateral and vertical extent of contamination and the Site's potential contribution to the regional PCE plume.

13. During the groundwater monitoring period (November 2007 to September 2008), groundwater was encountered at depths ranging from 8.02 feet below top of casing (BTOC) to 12.34 feet BTOC. In 2018, the Lake Tahoe Laundry Works (LTLW) site, located at 1024 Lake Tahoe Boulevard, installed shallow monitoring well OS-4S in James Avenue, located approximately 50 feet northwest of Site's northern property corner (Figure 3, *Lake Tahoe Laundry Works Site Plan and Vicinity*). Groundwater in this well has been encountered at depths ranging from 2.23 feet BTOC to 9.65 feet BTOC (between 2018 and 2021). The groundwater monitoring data (from the Site

and the Lake Tahoe Laundry Works Site) confirms that the groundwater table at and near the Site fluctuates seasonally and is affected by the amount of precipitation the area receives. This indicates that shallow soil contaminated with PCE at the Site was likely in contact with groundwater at various points in time following the time of discharge. The contact of groundwater with contaminated soil at the Site, and the subsequent leaching of PCE contamination from Site soil into groundwater, has allowed the off-Site (defined as any land both above and below the ground surface that is outside of the Site's property lines/boundaries, hereafter off-Site) migration of PCE in groundwater to occur. Any remaining soil contamination at depths that could potentially leach into groundwater in the future continues to pose a threat to human health by causing groundwater contamination.

14. Significant shifts in the groundwater flow direction were indicated during the four quarters of groundwater monitoring conducted at the Site (Figure 11, *Groundwater Elevation Map – September 30, 2008* and Figure 12, *Groundwater Elevation Map - June 30, 2008*). During the fall and winter months, the reported predominant groundwater flow direction was towards the north-northwest, and during the spring and summer months the flow was towards the north. Steeper hydraulic gradients (i.e., larger differences in measured groundwater elevations that influence groundwater velocities) were also reported in the fall and winter months. The significant shifts in groundwater flow direction and gradients observed during the limited (about 1 year) groundwater monitoring period (relative to the release timeframe (about 40 years) indicates that past (and current) PCE contamination originating from the Site may have migrated in a wide range of groundwater flow directions. Lukins Brother Water Company Well #3 (LBWC #3) was located approximately 600 feet to the west of the Site (Figure 4, *Annotated Dissolved PCE in Groundwater Plume Map*) and operated until 1989, when PCE was detected above the MCL. Historical groundwater pumping (pre-1989) from LBWC #3 likely affected local groundwater flow directions and gradients.

15. The Site investigation activities conducted to date did not consider the release timeframe and the potential for off-Site migration of PCE in groundwater to occur. The lateral and vertical extent of PCE discharge was never determined during the investigation activities conducted at the Site and investigation activities are therefore incomplete.

16. In July 2017, environmental consultants for the LTLW site collected grab groundwater samples at various depths from 19 locations within the South "Y" Area, including three locations along James Avenue (J2, J3, and J4) in the vicinity of the Site (Figure 13, *Multi Depth Groundwater Sample Locations and PCE Results*). In borings J2, J3, and J4, the highest PCE concentrations were reported within the "middle" zone interval (35-39 feet bgs) with PCE concentrations ranging from 351 µg/L to 718 µg/L. PCE concentrations within the "shallow" zone interval (18-22 feet bgs) ranged from 3.46 to 25 µg/L. Monitoring well OS-1 (Figure 3, *Lake Tahoe Laundry Works Site Plan and Vicinity*) located near the southern property boundary

and screened within the "shallow" zone (10-25 feet bgs), reported PCE concentrations of 1.1 and 1.4 µg/L, during the May and September 2017 groundwater monitoring events, respectively. This groundwater data shows that elevated PCE concentrations remain in "middle" zone groundwater at locations within the inferred range of historical groundwater flow directions and documents an increase in PCE concentrations across the Site within the "shallow" zone interval, indicating potential discharges to groundwater from the Site, which may be contributing to the regional PCE plume.

17. In 2018, environmental consultants for the LTLW site installed groundwater monitoring well pair OS-4S/M (Figure 3, *Lake Tahoe Laundry Works Site Plan and Vicinity*) approximately 50 feet to the northwest of the Site's northern property boundary (i.e., downgradient from the Site). Since installation, PCE concentrations have ranged between 0.5 µg/L and 5.2 µg/L in "shallow" zone monitoring well (OS-4S) and between 40 µg/L and 540 µg/L in "middle" zone monitoring well (OS-4M). PCE concentrations in both wells have decreased since monitoring began but concentrations in OS-4M remain above the MCL. The groundwater concentrations above MCL in OS-4M confirm that groundwater downgradient from the Site poses a threat to the municipal and domestic water supply (MUN) beneficial use.

18. In July 2019, discrete depth groundwater samples were collected from eight depth intervals at boring CPT-F01 (Figure 14, *Cross Section Map*), located approximately 150 feet to the west of the northern property boundary, during the Site Cleanup Subaccount Program (SCAP) Regional PCE Plume Investigation. PCE concentrations were reported in perched groundwater (i.e., shallow groundwater separated from underlying regionally extensive groundwater by an unsaturated zone) between 4 and 6 feet bgs (0.3 J µg/L; J is a data qualifier indicating that the detection is an estimate) and PCE concentrations above the MCL were reported between 20 and 22 feet bgs (14 µg/L) and 41 and 43 feet bgs (320 µg/L). The PCE concentrations in perched groundwater and in "shallow" zone (i.e., regionally extensive) groundwater indicate PCE concentrations extend from the surface and are consistent with discharges from the Site.

19. In November 2020, on behalf of Trestle, RMC Geoscience, Inc. (RMC) conducted a passive soil gas investigation as an initial step in a phased approach to address the identified data gaps in the historical Site investigations. The investigation results indicate elevated PCE concentrations in soil gas remain in the vicinity of areas where PCE contamination in soil was previously detected (e.g., PCE solvent delivery area, underneath the existing building near the former DCU and boring BH-16). PCE concentrations in soil gas were detected above the Commercial/Industrial vapor intrusion ESL of 67 micrograms per cubic meter (µg/m^3) within the former excavation area near the PCE delivery parking area (Figure 15, *Soil Vapor Probe PCE Concentration Contours*) which is located (1) directly adjacent to the current BevMo! building and (2) in the vicinity of boring B3, where uncertainty remains as to whether the previously identified contaminated soil was actually removed during the 2008

excavation activities (see Finding 26a). The maximum concentration of PCE in soil gas reported was 145 µg/m^3. The passive soil gas investigation (1) was intended to provide an initial screening of Site conditions to help guide future soil, soil gas, and groundwater sampling to further evaluate potential threats to human health and the environment, (2) confirmed the need for additional soil, soil gas, and groundwater sampling to evaluate potential threats to human health and the environment, and (3) indicated unacceptable uncertainty in the current conceptual Site model to proceed with Site-specific vapor intrusion to indoor air risk modeling as currently proposed (i.e., without additional data collection).

20. In October and December 2020, on behalf of Trestle, RMC conducted a geophysical survey of the Site and a camera survey of the current sewer lateral for the BevMo! building. Results of the investigation activities were described and illustrated in the February 10, 2021 *Results of Soil Vapor Probe Investigation* (Figure 2, *Annotated Site Conditions and Existing Utilities*). The information submitted did not contain sufficient detail and discussion to understand the layout of the sanitary sewer and stormwater conveyance systems prior to, and following Site re-development activities completed in 2014 (i.e., the differences in the subsurface utilities layout during the release timeframe versus the current subsurface utility layout). RMC submitted additional information on August 26, 2021 to address staff's August 5, 2021 comments related to the stormwater conveyance system uncertainty and to support work plan development. RMC subsequently provided work plans dated September 3, 2021 and November 4, 2021 which included discussion of the stormwater conveyance system. The documentation and work plans submitted to date do not adequately describe how surface water from the Site is currently collected, conveyed, and discharged. The Site is not connected to the City of South Lake Tahoe's stormwater conveyance system, and the information provided to date does not indicate all stormwater discharge locations from the Site (e.g., stormwater discharge location from the eastern side of the former building) or evaluate the disposition of the two drop inlets on the southeastern side of the former building that were supposedly retained during construction activities but have not been located and do not appear to be present currently.

21. The 2020 camera survey identified several potential discharge points in the sanitary sewer lateral including from root intrusion, a pipe joint offset, a pipe joint separation, pipe fractures, and pipe corrosion. Lahontan Water Board staff also note that soil gas sample SVP-22, which was collected to evaluate conditions near the storm drain, indicated a PCE concentration of 16.8 µg/m^3. Investigations conducted to date have not evaluated utility backfill or potential transport along preferential pathways. Additional investigation is necessary to 1) verify the locations of the former and current features and alignments of the stormwater conveyance and sanitary sewer systems and 2) evaluate potential contaminant transport within and adjacent to the backfill materials.

22. Additional investigation activities are necessary to determine the extent of PCE in soil gas, soil, and groundwater at the Site to evaluate the potential risk to human health from direct contact and vapor intrusion to indoor air exposure pathways. Cleanup and abatement of PCE in soil gas, soil, and groundwater may be necessary to (1) protect building occupants from the vapor intrusion to indoor air pathway, and (2) protect the MUN beneficial use of groundwater.

23. Previous investigation activities and current soil gas investigation results indicate waste was discharged near the former DCU and boring BH-16 (i.e., underneath the current building and in the parking lot east of the former and current buildings). The identified PCE contamination in these areas has not been adequately delineated and no remediation has occurred. Further, boring B2 may not have been located directly beneath the former DCU and as such may not accurately represent Site conditions in a known source area (see Finding 10). Although these areas are located beneath the current building that has a vapor barrier, the remaining contamination in these areas poses a threat to human health from direct contact and vapor intrusion to indoor air exposure pathways (e.g. soil contamination under the building may be in contact with groundwater during seasonal shallow groundwater conditions leading to further groundwater contamination and any penetrations (e.g. utility corridors) through the vapor barrier may allow for soil vapor contaminant transport into the building). Due to (1) the recent detections of PCE in soil vapor at concentrations above the vapor intrusion ESL in the former PCE delivery area (i.e., excavation area directly adjacent to existing building), (2) remaining uncertainty about the extent of excavation activities performed relative to identified soil contamination adjacent to the existing building (see Finding 26a), (3) remaining uncertainty about the location of the former DCU and conditions in the vicinity, and (4) PCE concentrations above MCLs in downgradient areas, evaluations of the threat posed to human health via the vapor intrusion to indoor air pathway at the Site and to the MUN beneficial use are required.

24. Recent soil gas investigation results indicate residual PCE contamination remains in place near the remedial excavation area (i.e., the former delivery area) and that previous remedial actions did not reduce soil gas concentrations to below the vapor intrusion ESL. PCE remains in place around the primary release location and additional evaluation is needed to evaluate the nature and extent of remaining contamination, demonstrate remedial effectiveness, assess potential threats to human health and the environment, and determine if additional mitigation measures are required.

25. The Lahontan Water Board has reviewed and evaluated the technical reports and records pertaining to the discharge, detection, and distribution of wastes at the Site and the Site vicinity. The Site assessment results indicate that the soil, soil vapor and/or groundwater are or were previously impacted with wastes exceeding screening levels and potential threats to human health and the environment remain:

a. Current soil data are needed to evaluate the Site's current contribution of PCE discharging to groundwater. The maximum concentration of PCE in the soil matrix reported prior to remedial actions was 0.190 mg/kg. The previous concentration of PCE in the soil matrix exceeds the SF Bay's Commercial Leaching to Groundwater ESL for soil by an order of magnitude indicating prior to remediation, impacted soil posed a threat to groundwater quality through leaching. Any soil contamination remaining in the various known discharge areas (e.g., former excavation, DCU, and BH-16 areas) may also contribute to groundwater contamination when it is in direct contact with the seasonally shallow groundwater via leaching.

b. The maximum concentration of PCE in the soil vapor is 145 µg/m^3, which exceeds the SF Bay's Commercial Vapor Intrusion ESL of 15 µg/m^3 for residential land use and 67 µg/m^3 for commercial/industrial land use, respectively. The maximum concentration of PCE in soil vapor is reported adjacent to the existing building in the former excavation area where questions remain about the extent of excavation performed in the area and if previously identified contamination was excavated to the maximum extent practicable.

c. No current on-Site groundwater data are available. The maximum concentrations of PCE in the groundwater recently reported in the inferred down-gradient direction in borings and monitoring wells is 718 µg/L and 40 µg/L (2017, boring J4 and 2021, monitoring well pair OS-4M), respectively. The concentrations of PCE in the groundwater greatly exceed the MCL and the SF Bay's Aquatic Habitat ESL of 120 µg/L.

d. The depth to groundwater in the Site area ranges from approximately 2 to 12 ft bgs. Because the depth to groundwater is shallow, the presence of the PCE in groundwater beneath the Site threatens to cause vapor intrusion into buildings. Seasonally shallow groundwater may also be in direct contact with soil contamination, which may contribute to further groundwater contamination.

e. Additional areas of impacted soil remain unaddressed and the extent of contamination in these areas is undefined. The contamination in these areas may dissolve from soil into shallow groundwater and serve as an ongoing source of groundwater contamination. The threat to the MUN beneficial use of groundwater from these areas must be evaluated where concentrations of PCE may be in direct contact with seasonally shallow groundwater or otherwise leach into groundwater.

f. The presence of PCE in soil gas along the stormwater conveyance system, the location of identified soil contamination, standard stormwater management practices at the time of discharge, and Site history indicate stormwater runoff contaminated with PCE from the Site likely was transported via surface flow as directed by the Site's grading to the former stormwater conveyance system's

drop inlets and then discharged to the stormwater conveyance detention basin or to unknown location(s) (Figure 16, *Preferential Pathway Inventory*).

g. Investigation activities conducted to date have not evaluated potential threats or impacts to surface water beneficial uses, including minor surface waters and minor wetlands, and ecological receptors. Chlorinated hydrocarbon concentrations in groundwater have been reported above ESLs intended for protection of aquatic habitats.

26. **Source Elimination and Remediation Status:** The following source removal and soil cleanup activities have been completed at the Site:

a. In January and February 2008, on behalf of Hurzel Properties, LLC, Secor excavated and disposed of PCE-impacted soil in the delivery parking area on the northwest side of the Site building. Approximately 368 cubic yards of soil were removed and transported to a landfill. Two confirmation soil samples were taken from the bottom of the excavation and were below the reporting limit of 0.02 mg/kg. No confirmation samples were taken from the excavation sidewalls (Figure 7, *Soil Confirmation Samples in Excavation*). Imported fill material was brought to the Site to backfill the excavation. Comparison of Figure 5, *Laundromat Floor Plan* and Figure 7, *Soil Confirmation Samples in Excavation* indicate that the contaminated soil identified in B3 was not removed during the excavation activities. The potential threat to human health posed by remaining contamination in the former excavation area via the vapor intrusion to indoor air and direct contact pathways, including as a potential source of groundwater contamination, remain data gaps.

b. The May 30, 2008 *Site Investigation Report* noted an area of subsidence within the excavation area where a 10 foot by 10 foot rebar enforced concrete layer was placed "in an effort to create a bridge over the area of subsidence". Insufficient information exists about the reason for the depression, which could be due to increased permeable soil, high groundwater table, an ongoing leaking water line, or other preferential pathways. Soil samples were not taken in this area of the excavation. Potential preferential contaminant transport in this area remains a data gap.

c. Remediation was not conducted near the DCU and in the parking area near the southwest portion of the Site building where PCE was detected in soil (Boring BH-16 area). The extent of contamination in soil, soil gas, and groundwater in these areas and potential threat to human health are data gaps.

27. **Regulatory Status:** On July 12, 2001, the Lahontan Water Board issued a directive, pursuant to Water Code section 13267, requiring Hurzel Properties, LLC to perform a groundwater investigation of the Site.

a. On July 12, 2001, the Lahontan Water Board issued a directive, pursuant to Water Code section 13267, requiring Hurzel Properties, LLC to perform a groundwater investigation of the Site.

b. On July 8, 2003, the Lahontan Water Board issued a directive, pursuant to Water Code section 13267, requiring Hurzel Properties, LLC and Norma Thayer to prepare a workplan for a source investigation (soil, soil vapor and groundwater investigation) of the Site.

c. On May 8, 2007, the Lahontan Water Board met with Rick Frost Hurzel of Hurzel Properties, LLC and subsequently requested preparation of a cleanup plan, acknowledging an upgradient source(s), but noting that PCE in groundwater increases across the Site at concentrations exceeding the MCL.

d. In 2007 and 2008, the Lahontan Water Board observed soil excavation activities at the Site and conducted a Site visit upon completion of the investigation.

e. In 2008, following submission of excavation and quarterly monitoring data, the Lahontan Water Board issued a No Further Action letter. The letter contains a reopener: "should the site conditions at the site be shown to be a significant threat or impact on health, safety and the environment or land use change, NFAR status may be rescinded and additional steps to protect the groundwater or health and safety may be required."

f. The Case Closure Summary for the Site also based closure upon the following premise: "No wells, drinking water, surface water or other receptors are likely to be contaminated. The site currently presents no significant risk to human health or the environment." The conclusions in the Case Closure Summary were based upon an incomplete Site investigation and available data at the time. PCE in groundwater was never delineated prior to case closure and new data are now available, which indicate PCE concentrations have been found extending off-Site and in several downgradient municipal and domestic water supply wells.

g. In May 2019, the Lahontan Water Board issued an order (May 2019 Order), pursuant to Water Code section 13267, requiring Trestle, Rick Frost-Hurzel, Hurzel Properties, LLC, Mr. Suds, LLC, and Heidi's Laundromat to submit a technical report and complete a site history and chemical usage questionnaire[2]. The intent of this order was to address data gaps from prior investigations and assess the Site's potential contribution to the regional PCE plume. Trestle has performed the "first phase" of an investigation, and collected some soil gas data, but has not complied with the entirety of the order requirements.

[2] Questionnaires were submitted in June 2019 by Trestle So Tahoe LLC and in September 2019 by Rick Frost-Hurzel and Mr. Suds, LLC. It was determined that Mr. Frost-Hurzel never owned the property as an individual, and that Mr. Suds, LLC, and Heidi's Laundromat did not use, store, or dispose of any chemicals of concern.

h. On August 27, 2019, January 10, 2020, and April 15, 2021, the Lahontan Water Board issued Notices of Violation for failure to complete the required investigations. On April 29, 2021, the matter was referred to the State Water Resources Control Board (State Water Board) Office of Enforcement.

i. On April 30, 2021, Thomas Bruen, legal counsel for Trestle, provided the email re *Response to Third Notice of Violation re 961 Emerald Bay Road, South Lake Tahoe*. Thomas Bruen and legal counsel from the Office of Enforcement (OE) and the Office of Chief Counsel (OCC) subsequently met via teleconference on July 16, 2021.

j. Following the July 16, 2021 meeting, Thomas Bruen directed RMC to work with Lahontan Water Board staff to develop a work plan that would satisfy the May 2019 Order.

k. On August 4, 2021, RMC provided the email re: *Trestle SLT Phase 2 Work Plan Discussion* which included the *2021-08-02 Phase 2 Investigation work Plan Framework (v3).pdf* attachment and met via teleconference with Lahontan Water Board staff. On August 5, 2021 Lahontan Water Board staff provided the email re: *Trestle SLT Phase 2 Work Plan Discussion* which provided a summary of the major discussion items and identified work plan deficiencies during the August 4, 2021 teleconference.

l. On August 5, 2021, Thomas Bruen met with legal counsel from OE and OCC, and Lahontan Water Board staff to discuss progress toward May 2019 Order compliance.

m. On August 26, 2021, RMC provided the email re: *Information to Support Phase 2 Work Plan at Trestle SLT Property* which included the *2021-08-23 Phase 2 Investigation Information (v1).pdf* attachment.

n. On September 3, 2021, RMC submitted the *Phase 2 Work Plan* dated September 3, 2021.

o. On September 27, 2021, Lahontan Water Board staff met with RMC to discuss the September 3, 2021 *Phase 2 Work Plan* and identified deficiencies in the proposed work. Following the meeting, Lahontan Water Board staff provided the email re 9/27 teleconference follow-up which included the *961 Emerald Bay 2021 9 24 Comments on Phase II WP.pdf* attachment. The attachment provided a summary of the data gaps identified in the May 2019 Order, evaluated if the proposed work would be sufficient, and provided recommendation for compliance.

p. On September 28, 2021, RMC provided the email re: *9/27 teleconference follow-up* which provided a summary of RMC's understanding of the September 27 teleconference discussion.

q. On November 4, 2021, RMC submitted the *Phase 2 Work Plan* dated October 22, 2021.

r. On February 8, 2022, Lahontan Water Board staff issued the *Notice of Deficient Workplan* letter which provided a summary of the data gaps identified in the May 2019 Order, evaluated if the proposed work would be sufficient, and provided recommendations for compliance.

s. On March 17, 2022, RMC provided a letter dated March 15, 2022, which included two attachments titled "*Response Comments to Lahontan Regional Water Quality Control Board Alleged Work Plan Deficiencies*" and "*Response Comments to Lahontan Regional Water Quality Control Board Phase 2 Scope of Work*", respectively.

t. Following May 2019 Order issuance, Lahontan Water Board staff has received public comments from PES Environmental, Inc. on a variety of the technical report and work plan submittals. Public comments from PES Environmental, Inc were received on August 23, 2019, December 22, 2020, May 14, 2012, October 14, 2021, and December 1, 2021. The public comments received identify inconsistencies and potential issues with submitted reports and work plans.

28. **Impairment of Drinking Water Wells:** The Lahontan Water Board has the authority to require the Dischargers who have contributed to the regional PCE plume to pay for or provide uninterrupted replacement water service to each affected public water supplier or private well owner in accordance with Water Code section 13304. Figure 4, *Annotated Dissolved PCE in Groundwater Plume Map* shows 1) the extent of the regional PCE plume relative to affected municipal supply wells and 2) the Site location near the head/origin of the regional PCE plume. The location of the Site within the regional PCE plume, and the soil gas, soil, and groundwater data confirming that the unauthorized discharge of PCE waste has occurred at the Site, support the critical need for additional investigation at the Site. This Order also requires cleanup to address the extent of PCE waste discharged/discharging from the Site.

29. **Sources of Information:** The sources of information supporting this Order include but are not limited to: reports and other documentation in Lahontan Water Board files, including meeting and telephone calls documentation, and e-mail communication with Dischargers, their attorneys, and/or consultants, and site visits. Relevant reports and data are available at GeoTracker Global ID No. SL0601790916 (GeoTracker (ca.gov).

AUTHORITY – LEGAL REQUIREMENTS

30. Water Code section 13304, subdivision (a) provides that:

"(a) Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board, or a regional board, may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."

31. Water Code section 13304, subdivision (c)(1) provides that:

". . . the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions. . ."

32. Water Code section 13267, subdivision (b)(1) provides that:

"In conducting an investigation . . ., the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region . . .shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports."

33. This Order requires investigation and submittal of work plans and reports (collectively referred to as reports) as well as ongoing monitoring and other tasks required pursuant to WC section 13267. The burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Specifically, the reports are needed in order to adequately delineate the extent and amount of waste discharged, assess the threat of continuing discharge and to facilitate compliance with implementing cleanup and abatement activities required by this Order, with the ultimate goal of restoring water

quality and protecting beneficial uses, including the drinking water supplies of the entire community of South Lake Tahoe. The record contains extensive evidence of the benefits to be obtained, including protecting an entire community from PCE, which is a classified by the EPA as a likely carcinogen to humans. Public health threats are not only in the form of impacts to drinking water supplies (which may be treated at the wellhead), but also include the potential for PCE vapors to volatilize up from the water table, potentially impacting the indoor air of residences and businesses overlying the plume. PCE vapors are not typically noticed (unlike a gas leak, for example), meaning that a person may inhale vapors for years without having any indication. The benefits to be obtained from the requirements for investigation include ensuring the protection of human health of local residents whose businesses and homes overlie the plume.

34. Additional benefits to be obtained include protection of the community's drinking water, both immediately and from threatened impacts that could occur in the future. Municipal supply wells spanning three water districts have been impaired (PCE concentration detected above the MCL), impacted (PCE concentration detected below the MCL), or threatened (PCE has not been detected above the reporting limit but may be come impacted or impaired in the future due to regional PCE plume migration) by the regional PCE plume. The three affected water districts include the South Tahoe Public Utility District, Lukins Brothers Water Company and Tahoe Keys Water Company. These three water districts serve approximately 40,000 residents and hundreds of commercial properties. These three water districts provide 97 percent of the South Lake Tahoe's community water supply. With the increased threat and severity of catastrophic wildfires in California, the ability of the community to rely upon these water resources is even more critical.

35. Based upon Lahontan Water Board staff experience with similar investigations, the approximate cost of these reports is in the range of $75,000 to $750,000, depending upon the extent of the discharge. The burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained. Specifically, the technical reports required by this Order are necessary assure compliance with Water Code section 13304 and State Water Board Resolution 92-49, including to adequately investigate the extent and persistence of discharges, and intrinsic to cleanup of the site to protect the beneficial uses of waters of the state, to protect against nuisance, and to protect human health and the environment.

36. The State Water Board has adopted Resolution No. 92-49, the Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304 (Resolution 92-49). This Policy sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Water Board Resolution 68-16, the Statement of Policy With Respect to Maintaining High Quality of Waters in California (Resolution 68-16). Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up

to background, or if that is not feasible, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with California Code of Regulations, title 23, section 2550.4.

37. The Lahontan Water Board's *Water Quality Control Plan for the Lahontan Region* (herein after "Basin Plan"), which was initially adopted on March 31, 1995, and amended from time-to-time, identifies beneficial uses and establishes water quality objectives to protect beneficial uses. The Site lies within the Tahoe South Subbasin of the Tahoe Valley Groundwater Basin (TVS Basin) of the Lake Tahoe Hydrologic Unit. As set forth in the Basin Plan, the designated beneficial uses for groundwater in the Lake Tahoe Hydrologic Unit include MUN, agricultural supply (AGR), and industrial service supply (IND). Water quality objectives to protect the beneficial use of MUN that apply to the groundwater at the Site include the "Chemical Constituents and Radioactivity", which incorporates by reference state maximum contaminant levels set forth in Title 22 of the California Code of Regulations. The MCLs for PCE and TCE is 5 µg/L, and cis-1,2 DCE is 6 µg/L. As discussed in the Findings of this Order, the concentrations of chlorinated hydrocarbons in groundwater at and downgradient of the Site exceed the water quality objectives applicable to the wastes.

38. Regionwide Prohibitions in Section 4.1 of the Basin Plan include:

    a. The discharge of waste that causes violation of any narrative or numeric water quality objective contained in this Plan is prohibited.

    b. Where any numeric or narrative water quality objective contained in this Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.

    c. The discharge of waste that could affect the quality of waters of the state that is not authorized by the State or Regional Water Board is prohibited.

39. Unit/Area Prohibitions for the Lake Tahoe Hydrologic Unit in Section 5.2 of the Basin Plan include a prohibition of the discharge attributable to human activities of any waste or deleterious material to surface waters (e.g., the stormwater conveyance system and Tucker Basin) of the Lake Tahoe Hydrologic Unit.

40. The designated beneficial uses of minor surface waters and minor wetlands for the South Tahoe Hydrologic Unit are MUN, AGR, GWR, REC1, REC2, COMM, COLD, WILD, and SPWN. Water quality objectives to protect these beneficial uses include narrative and numerical water quality objectives in the Basin Plan. As set forth in Finding 37, the discharges of waste at the site exceed the water quality objectives applicable to the wastes.

41. The exceedance of applicable narrative or numeric water quality objectives in the Basin Plan constitutes contamination, pollution and nuisance as defined in Water Code section 13050.

42. The threat of vapor intrusion into buildings at and near the Site warrants additional investigation due to the potential of causing nuisance as defined in Water Code section 13050, subdivision (m). In particular, the threat of vapor intrusion is potentially "injurious to health, indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property and affects at the same time an entire community and occurs during or as a result of the treatment or disposal of waste."

43. The Lahontan Water Board may require the Dischargers to submit a Public Participation Plan or engage in other activities to disseminate information and gather community input regarding the Site, as authorized or required by Water Code sections 13307.1, 13307.5 and 13307.6.

44. This Order requires investigation and cleanup of the site in compliance with the Water Code, the applicable Basin Plan, State Water Board Resolutions 92-49 and 68-16, and other applicable plans, policies, and regulations. All Dischargers are responsible for complying with each and every requirement, unless otherwise specifically noted.

DISCHARGER LIABILITY

45. PCE and other waste constituents discharged at the site constitute "waste" as defined in Water Code section 13050, subdivision (d).

46. The relevant facts and the evidence indicate that the following Dischargers caused or permitted waste to be discharged into waters of the state and are therefore appropriately identified in this Order:

Trestle

47. Trestle is a discharger because, as the current owner of the property, it has caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance.[3] As the current owner of the property, Trestle has the legal ability to control the discharge.

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[3] *Tesoro Refining & Marketing Company LLC v. Los Angeles Regional Water Quality Control Board*, 42 Cal.App.5th 453, 457 (2019), held "the term 'discharge' must be read to include not only the initial occurrence [of a discharge], but also the passive migration of the contamination into the soil." The Court affirmatively cited State Board precedent: "State Board held that a continuous and ongoing movement of contamination from a source through the soil and into the groundwater is a discharge to waters of the

Hurzel Properties, LLC

48. Hurzel Properties, LLC, is a discharger because it was the former property owner during a timeframe when discharges occurred, and knew or should have known that activities on the Site created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance, and had ability to control those discharges.

Hurzel Family 1992 Trust

49. Hurzel Family 1992 Trust, is a discharger because it was the former property owner during a timeframe when discharges occurred, and knew or should have known that activities on the Site created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance, and had ability to control those discharges.

John Hurzel and Hattie Hurzel

50. John Hurzel and Hattie Hurzel are dischargers because they were the former property owner during a timeframe when discharges occurred, and knew or should have known that activities on the Site created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance, and had ability to control those discharges.

Wing Tow Ong

51. Wing Tow Ong is a discharger because he was the former property owner from 1964 to 1971, when discharges occurred, and knew or should have known that activities on the Site created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance, and had ability to control those discharges.

Norma Thayer

52. Norma Thayer is a discharger because, as the operator of the dry cleaner using PCE at the Site, the dry cleaning activities caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has

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state and subject to regulation." (*Ibid*., citing State Water Board Order WQ 86-2 (*Zoecon Corp*), WQ74-13 (*Atchison, Topeka, et al*), and WQ 89-8 (*Spitzer*) ["[D]ischarge continues as long as pollutants are being emitted at the site"]. See also State Water Board Order WQ 89-1 (*Schmidl*).) Under California law, courts have historically held, and modern courts maintain, that possessors of land may be liable for a nuisance on that land even if the possessor did not create the nuisance. (See *Leslie Salt Co. v. San Francisco Bay Conservation and Dev. Comm'n* (1984) 153 Cal.App.3d 605, 619–620).

created, and continues to threaten to create, a condition of pollution or nuisance. Norma Thayer is deceased as of November 3, 2014.

53. Decades of Lahontan Water Board staff experience with industries that use, store, and transfer chemicals such as petroleum products and chlorinated solvents (e.g., total petroleum hydrocarbons, VOCs, etc.), provide evidence that small amounts of spilled chemicals discharge during routine operations, seep through concrete and other intended containment, leading to the type of contamination found at the Site. The water boards are currently overseeing numerous cleanup operations resulting from improper and inadequate handling of hazardous materials. Standard chemical handling practices often unknowingly allow adverse environmental impacts, like the ones observed at the Site, to occur. These factors, taken as a whole, lead to the conclusion that the Dischargers have discharged chemicals of concern which must be cleaned up and abated to protect the environment and human health[4]. Lahontan Water Board files contain extensive evidence of publicly available information concerning the knowledge of the use of chlorinated solvents (including PCE) resulting in discharges and contamination of water supplies during the relevant timeframe.

54. Due to the activities described in this Order, the Dischargers have caused or permitted wastes, including PCE, to be discharged or deposited where the wastes are, or probably will be, discharged into the waters of the State which creates a condition of pollution or nuisance.

55. The Dischargers have caused or permitted chlorinated solvents (including PCE) to be discharged or deposited where the wastes are or probably will pose a potential human health threat to occupants of the Site through direct contact exposure to contaminated soil, soil vapor and/or groundwater, or through vapor intrusion into indoor air or through other exposure pathways.

56. The Lahontan Water Board will consider whether additional dischargers caused or permitted the discharge of waste at the Site, and whether additional dischargers should be added to this Order. The Lahontan Water Board may amend this Order or issue a separate order or orders in the future as more information becomes available. The Lahontan Water Board is issuing this Order to avoid further delay of Site investigation and remediation, which only becomes more costly with the passage of time.

57. The May 10, 2019 investigative order required Dischargers to submit technical and monitoring reports. All aspects of the May 2019 Order remain in full force and effect. The obligations contained in this Order do not supersede or replace the

[4] State Board Order WQ 86-16 (*Stinnes-Western*) supports the use of evidence of chemical use, standard chemical handling practices, and detections of that chemicals in the environment as reasonable bases supporting a cleanup and abatement order. "As we noted earlier, given the very low action levels for these chemicals, today we are concerned with <u>any</u> discharge." (*Ibid.* at n. 4.)

requirements contained in the May 2019 Order, although the Lahontan Water Board will accept consolidated reports that address the requirements of this CAO and the May 2019 Order. The May 2019 Order remains in effect for enforcement purposes; the Lahontan Water Board and/or the State Water Board may take enforcement actions (including, but not limited to, issuing administrative civil liability complaints) against Dischargers who have not complied with directives contained in previously issued orders.

OTHER CONSIDERATIONS

58. Issuance of this Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) in accordance with title 14, California Code of Regulations, sections 15061, subdivision (b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger(s) to submit plans for approval prior to implementation of cleanup activities at the Site. Mere submittal of plans is exempt from CEQA, as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is not enough information concerning the Dischargers' proposed remedial activities and possible associated environmental impacts. If the Lahontan Water Board determines that implementation of any plan required by this Order will have a significant effect on the environment, the Lahontan Water Board will conduct the necessary and appropriate environmental review prior to Executive Officer's approval of the applicable plan.

59. Pursuant to Water Code section 13304, the Lahontan Water Board may seek reimbursement for all reasonable costs to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action.

60. 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 the Discharger(s) to clean up the groundwater to meet drinking water standards.

61. Any person aggrieved by this action of the Lahontan Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and title 23, California Code of Regulations, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Filing a petition does not stay the requirements of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request or may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality

REQUIRED ACTIONS

THEREFORE, IT IS HEREBY ORDERED, pursuant to Water Code sections 13304 and 13267 that the Discharger(s) shall investigate, cleanup the waste and abate the effects of waste forthwith discharging at and from **961 Emerald Bay Road**. "Forthwith" means as soon as reasonably possible, but in any event no later than the compliance dates established in Attachment A. More specifically, the Dischargers shall:

1. **Develop and Submit a Conceptual Site Model**

   The Conceptual Site Model (CSM) shall include a written presentation with graphic illustrations of discharge scenario, geology and hydrogeology, waste fate and transport in soil, soil vapor, and groundwater, distribution of wastes, exposure pathways, sensitive receptors and other relevant information. The CSM shall be based upon the actual data already collected from the Site and be prepared in accordance with the most recent available USEPA and DTSC guidance[5]. The CSM can be included as part of the initial Site Investigation Work Plan (Order No. 2) or as a standalone document. The CSM shall:

   a. Provide a written presentation with graphic illustrations of nature and extent of contaminants of concern (COCs) in soil, soil vapor, and groundwater originating from the Site and potential and known impacts of contamination to human and ecological receptors.

   b. Include a description of discharge scenario(s), Site geology and hydrogeology, on-Site and off-Site preferential pathways (e.g., stormwater conveyance system, sanitary sewer, other subsurface utilities), distribution of wastes in soil, soil vapor, and groundwater, exposure pathways, sensitive receptors (i.e., schools, day cares, nursing homes, etc.) and water supply wells.

   c. Identify data gaps to be addressed in the Site Investigation Work Plan(s).

   d. The CSM and routine CSM updates (as new data becomes available) acceptable to the Executive Officer shall be submitted in conformance with the requirements detailed in Attachment A, Time Schedule.

2. **Develop, Submit, and Implement Site Investigation Work Plan(s)**

   The Site Investigation Work Plan(s) (SIWP) shall propose investigation activities to update on-Site and off-Site information with the data required to define the full lateral and vertical extent of the discharge and evaluate potential threats to human health and ecological receptors. The data required will be used to support development of the Human Health and Ecological Risk Assessment (Order 3) and recommendations

[5] DTSC's June 2012 Guidelines for Planning and Implementing Groundwater Characterization of Contaminated Sites

for appropriate interim (Order 4a) and final (Order 4c) remedial actions to cleanup and abate contamination. The SIWP shall:

a. Fully assess the lateral and vertical extent of wastes in soil, soil vapor, and groundwater to support evaluation of the potential threat from each media through each relevant exposure pathway for all identified constituents of concern (COC) originating from the Site. "Fully assess" means the Dischargers must perform step-out sampling, both laterally and vertically, until soil and soil vapor concentrations are defined to the applicable ESLs (i.e., direct exposure, vapor intrusion, terrestrial habitat, leaching to groundwater) and groundwater concentrations of COCs are defined to 0.5 µg/L (i.e., the reporting limit for each COC; the method detection limit will be utilized as the practical limitation for defining natural background concentrations) unless an alternative that meets remedial objectives is proposed by the Dischargers and accepted by the Executive Officer. If investigation data are being collected to support the Human Health and Ecological Risk Assessment, applicable health and ecological-based screening levels shall be considered when developing data quality objectives for the SIWP.

b. Fully assess the extent of discharges along preferential pathways (e.g., stormwater conveyance system, sanitary sewer, other subsurface utilities) to support evaluation of the potential threats to human health.

c. Update the current concentrations of waste constituents in indoor air by conducting an indoor air survey to assess potential vapor intrusion to building(s) and efficacy of current mitigation measures.

d. Provide an implementation schedule for delineation activities described above.

e. Document the procedural and analytical requirements for sampling soil, soil vapor, surface water (if applicable), subsurface utility backfill (e.g., stormwater and sanitary sewer conveyance system backfill) and groundwater.

f. Describe the quality assurance procedures, quality control activities, and technical activities that will be implemented to ensure data quality objectives are met.

g. Phased Site Investigation may be warranted, and completion of the full Site Investigation may require multiple submittals of work plans for review and approval.

h. A SIWP, acceptable to the Executive Officer, shall be submitted in conformance with the deadline detailed in Attachment A, Time Schedule.

i. Scheduling, completion, and reporting of all Site Investigation related activities required in this Order shall be conducted in conformance with the requirements detailed in Attachment A, Time Schedule.

3. **Prepare and Submit a Human Health and Ecological Risk Assessment**

Prepare and submit a human health risk assessment (HHRA) and an ecological risk assessment, considering all waste constituents in the soil, soil vapor, surface water, and groundwater, all exposure pathways and sensitive receptors and applying existing regulatory human health and ecological screening levels and/or acceptable risk assessment models in accordance with current guidance. The Human Health and Ecological Risk Assessment (HHERA) shall, at a minimum:

a. Evaluate the potential risk COCs pose to the complete exposure pathways for soil and groundwater (i.e., ingestion, dermal exposure, inhalation and ecological exposure).

b. Evaluate the potential risk COCs pose to the vapor intrusion to indoor air pathway for soil vapor and groundwater, including potential short-term exposure to TCE.

c. Compare available soil, soil vapor, surface water, and groundwater COC concentrations to soil, soil vapor, and groundwater ESLs and MCLs to evaluate the potential and known threats the remaining contamination poses to human health and ecological receptors.

d. Complete a screening level evaluation or a Site-specific risk assessment. If Dischargers complete a Site-specific risk assessment, exposure levels selected must be relevant for exposure pathways and receptors for the Site and shall be acceptable to the Executive Officer and may be reviewed by the California Office of Environmental Health Hazard Assessment (OEHHA). Acceptable exposure levels for Site COCs shall be considered when developing remedial alternatives.

e. The HHERA shall conform with the most current guidance documents[6], and be acceptable to the Executive Officer.

f. A HHERA, acceptable to the Executive Officer, shall be submitted in conformance with the deadlines in Attachment A, Time Schedule.

[6] Preliminary Endangerment Assessment Guidance Manual (DTSC, Revised October 2015), Supplemental Vapor Intrusion Guidance, DTSC HERO HHRA Note 5, Vapor Intrusion Mitigation Advisory (DTSC. 2011b), San Francisco Bay Regional Water Board Vapor Intrusion Framework (SF Bay Water Board, 2014), and Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air (USEPA, 2015)

4. **Conduct Remedial Actions**

Develop and implement a cleanup and abatement program for the cleanup of wastes in the soil, soil vapor, and groundwater and the abatement of the effects of the discharges of waste on beneficial uses of water, human health, and the environment. Remedial actions shall include, at a minimum:

a. Submit an Interim Remedial Action workplan (IRAP), consistent with State Water Board Resolution No. 92-49, to evaluate interim remedial action alternatives where COCs exceed screening levels for protection of human health and the environment. The IRAP shall evaluate on-Site and off-Site areas affected by discharges originating from the Site and provide the technical basis for selecting and designing final remedial measures. The workplan shall recommend one or more alternatives for implementation and include plans to address immediate threats identified through currently available information and from data collected during SIWP implementation. The workplan shall specify a proposed time schedule. Work may be phased to allow the investigation to proceed efficiently.

b. Complete tasks in Interim Remedial Action workplan and submit a technical report acceptable to the Executive Officer documenting completion. For ongoing actions, such as soil vapor extraction or indoor air remediation and/or monitoring, the report shall document start-up as opposed to completion.

c. Develop a comprehensive Remedial Action Plan(s) (RAP) for cleanup of wastes in the soil, soil vapor and groundwater originating from the Site and submit to the Executive Officer for review and approval. The RAP shall include, at a minimum:

   i. A feasibility study or assessment report for evaluation of the cleanup technologies considered for remediation of soil, soil vapor and groundwater and the need for interim remedial measures and pilot tests. Multiple remedial measures may be needed and may be implemented to achieve all cleanup goals.

   ii. Cleanup proposals for soil, soil vapor and groundwater that comply with State Water Board Resolution No. 92-49 and Resolution No. 68-16.

   iii. A description of the selection criteria for choosing the proposed method over other potential remedial options. Discuss the technical merit, suitability of the selected method under the given Site conditions and waste constituents present, economic and temporal feasibility, and immediate and/or future beneficial results.

   iv. A description of any pilot projects intended to be implemented.

v. An estimation of cumulative mass of wastes to be removed with the selected method. Include all calculations and methodology used to obtain this estimate.

vi. A proposed schedule for completion of the RAP.

d. An IRAP and a RAP, acceptable to the Executive Officer, shall be submitted in conformance with the requirements detailed in Attachment A, Time Schedule.

e. Scheduling, implementation, completion, and reporting of all IRAP and RAP related activities required in this Order shall be conducted in conformance with the requirements detailed in Attachment A, Time Schedule.

5. **Prepare and Submit a Public Participation Plan**

The Dischargers shall submit information and take actions addressing public participation requirements of Water Code sections 13307.5 and 13307.6 as required in Attachment A or when otherwise directed by the Executive Officer. The Dischargers are required to prepare and submit a Public Participation Plan for review and approval by the Executive Officer, with the goal of having the Lahontan Water Board provide the stakeholders and other interested persons with periodic, meaningful opportunities to review, comment upon, and to influence investigation and cleanup activities at the Site. The following tasks shall be completed by the deadlines in Attachment A:

a. Submit an interested persons contact list.

b. Submit a draft fact sheet that provides information, appropriately targeted to the literacy and translational needs of the community, about the investigation and remedial activities concerning the discharges of waste at the Site.

c. Deliver an approved fact sheet to all interested persons on a schedule to be determined by the Executive Officer.

d. Public participation activities shall coincide with key decision-making points throughout the process as specified or as directed by the Executive Officer.

e. Scheduling, implementation, completion, and reporting of all public participation plan related activities required in this Order shall be conducted in conformance with the requirements detailed in Attachment A, Time Schedule.

6. **Conduct Groundwater Monitoring**

Implement a groundwater monitoring program if determined necessary following Site Investigation completion (Order No. 2) as set forth in Attachment B. The groundwater monitoring reports shall be submitted according to the schedule specified in Attachment A.

7. **Time Schedule**

The Dischargers shall submit all required work plans and reports and complete work within the time schedule set forth in Attachment A attached hereto and incorporated herein by reference, and as extended by any approved work or IRAP or by the Executive Officer at his/her discretion.

OTHER REQUIREMENTS AND SPECIFICATIONS

8. **Authorized Inspection and Entry**

To the extent allowed by law, each Discharger shall provide the Lahontan Water Board's authorized representative(s) permission to:

a. Entry upon premises owned by such Discharger where a regulated facility or activity is located, conducted, or where records are stored, under the conditions of this Order;

b. Access to copy any records that are stored under the conditions of this Order;

c. Access to inspect any facility, owned by such Discharger, and equipment (including monitoring and control equipment), practices, or operations conducted by Dischargers regulated or required under this Order; and,

d. The right to photograph, sample, and monitor the Site for the purpose of ensuring compliance with this Order, or as otherwise authorized by the Water Code.

9. **Contractor/Consultant Qualification:**

As required by the Business and Professions Code sections 6735, 7835, and 7835.1, all reports shall be prepared by, or under the supervision of, a California registered professional civil engineer or geologist and signed by the registered professional. All technical reports submitted by the Discharger(s) shall include a statement signed by the authorized representative certifying under penalty of law that the representative has examined and is familiar with the report and that to his knowledge, the report is true, complete, and accurate. All technical documents shall be signed by and stamped with the seal of the above-mentioned qualified professionals that reflects a license expiration date.

10. **Compliance with All Laws and Requirements**

This Order is not intended to permit or allow the Discharger(s) to cease any work required by any other Order issued by the Lahontan Water Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup, or remediation programs ordered by the Lahontan Water Board or any other agency. Furthermore, this Order does not exempt the Discharger(s) from compliance with any other laws, regulations, or ordinances and from any requirements of other agencies.

11. **Notice of Changed Name or Ownership**

Trestle, the Discharger that is the current property owner, shall submit a notice to the Lahontan Water Board 30-days in advance of any planned changes in name, ownership, or control of the Site and shall provide a notice to the Lahontan Water Board 30-days in advance of any planned physical changes to the Site that may affect compliance with this Order. In the event of a change in ownership or operator, Trestle, the Discharger that is the current property owner, also shall provide a notice 30-days in advance, by letter, to the succeeding owner/operator of the existence of this Order and shall submit a copy of this advance notice to the Lahontan Water Board. Transfer of ownership does not automatically transfer responsibility for the requirements in this Order.

12. **Well Abandonment Approval**

Abandonment of any groundwater well(s) at the Site must be approved by and reported to the Lahontan Water Board at least 30 days in advance. Any groundwater wells removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With written justification, the Executive Officer may approve the abandonment of groundwater wells without replacement. When a well is removed, all work shall be completed in accordance with California Department of Water Resources Bulletin 74-90, "California Well Standards," Monitoring Well Standards Chapter, Part III, Sections 16-19.

13. **Extensions**

In the event compliance cannot be achieved within the terms of this Order, the Discharger(s) has the opportunity to request, in writing, an extension of the time specified. The extension request shall include an explanation why the specified date could not or will not be met and justification for the requested period of extension. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. Extension requests not approved in writing with reference to this Order are denied.

14. **Delegated Authority to the Executive Officer**

The Lahontan Water Board, through its Executive Officer, may revise this Order as additional information becomes available. Upon request by the Dischargers, and for good cause shown, the Executive Officer may defer, delete, or extend the date of compliance for any action required of the Dischargers under this Order. The authority of the Lahontan Water Board, as contained in the Water Code, to order investigation and cleanup, in addition to that described herein, is in no way limited by this Order.

Reference herein to determinations and considerations to be made by the Lahontan Water Board regarding the terms of the Order shall be made by the Executive

Officer or his/her designee. Decisions and directives made by the Executive Officer with respect to this Order shall be as if made by the Lahontan Water Board.

15. **Continue Uninterrupted Cleanup and Abatement**

Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished and this Order has been rescinded.

16. **Cost Reimbursement**

Reimburse the Lahontan Water Board for the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup and abatement activities, or taking other remedial action of the waste at or emanating from the Site. Provide the Lahontan Water Board with the name or names and contact information for the person to be provided billing statements from the State Water Resources Control Board.

17. **Reports Submitted Under Penalty of Law**

The Lahontan Water Board, under the authority given by Water Code section 13267, subdivision (b)(1), requires you to include a perjury statement in all reports submitted under this Order. The perjury statement shall be signed by a senior authorized representative (not by a consultant). The perjury statement shall be in the following format:

"I, [NAME], certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

18. **Electronic Submission of Reports**

On September 30, 2004, the State Water Board adopted the resolution to revise regulations in Chapter 30, Division 3 of Title 23 of CCR, which requires persons to ensure electronic submission of laboratory analytical data (i.e., soil, soil vapor, or groundwater chemical analysis) and locational data (i.e., location and elevation of groundwater monitoring wells) via the Internet to the State Water Board's GeoTracker database. You must upload all available Electronic submittal of information (ESI) concerning the Site to the State Water Board's GeoTracker database: the report (in PDF format), laboratory analytical data (in electronic data

format [EDF]), monitoring event information in GEO_WELL format, an updated site map (GEO_MAP) showing any new monitoring well locations, boring logs in PDF (GEO_BORE) to be used to link to well locations, monitoring well latitude and longitude (GEO_XY) survey data, and monitoring well elevation data (GEO_Z). Hard copy paper reports, which have already been electronically uploaded to GeoTracker, are no longer required to be submitted to the Water Board. The regulations and other background information are available at https://geotracker.waterboards.ca.gov

19. **Enforcement**

Failure to comply with the terms or conditions of this Order may result in imposition of civil liabilities, imposed either administratively by the Lahontan Water Board or judicially by the Superior Court in accordance with Water Code sections 13268, 13304, 13308, and/or 13350, and/or referral to the Attorney General of the State of California.

20. **Bankruptcy**

None of the obligations imposed by this Order on the Dischargers are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of California intended to protect the public health, safety, welfare, and environment.

Ordered by: _____ Date: February 28, 2025
(*for*) MICHAEL R. PLAZIAK, PG
EXECUTIVE OFFICER

List of Figures:

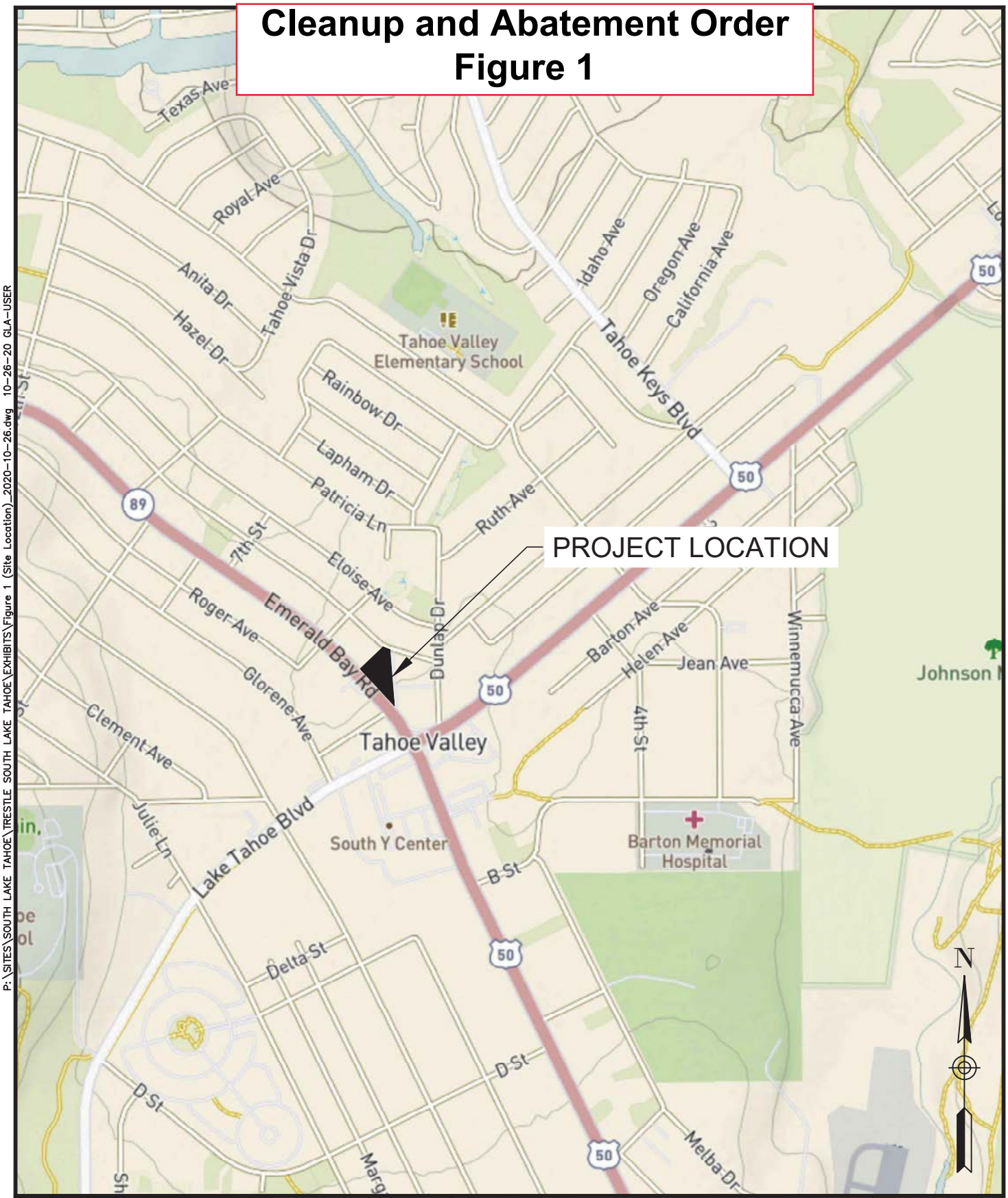
Attachments:

FIGURES

FIGURE 1: SITE LOCATION, INVESTIGATION WORK PLAN
(RMC GEOSCIENCE, INC.[RMC], 2020)

RMC. 28 October 2020. Investigation Work Plan to Address the Lahontan Regional Water Quality Control Board Section 13267 Technical Report Requirements for the Property Located at 961 Emerald Bay Road, South Lake Tahoe.

Cleanup and Abatement Order
Figure 1



P:\SITES\SOUTH LAKE TAHOE\TRESTLE SOUTH LAKE TAHOE\EXHIBITS\Figure 1 (Site Location)_2020-10-26.dwg 10-26-20 GLA-USER

RMC GEOSCIENCE
ENGINEERING GEOLOGY - ENVIRONMENTAL GEOSCIENCE
405 EAST D STREET, SUITE 112
PETALUMA, CA 94952
TEL: 415.699.8073
FAX: 707.765.1924

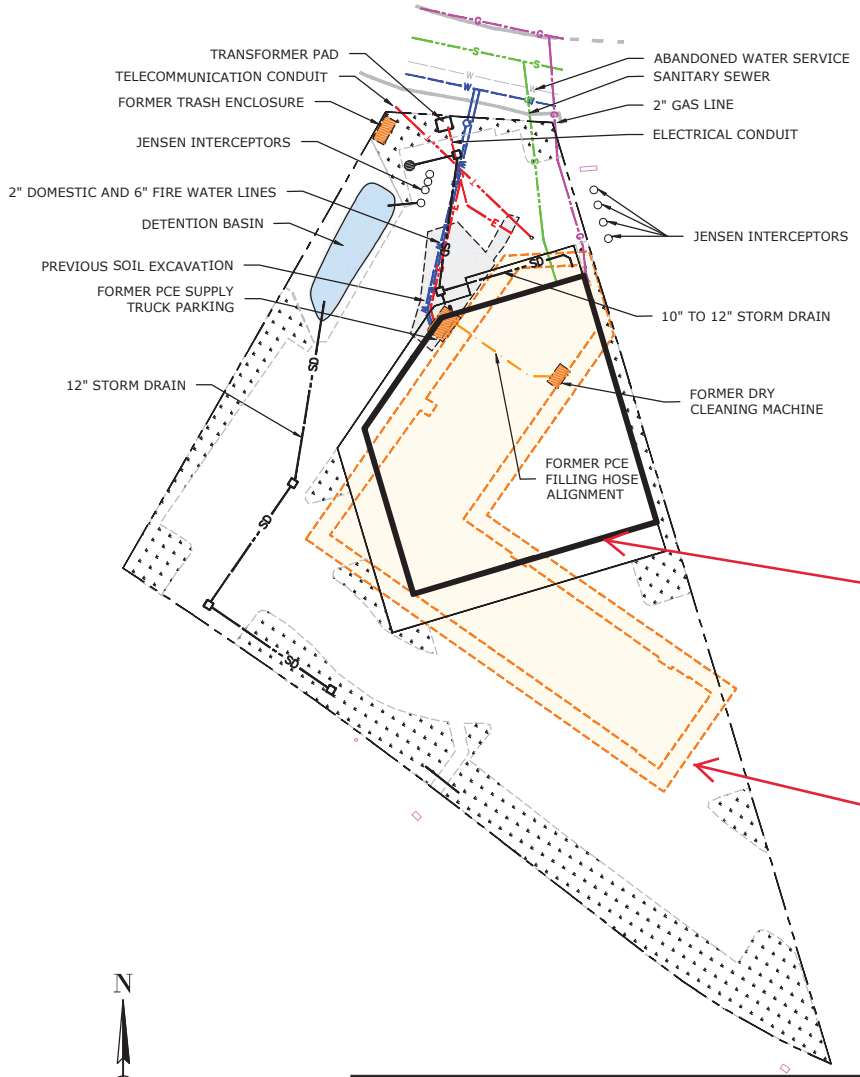
Trestle South Lake Tahoe 961 Emerald Bay Road	DATE: October 2020
SITE LOCATION	FIGURE: 1

FIGURE 2: ANNOTATED SITE CONDITIONS AND EXISTING UTILITIES, INVESTIGATION WORK PLAN

(RMC, 2020, ANNOTATED BY LAHONTAN WATER BOARD STAFF)

RMC. 28 October 2020. Investigation Work Plan to Address the Lahontan Regional Water Quality Control Board Section 13267 Technical Report Requirements for the Property Located at 961 Emerald Bay Road, South Lake Tahoe.

Cleanup and Abatement Order
Figure 2



Outline of existing building is shown by bold black line

Outline of former building is shown by orange dashed line

N

0 50 100 Feet

P:\SITES\SOUTH LAKE TAHOE\TRESTLE SOUTH LAKE TAHOE\EXHIBITS\Figure 2 (RMC Base Map).dwg 10-23-20 GLA-USER

RMC GEOSCIENCE
ENGINEERING GEOLOGY - ENVIRONMENTAL GEOSCIENCE
405 EAST D STREET, SUITE 112
PETALUMA, CA 94952
TEL: 415.699.8073
FAX: 707.765.1924

Trestle South Lake Tahoe
961 Emerald Bay Road

SITE CONDITIONS AND EXISTING UTILITIES

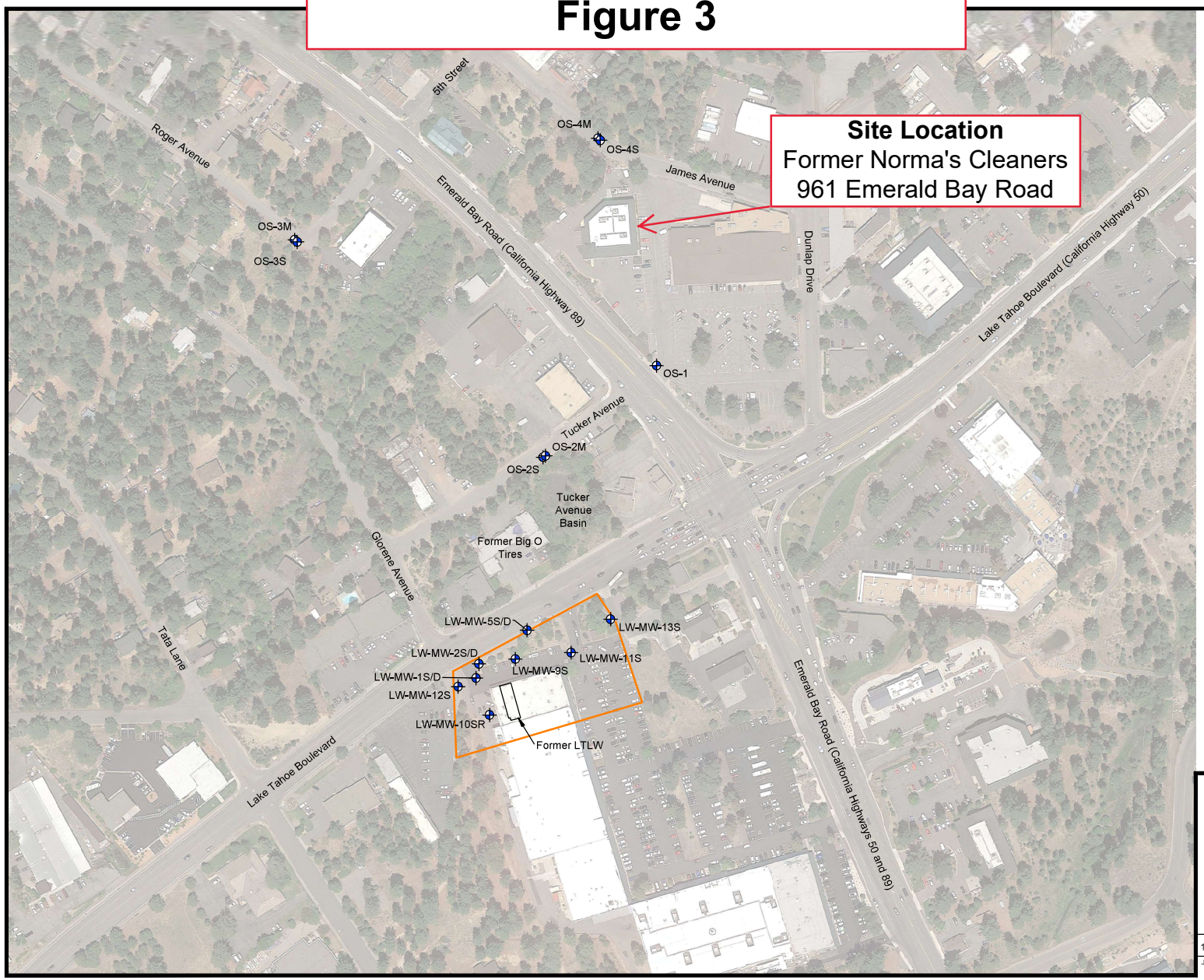
DATE: October 2020

FIGURE: 2

FIGURE 3: LAKE TAHOE LAUNDRY WORKS SITE PLAN AND VICINITY, THIRD QUARTER 2021 MONITORING REPORT (PES, 2021)

PES. 15 December 2021. Third Quarter 2021 Monitoring Report, Former Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California.

Cleanup and Abatement Order
Figure 3



Explanation

Lake Tahoe Laundry Works (LTLW) Site

OS-1 Groundwater Monitoring Well

N

0 100

SCALE IN FEET

Aerial Photo: June 07, 2018 (Google 2019)
All locations are approximate

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan and Vicinity
Quarterly Monitoring Report
Former Lake Tahoe Laundry Works
South Lake Tahoe, California

PLATE 2

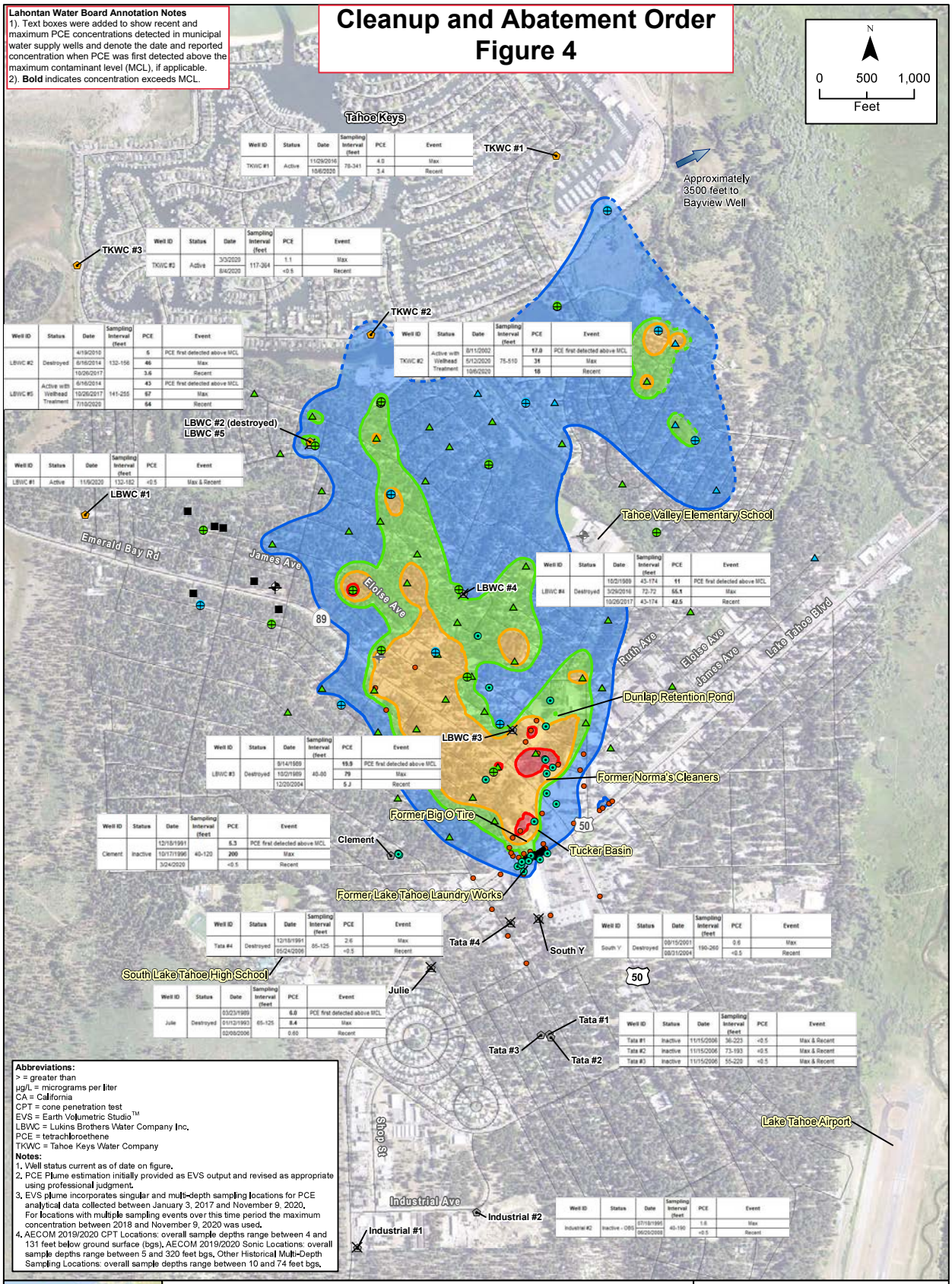
1021.001.04.025	102100104025_20Q3_2	PDG	12/20
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

FIGURE 4: ANNOTATED DISSOLVED PCE IN GROUNDWATER PLUME MAP WITH RECENT AND MAXIMUM PCE CONCENTRATIONS IN MUNICIPAL SUPPLY WELLS, REGIONAL PLUME CHARACTERIZATION SUMMARY REPORT: SOUTH "Y" PCE PLUME 2019-2020 FIELD SEASON (AECOM, 2022, ANNOTATED BY LAHONTAN WATER BOARD STAFF)

AECOM. 10 June 2022. Regional Plume Characterization Summary Report: South "Y" PCE Plume 2019-2020 Field Season.

Cleanup and Abatement Order
Figure 4

Lahontan Water Board Annotation Notes
1). Text boxes were added to show recent and maximum PCE concentrations detected in municipal water supply wells and denote the date and reported concentration when PCE was first detected above the maximum contaminant level (MCL), if applicable.
2). **Bold** indicates concentration exceeds MCL.



Abbreviations:
> = greater than
µg/L = micrograms per liter
CA = California
CPT = cone penetration test
EVS = Earth Volumetric Studio™
LBWC = Lukins Brothers Water Company Inc.
PCE = tetrachloroethene
TKWC = Tahoe Keys Water Company

Notes:
1. Well status current as of date on figure.
2. PCE Plume estimation initially provided as EVS output and revised as appropriate using professional judgment.
3. EVS plume incorporates singular and multi-depth sampling locations for PCE analytical data collected between January 3, 2017 and November 9, 2020. For locations with multiple sampling events over this time period the maximum concentration between 2018 and November 9, 2020 was used.
4. AECOM 2019/2020 CPT Locations: overall sample depths range between 4 and 131 feet below ground surface (bgs). AECOM 2019/2020 Sonic Locations: overall sample depths range between 5 and 320 feet bgs. Other Historical Multi-Depth Sampling Locations: overall sample depths range between 10 and 74 feet bgs.

Location Type
- AECOM 2019 CPT Location
- AECOM 2019 Sonic Location
- AECOM 2020 CPT Location
- AECOM 2020 Sonic Location
- Active Municipal Supply Well
- Inactive Municipal Supply Well
- Destroyed Municipal Supply Well
- Monitoring Well Location
- Historical Single-Depth Sampling Location
- Historical Multi-Depth Sampling Location
- Active Private Supply Well
- Active Small Community Well
- Inactive Small Community Well

PCE Concentration Contours (dashed where inferred)
- 5 - 50 µg/L
- 50 - 100 µg/L
- 100 - 500 µg/L
- >500 µg/L

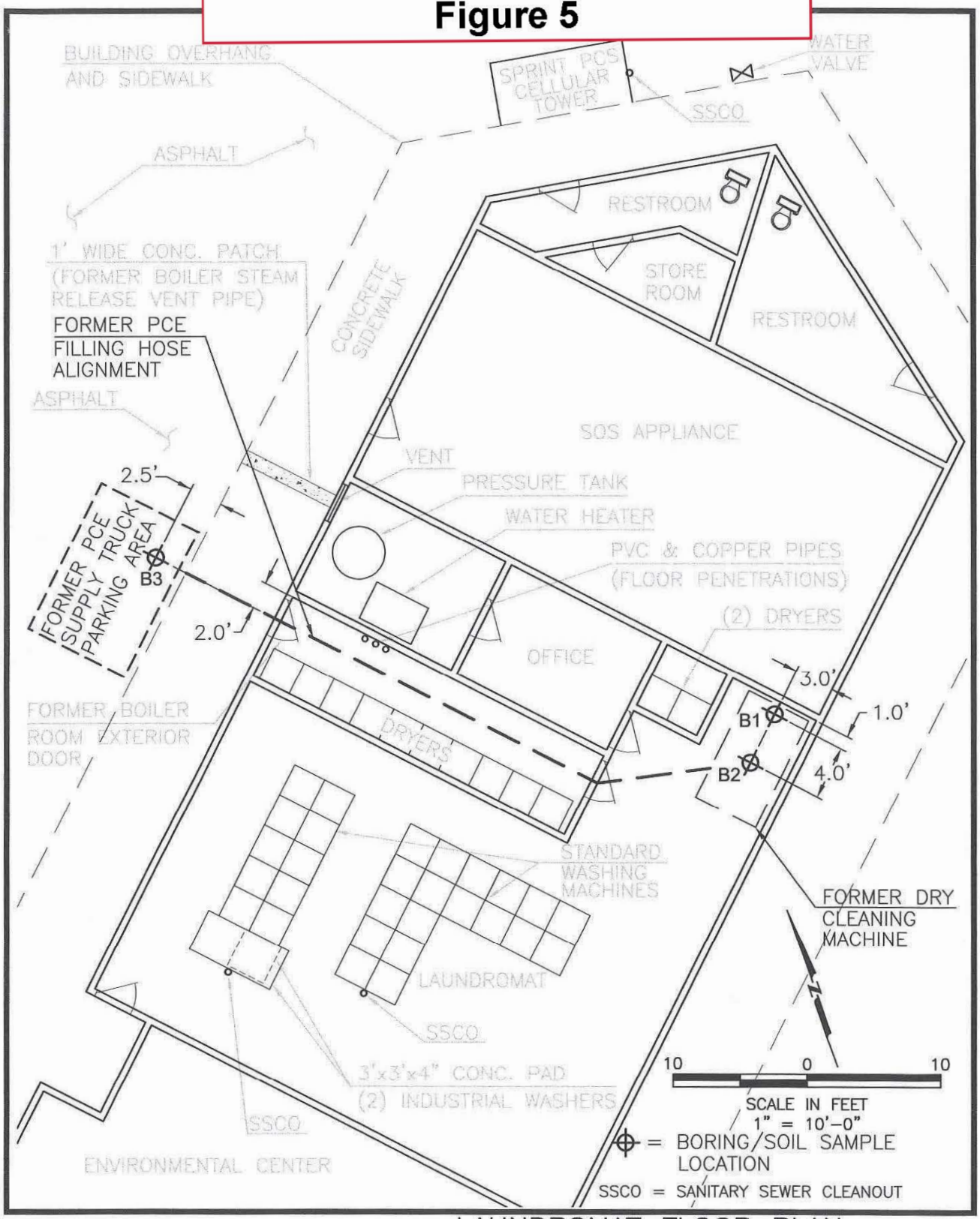
Figure 5
Dissolved PCE in Groundwater Plume Map

South "Y" PCE Plume
South Lake Tahoe, CA

FIGURE 5: LAUNDROMAT FLOOR PLAN, REPORT OF FINDINGS (MACTEC, 2003)

MACTEC. 3 November 2003. Report of Findings Potential PCE Source Investigation, 949 Emerald Bay Road, South Lake Tahoe, California.

Cleanup and Abatement Order
Figure 5



MACTEC

Engineering, Surveying and Environmental Services

LAUNDROMAT FLOOR PLAN
BORING LOCATIONS
A.P.N. 023-191-21-100
949 EMERALD BAY ROAD
SOUTH LAKE TAHOE, CALIFORNIA

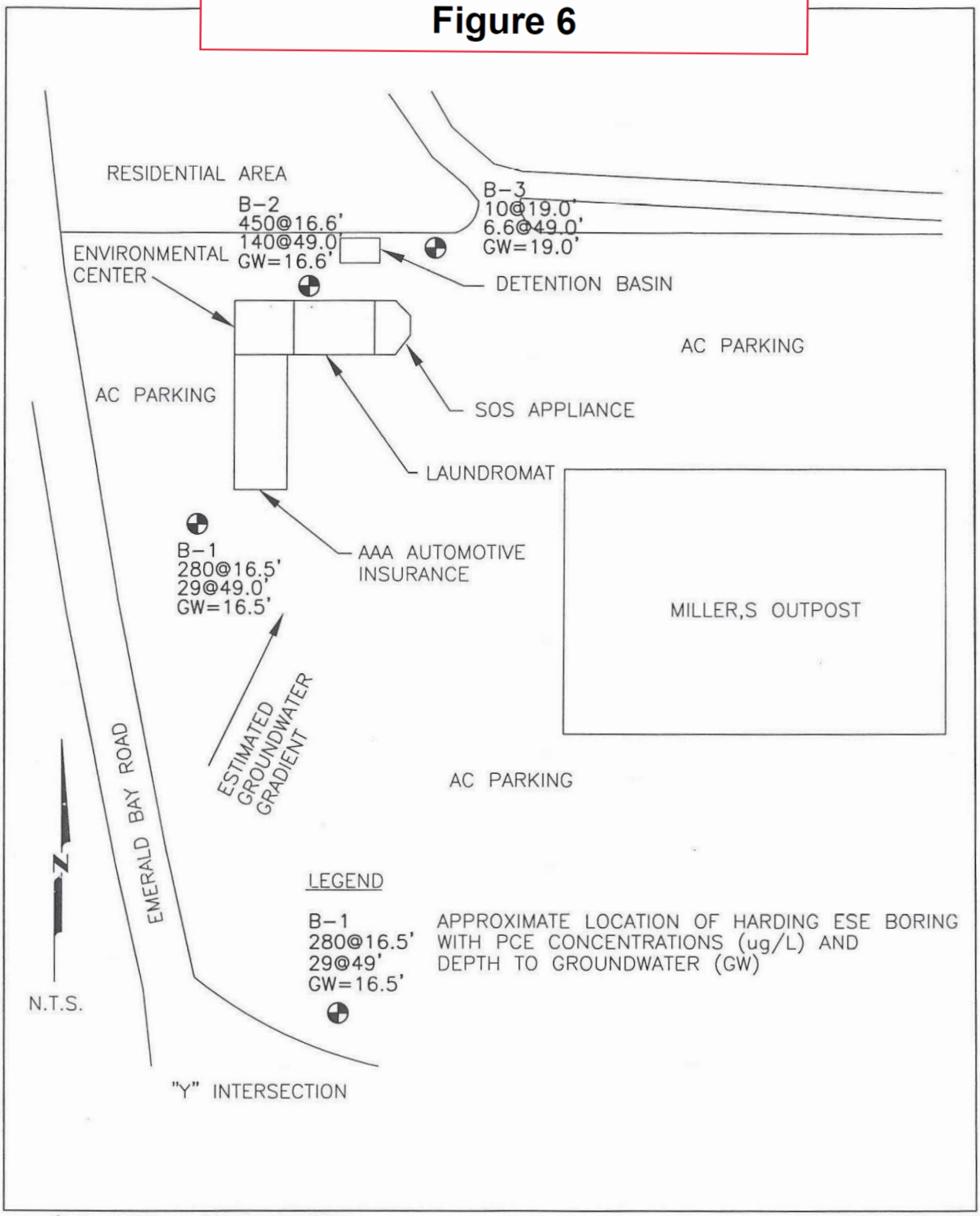
FIGURE 1

DRAWN	JOB NUMBER	APPROVED	DATE
KH	4306-03-035.02		10/17/03

FIGURE 6: SITE PLAN, GROUNDWATER INVESTIGATION (HARDING ESE, 2001)

Harding ESE. 12 December 2001. Groundwater Investigation, Hurzel Properties LLC, 949 Emerald Bay Road, South Lake Tahoe, California.

Cleanup and Abatement Order
Figure 6



Harding ESE
A MACTEC COMPANY
Engineering, Planning, Surveying, & Construction Services

SITE PLAN
949 EMERALD BAY ROAD
SOUTH LAKE TAHOE, CALIFORNIA

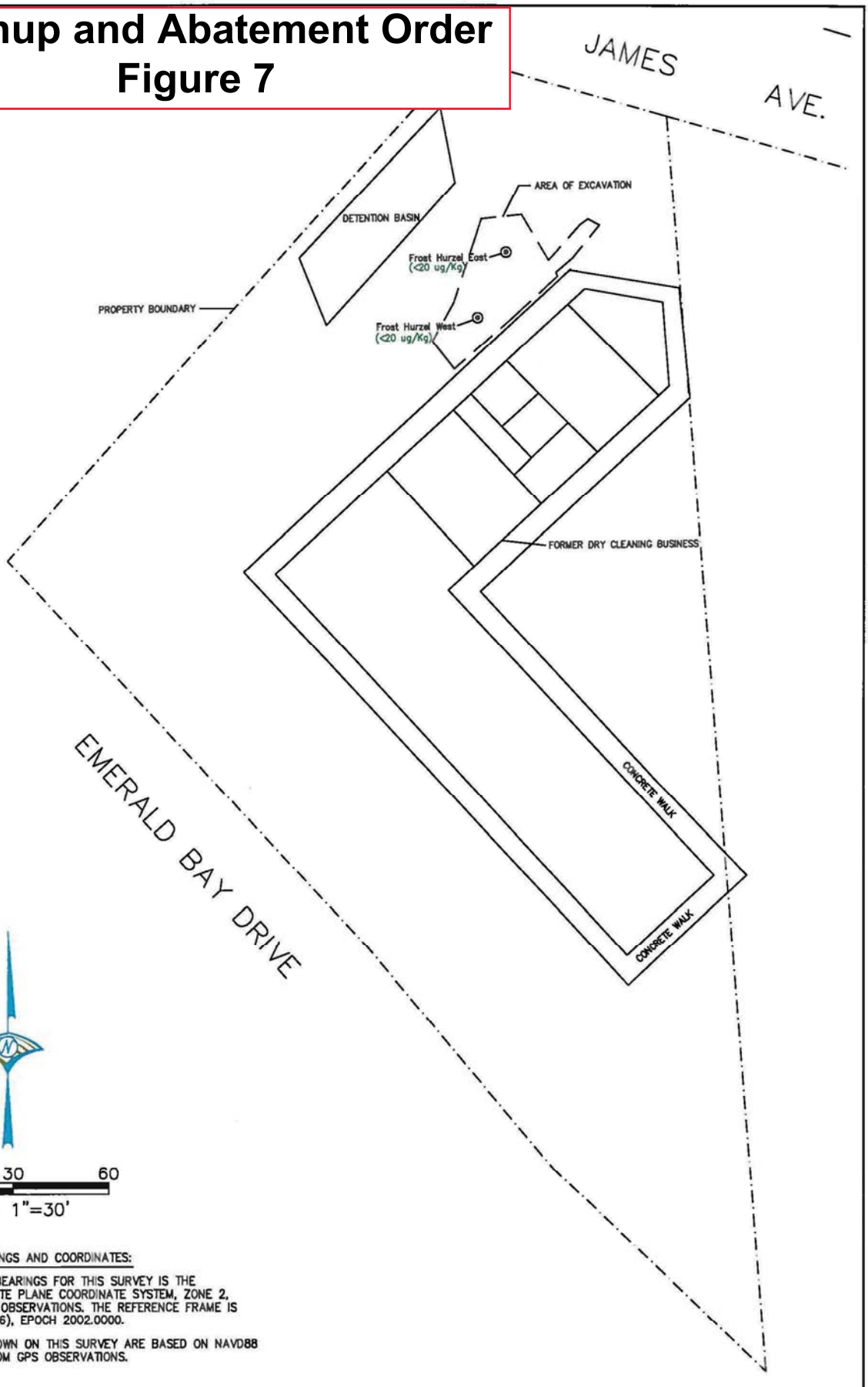
FIGURE 1

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
KLD	54583		11-23-01		

FIGURE 7: SOIL CONFIRMATION SAMPLES IN EXCAVATION, SITE INVESTIGATION REPORT (SECOR, 2008)

Secor. 30 May 2008. Site Investigation Report, Former Dry Cleaning Business, 949 Emerald Bay Road, South Lake Tahoe, California 96150.

Cleanup and Abatement Order
Figure 7



BASIS OF BEARINGS AND COORDINATES:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 2, BASED ON GPS OBSERVATIONS. THE REFERENCE FRAME IS NAD83 (CORS 96), EPOCH 2002.0000.

ELEVATIONS SHOWN ON THIS SURVEY ARE BASED ON NAVD88 AS DERIVED FROM GPS OBSERVATIONS.

LEGEND

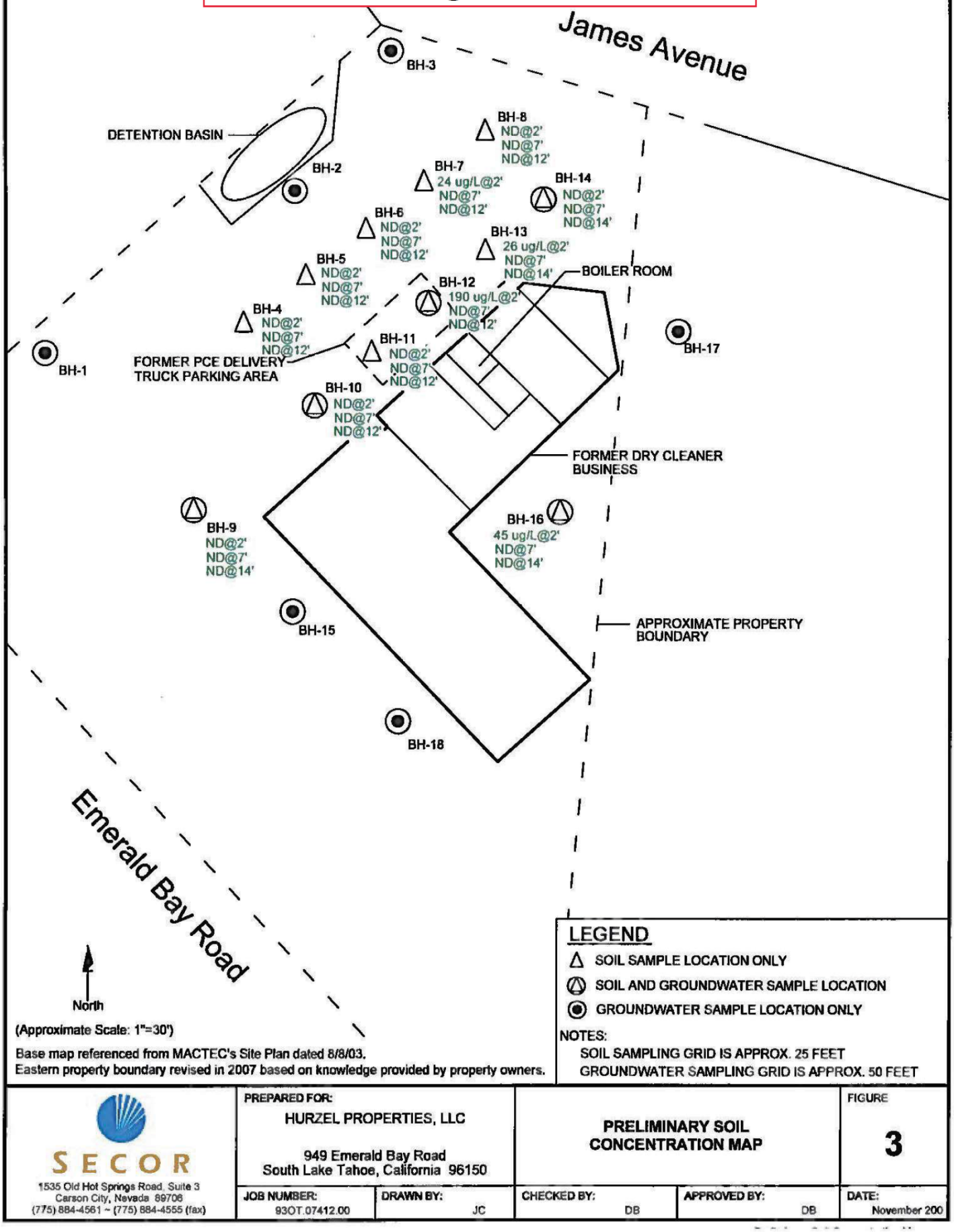
⊙ CONFIRMATION SOIL SAMPLE LOCATION

SECOR 1535 OLD HOT SPRINGS ROAD CARSON CITY, NEVADA PHONE (775) 884-4561/884-4555 (FAX)	FOR: HURZEL PROPERTIES, LLC 949 EMERALD BAY DRIVE SOUTH LAKE TAHOE, CALIFORNIA		**SOIL CONFIRMATION SAMPLES IN EXCAVATION**		FIGURE: **10**
	JOB NUMBER: 93OT.07412.01	DRAWN BY: JRC	CHECKED BY: EF	APPROVED BY: MB	DATE: 5/27/08

FIGURE 8: PRELIMINARY SOIL CONCENTRATION MAP, WORK PLAN FOR INTERIM REMEDIATION: PCE – IMPACTED SOIL EXCAVATION (SECOR, 2007)

Secor. 10 December 2007. Work Plan for Interim Remediation: PCE-Impacted Soil Excavation, Former Dry Cleaning Business, 949 Emerald Bay Road, South Lake Tahoe, California 96150.

Cleanup and Abatement Order
Figure 8

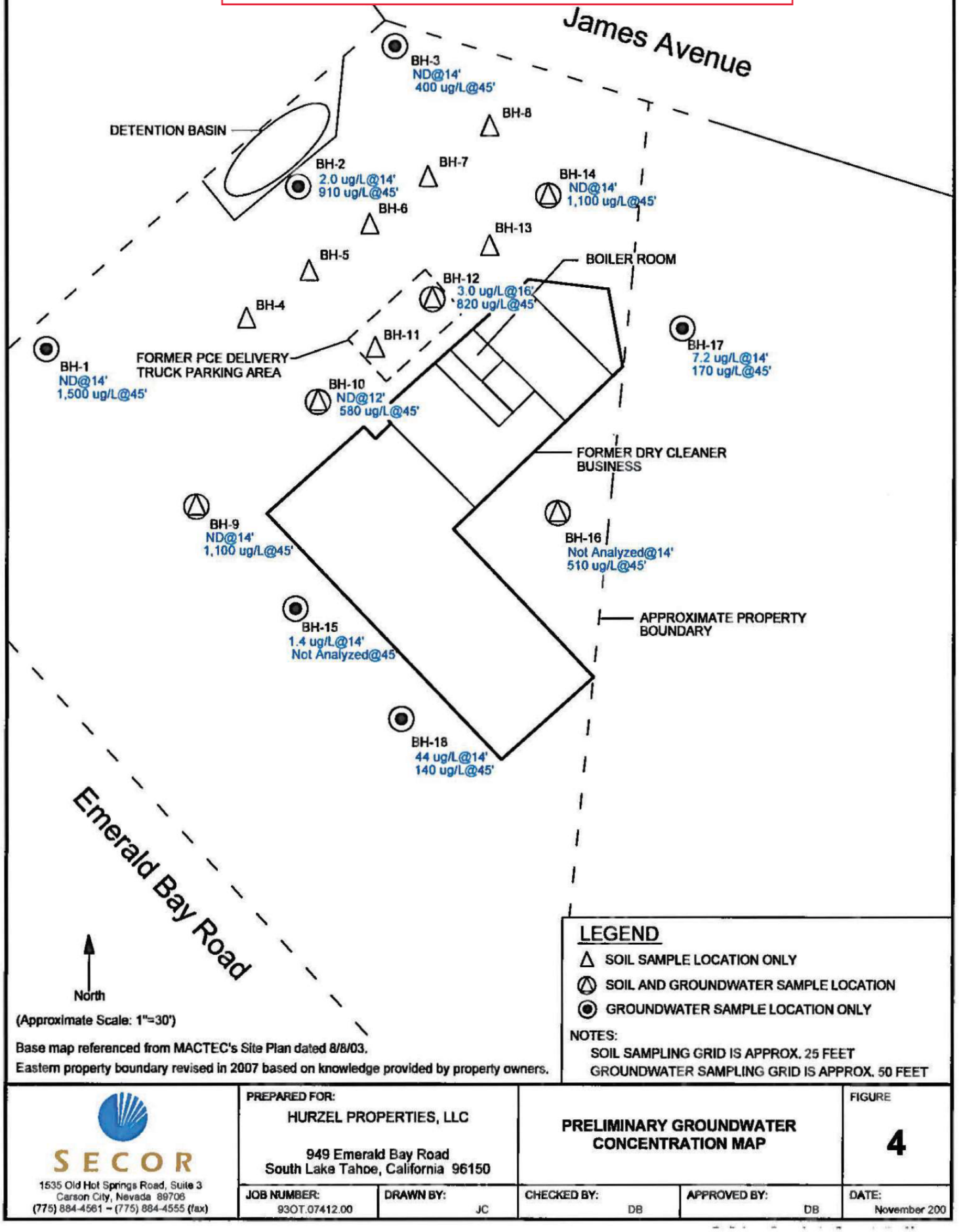


SECOR 1535 Old Hot Springs Road, Suite 3 Carson City, Nevada 89706 (775) 884-4561 ~ (775) 884-4555 (fax)	PREPARED FOR: HURZEL PROPERTIES, LLC 949 Emerald Bay Road South Lake Tahoe, California 96150	PRELIMINARY SOIL CONCENTRATION MAP			FIGURE 3
	JOB NUMBER: 93OT.07412.00	DRAWN BY: JC	CHECKED BY: DB	APPROVED BY: DB	DATE: November 200

FIGURE 9: PRELIMINARY GROUNDWATER CONCENTRATION MAP, WORK PLAN FOR INTERIM REMEDIATION: PCE – IMPACTED SOIL EXCAVATION (SECOR, 2007)

Secor. 10 December 2007. Work Plan for Interim Remediation: PCE-Impacted Soil Excavation, Former Dry Cleaning Business, 949 Emerald Bay Road, South Lake Tahoe, California 96150.

Cleanup and Abatement Order
Figure 9

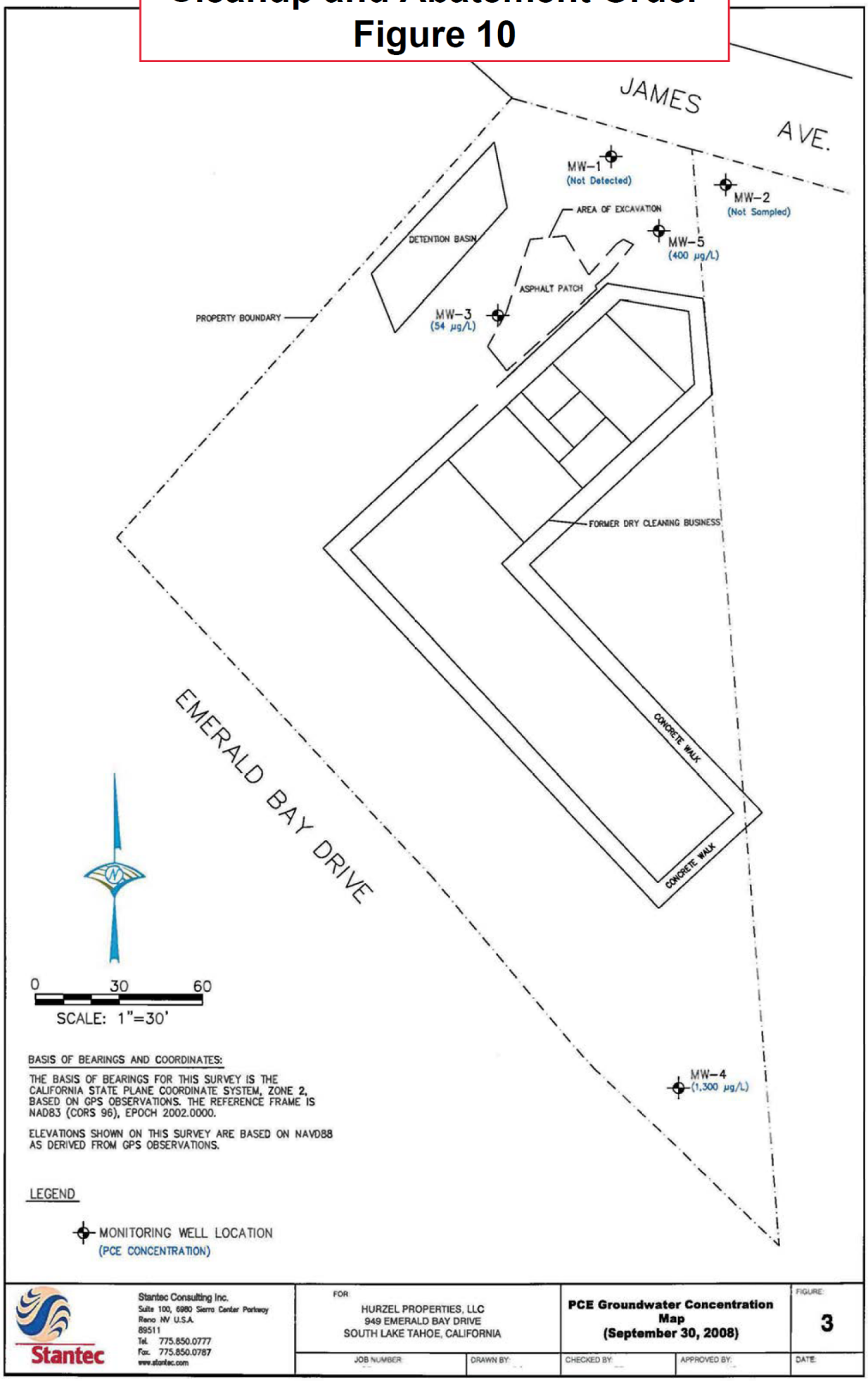


SECOR 1535 Old Hot Springs Road, Suite 3 Carson City, Nevada 89706 (775) 884-4561 – (775) 884-4555 (fax)	PREPARED FOR: HURZEL PROPERTIES, LLC 949 Emerald Bay Road South Lake Tahoe, California 96150	PRELIMINARY GROUNDWATER CONCENTRATION MAP		FIGURE 4
	JOB NUMBER: 93OT.07412.00	DRAWN BY: JC	CHECKED BY: DB	APPROVED BY: DB	DATE: November 200

FIGURE 10: PCE GROUNDWATER CONCENTRATION MAP SEPTEMBER 30, 2008, THIRD QUARTER 2008 WATER QUALITY REPORT (SECOR, 2008)

SECOR. 10 December 2008. Third Quarter 2008 Water Quality Report, Former Dry Cleaning Business, Emerald Bay Drive, South Lake Tahoe, CA 96150.

Cleanup and Abatement Order
Figure 10



BASIS OF BEARINGS AND COORDINATES:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 2, BASED ON GPS OBSERVATIONS. THE REFERENCE FRAME IS NAD83 (CORS 96), EPOCH 2002.0000.

ELEVATIONS SHOWN ON THIS SURVEY ARE BASED ON NAVD88 AS DERIVED FROM GPS OBSERVATIONS.

LEGEND

MONITORING WELL LOCATION
(PCE CONCENTRATION)

Stantec
Stantec Consulting Inc.
Suite 100, 6980 Sierra Center Parkway
Reno NV U.S.A.
89511
Tel. 775.850.0777
Fax. 775.850.0787
www.stantec.com

FOR:
HURZEL PROPERTIES, LLC
949 EMERALD BAY DRIVE
SOUTH LAKE TAHOE, CALIFORNIA

PCE Groundwater Concentration Map (September 30, 2008)

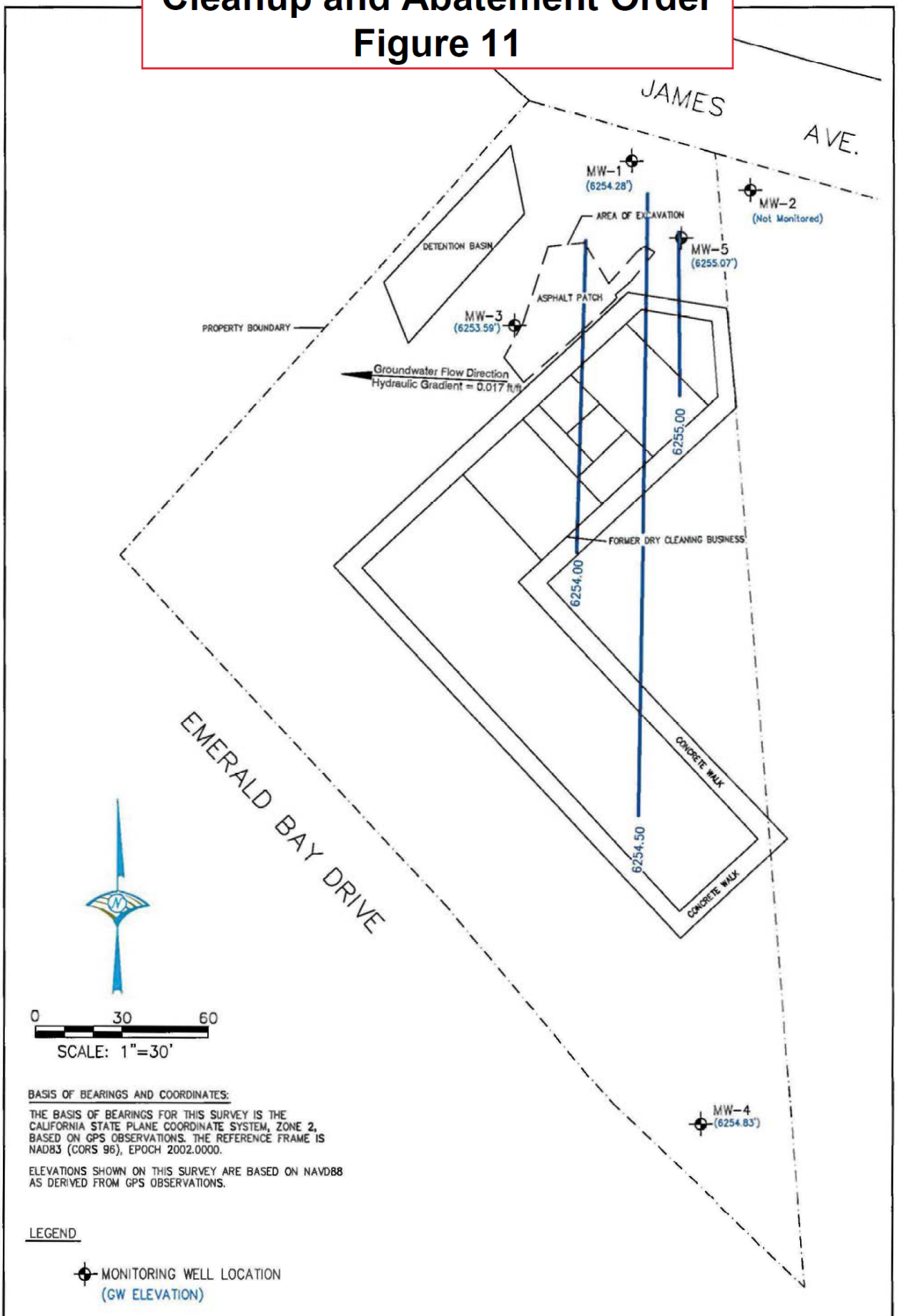
FIGURE: 3

JOB NUMBER	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:

FIGURE 11: GROUNDWATER ELEVATION MAP SEPTEMBER 30, 2008, THIRD QUARTER 2008 WATER QUALITY REPORT (SECOR, 2008)

SECOR. 10 December 2008. Third Quarter 2008 Water Quality Report, Former Dry Cleaning Business, Emerald Bay Drive, South Lake Tahoe, CA 96150.

Cleanup and Abatement Order
Figure 11



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ELEVATIONS SHOWN ON THIS SURVEY ARE BASED ON NAVD88 AS DERIVED FROM GPS OBSERVATIONS.

LEGEND

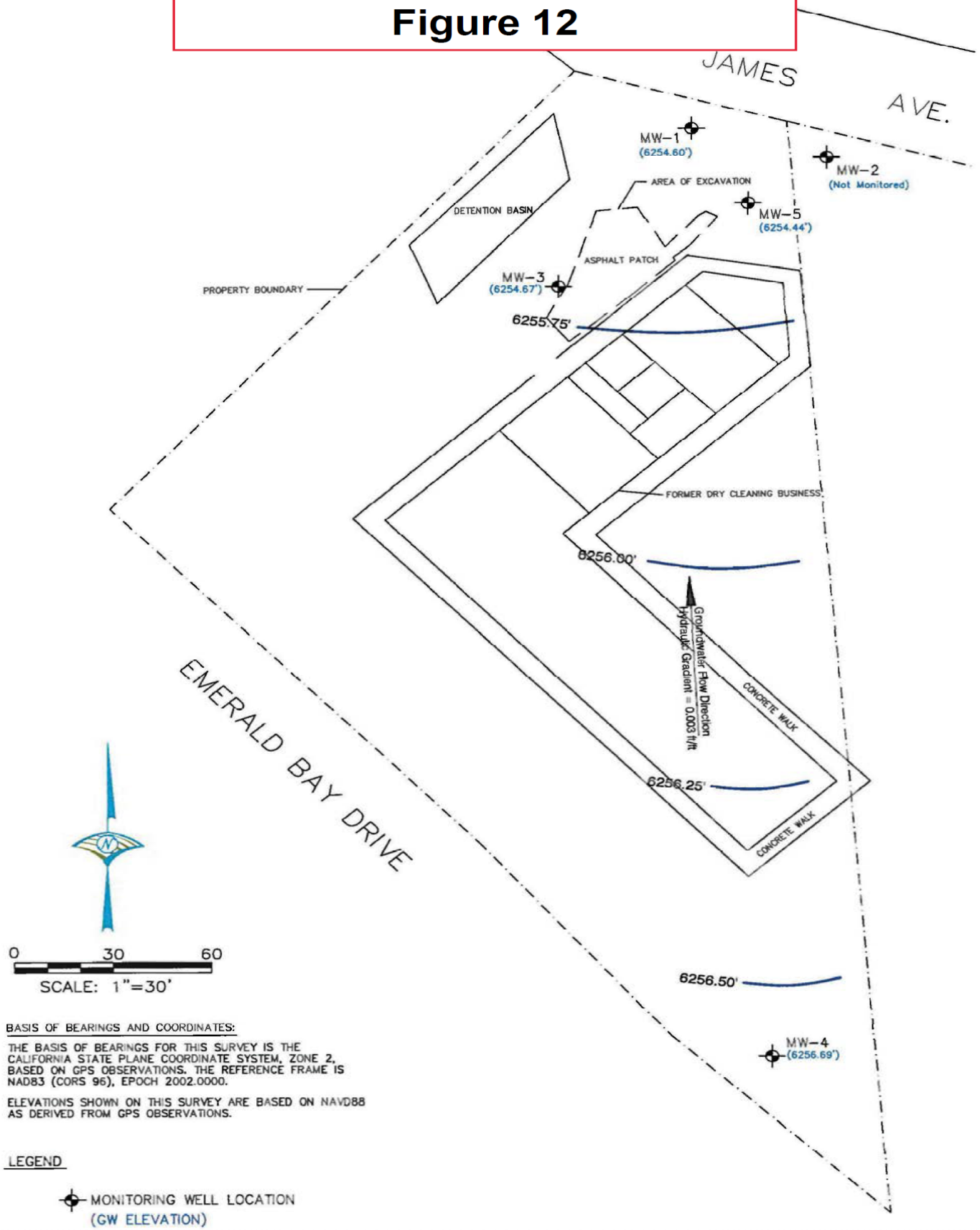
MONITORING WELL LOCATION
(GW ELEVATION)

Stantec Consulting Inc. Suite 100, 5980 Sierra Center Parkway Reno NV U.S.A. 89511 Tel. 775.850.0777 Fax. 775.850.0787 www.stantec.com	FOR: HURZEL PROPERTIES, LLC 949 EMERALD BAY DRIVE SOUTH LAKE TAHOE, CALIFORNIA		**GROUNDWATER ELEVATION MAP (September 30, 2008)**		FIGURE: **2**
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:

FIGURE 12: GROUNDWATER ELEVATION MAP JUNE 30, 2008, SECOND QUARTER 2008 WATER QUALITY REPORT (SECOR, 2008)

SECOR. 21 August 2008. Second Quarter 2008 Water Quality Report, Former Dry Cleaning Business, Emerald Bay Drive, South Lake Tahoe, CA 96150.

Cleanup and Abatement Order
Figure 12



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ELEVATIONS SHOWN ON THIS SURVEY ARE BASED ON NAVD88 AS DERIVED FROM GPS OBSERVATIONS.

LEGEND

MONITORING WELL LOCATION
(GW ELEVATION)

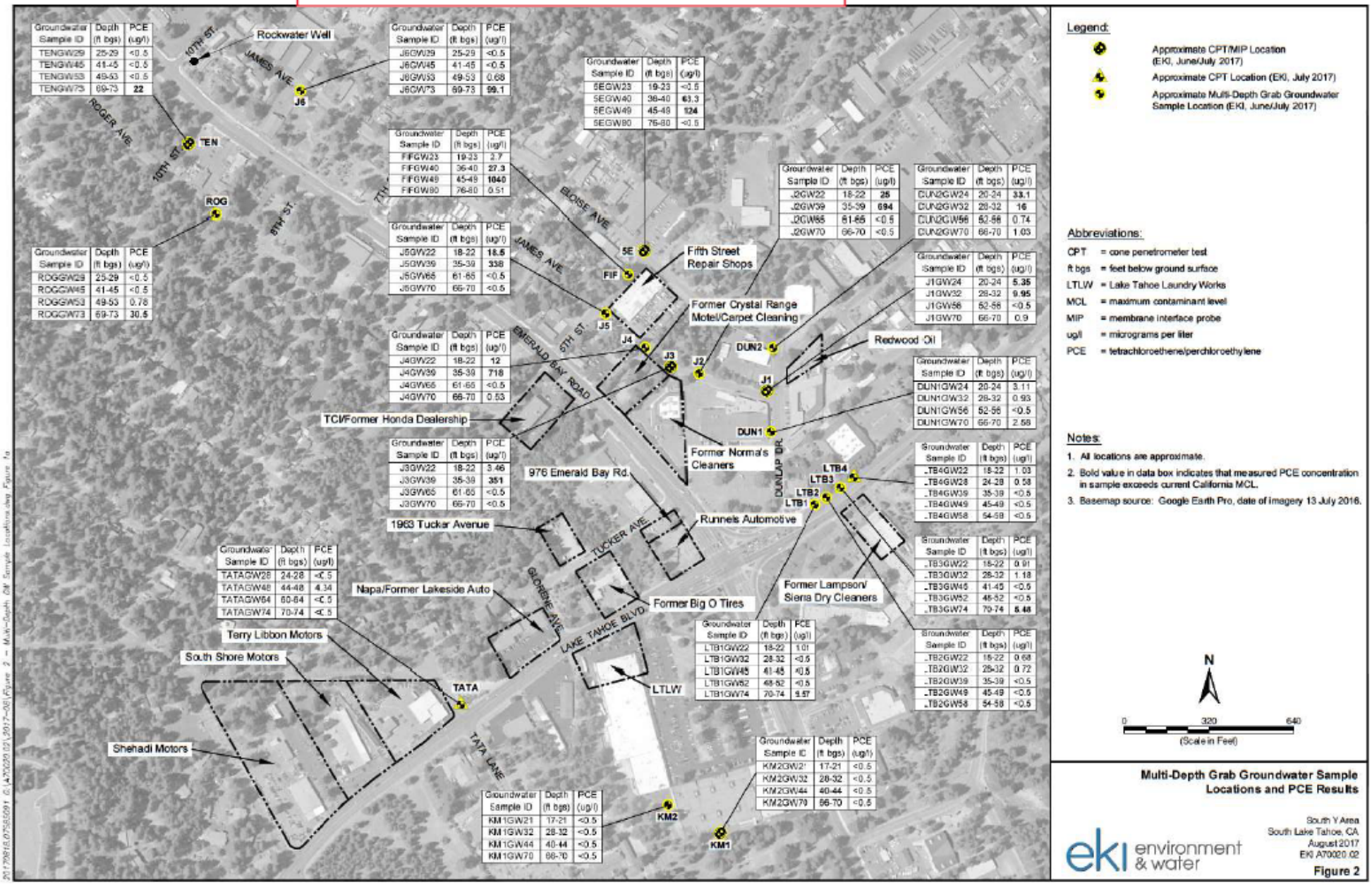
Stantec
Stantec Consulting Inc.
Suite 100, 6980 Sierra Center Parkway
Reno NV U.S.A.
89511
Tel. 775.850.0777
Fax. 775.850.0787
www.stantec.com

FOR:				FIGURE:
HURZEL PROPERTIES, LLC 949 EMERALD BAY DRIVE SOUTH LAKE TAHOE, CALIFORNIA	**GROUNDWATER ELEVATION MAP (June 30, 2008)**			**2**
JOB NUMBER: 93OT.07412.01	DRAWN BY: JRC	CHECKED BY: EF	APPROVED BY: MB	DATE: 08/19/08

FIGURE 13: MULTI-DEPTH GRAB GROUNDWATER SAMPLE LOCATIONS AND PCE RESULTS, OFF-SITE GROUNDWATER INVESTIGATION DATA REPORT (EKI, 2017)

EKI. 30 August 2017. Off-Site Groundwater Investigation Data Report, South Y Area, South Lake Tahoe, California.

Cleanup and Abatement Order
Figure 13



Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
TENGW29	25-29	<0.5
TENGW45	41-45	<0.5
TENGW53	49-53	<0.5
TENGW73	69-73	**22**

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
J6GW29	25-29	<0.5
J6GW45	41-45	<0.5
J6GW53	49-53	0.68
J6GW73	69-73	**99.1**

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
5EGW23	19-23	<0.5
5EGW40	36-40	**63.3**
5EGW49	45-49	**124**
5EGW80	76-80	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
FIFGW23	19-23	2.7
FIFGW40	36-40	**27.3**
FIFGW49	45-49	**1040**
FIFGW80	76-80	0.51

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
J5GW22	18-22	**18.5**
J5GW39	35-39	**338**
J5GW65	61-65	<0.5
J5GW70	66-70	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
J4GW22	18-22	**12**
J4GW39	35-39	**718**
J4GW65	61-65	<0.5
J4GW70	66-70	0.53

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
J3GW22	18-22	3.46
J3GW39	35-39	**351**
J3GW65	61-65	<0.5
J3GW70	66-70	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
RDGGW29	25-29	<0.5
RDGGW45	41-45	<0.5
RDGGW53	49-53	0.78
RDGGW73	69-73	**30.5**

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
J2GW22	18-22	**25**
J2GW39	35-39	**694**
J2GW65	61-65	<0.5
J2GW70	66-70	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
DUN2GW24	20-24	**33.1**
DUN2GW32	28-32	**16**
DUN2GW56	52-56	0.74
DUN2GW70	66-70	1.03

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
J1GW24	20-24	**5.35**
J1GW32	28-32	**9.95**
J1GW56	52-56	<0.5
J1GW70	66-70	0.9

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
DUN1GW24	20-24	3.11
DUN1GW32	28-32	0.93
DUN1GW56	52-56	<0.5
DUN1GW70	66-70	2.58

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
_TB4GW22	18-22	1.03
_TB4GW28	24-28	0.58
_TB4GW39	35-39	<0.5
_TB4GW49	45-49	<0.5
_TB4GW58	54-58	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
_TB3GW22	18-22	0.91
_TB3GW32	28-32	1.18
_TB3GW45	41-45	<0.5
_TB3GW52	48-52	<0.5
_TB3GW74	70-74	**5.48**

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
_TB2GW22	18-22	0.68
_TB2GW32	28-32	0.72
_TB2GW39	35-39	<0.5
_TB2GW49	45-49	<0.5
_TB2GW58	54-58	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
LTB1GW22	18-22	1.01
LTB1GW32	28-32	<0.5
LTB1GW45	41-45	<0.5
LTB1GW52	48-52	<0.5
LTB1GW74	70-74	**9.57**

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
TATAGW28	24-28	<0.5
TATAGW48	44-48	**4.34**
TATAGW64	60-64	<0.5
TATAGW74	70-74	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
KM1GW21	17-21	<0.5
KM1GW32	28-32	<0.5
KM1GW44	40-44	<0.5
KM1GW70	66-70	<0.5

Groundwater Sample ID	Depth (ft bgs)	PCE (ug/l)
KM2GW21	17-21	<0.5
KM2GW32	28-32	<0.5
KM2GW44	40-44	<0.5
KM2GW70	66-70	<0.5

Legend:

- Approximate CPT/MIP Location (EKI, June/July 2017)
- Approximate CPT Location (EKI, July 2017)
- Approximate Multi-Depth Grab Groundwater Sample Location (EKI, June/July 2017)

Abbreviations:

CPT = cone penetrometer test
ft bgs = feet below ground surface
LTLW = Lake Tahoe Laundry Works
MCL = maximum contaminant level
MIP = membrane interface probe
ug/l = micrograms per liter
PCE = tetrachloroethene/perchloroethylene

Notes:

1. All locations are approximate.
2. Bold value in data box indicates that measured PCE concentration in sample exceeds current California MCL.
3. Basemap source: Google Earth Pro, date of imagery 13 July 2016.

N

0 320 640
(Scale in Feet)

Multi-Depth Grab Groundwater Sample Locations and PCE Results

South Y Area
South Lake Tahoe, CA
August 2017
EKI A70020.02

Figure 2

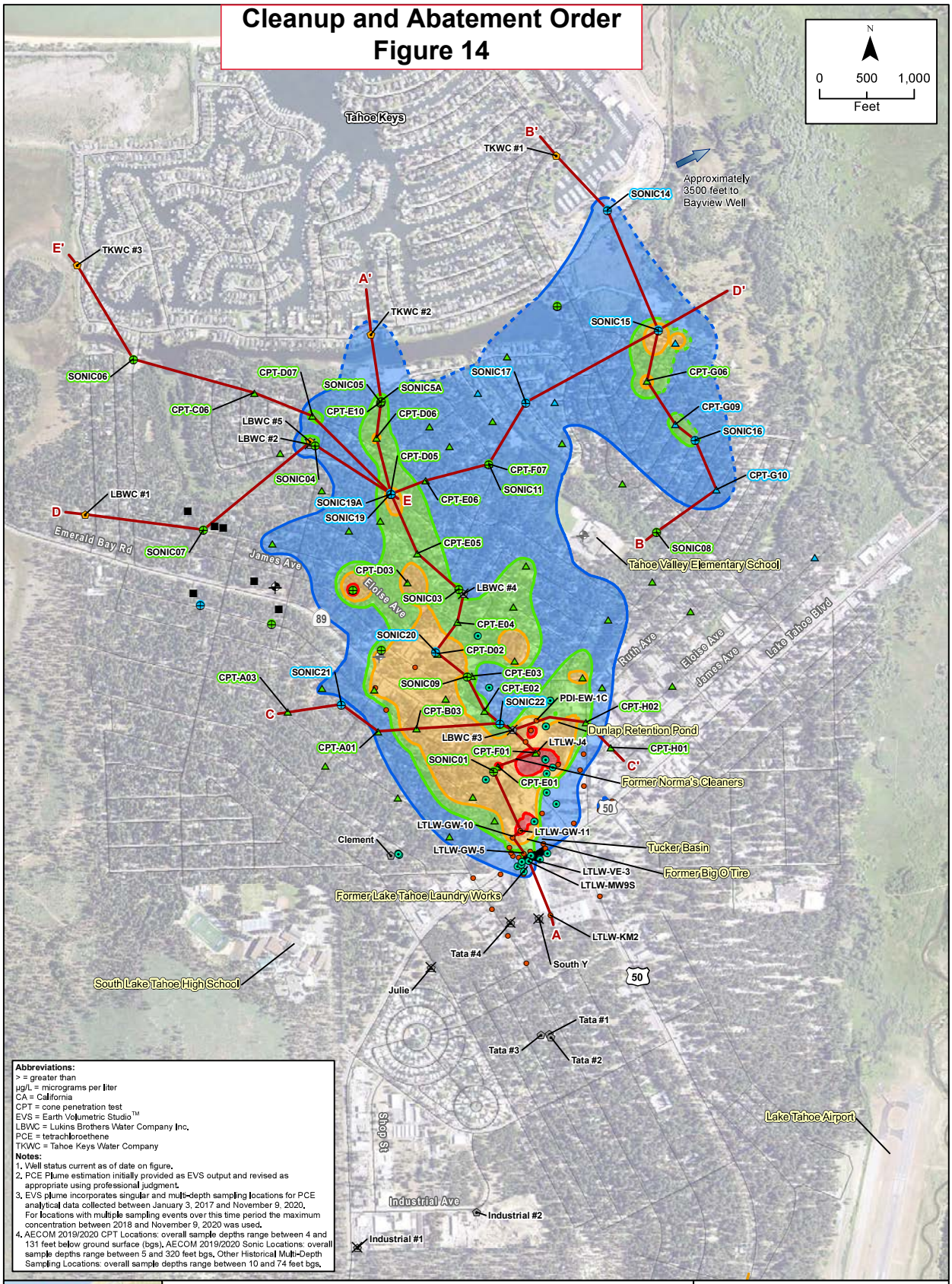
eki environment & water

2017\08\07\565091 G:\A70020.02\2017-08\Figure 2 - Multi-Depth GW Sample Locations.dwg Figure 1a

FIGURE 14: CROSS SECTION MAP, REGIONAL PLUME CHARACTERIZATION SUMMARY REPORT: SOUTH "Y" PCE PLUME 2019-2020 FIELD SEASON (AECOM, 2022)

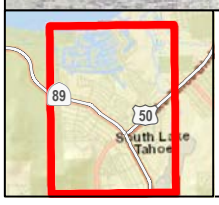
AECOM. 10 June 2022. Regional Plume Characterization Summary Report: South "Y" PCE Plume 2019-2020 Field Season

Cleanup and Abatement Order
Figure 14



Abbreviations:
> = greater than
µg/L = micrograms per liter
CA = California
CPT = cone penetration test
EVS = Earth Volumetric Studio™
LBWC = Lukins Brothers Water Company Inc.
PCE = tetrachloroethene
TKWC = Tahoe Keys Water Company

Notes:
1. Well status current as of date on figure.
2. PCE Plume estimation initially provided as EVS output and revised as appropriate using professional judgment.
3. EVS plume incorporates singular and multi-depth sampling locations for PCE analytical data collected between January 3, 2017 and November 9, 2020. For locations with multiple sampling events over this time period the maximum concentration between 2018 and November 9, 2020 was used.
4. AECOM 2019/2020 CPT Locations: overall sample depths range between 4 and 131 feet below ground surface (bgs). AECOM 2019/2020 Sonic Locations: overall sample depths range between 5 and 320 feet bgs. Other Historical Multi-Depth Sampling Locations: overall sample depths range between 10 and 74 feet bgs.



Location Type
- AECOM 2019 CPT Location
- AECOM 2019 Sonic Location
- AECOM 2020 CPT Location
- AECOM 2020 Sonic Location
- Active Municipal Supply Well
- Inactive Municipal Supply Well
- Destroyed Municipal Supply Well
- Monitoring Well Location
- Historical Single-Depth Sampling Location
- Historical Multi-Depth Sampling Location
- Active Private Supply Well
- Active Small Community Well
- Inactive Small Community Well
- Cross Section Location (shown on Figures 6 through 10)

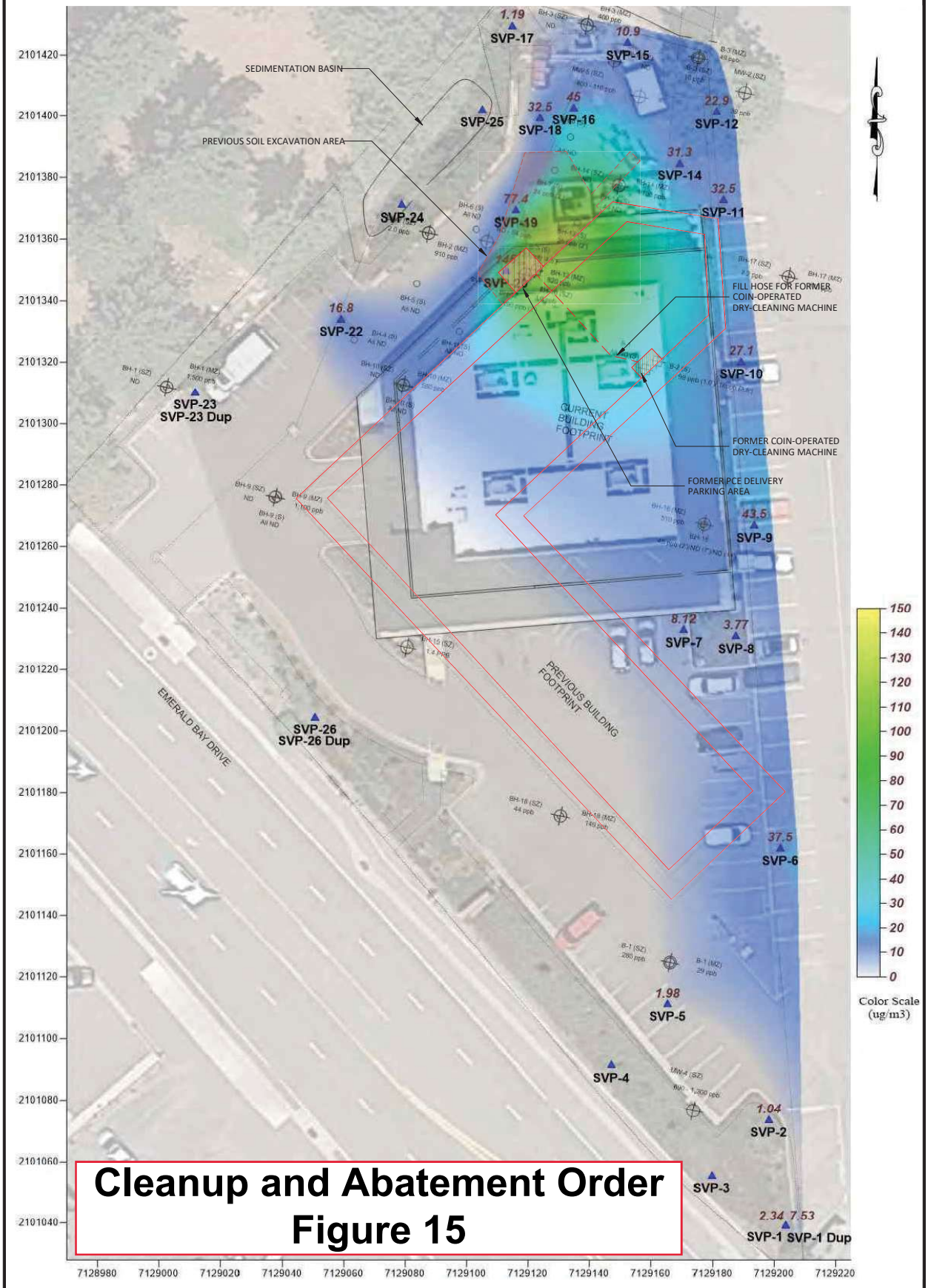
PCE Concentration Contours (dashed where inferred)
- 5 - 50 µg/L
- 50 - 100 µg/L
- 100 - 500 µg/L
- >500 µg/L

Figure 7
Cross Section Map

South "Y" PCE Plume
South Lake Tahoe, CA

FIGURE 15: SOIL VAPOR PROBE PCE CONCENTRATION CONTOURS, RESULTS OF SOIL VAPOR PROBE INVESTIGATION (RMC, 2021)

RMC. 10 February 2021. Results of soil Vapor Probe Investigation, Trestle South Lake Property at 961 Emerald Bay Road, South Lake Tahoe



Cleanup and Abatement Order
Figure 15

FIGURE FROM BEACON ENVIRONMENTAL - SEE ATTACHMENT 7

RMC GEOSCIENCE
ENGINEERING GEOLOGY - ENVIRONMENTAL GEOSCIENCE
405 EAST D STREET, SUITE 112
PETALUMA, CA 94952
TEL: 415.699.8073
FAX: 707.765.1924

Trestle South Lake Tahoe
961 Emerald Bay Road

SOIL VAPOR PROBE PCE CONCENTRATION CONTOURS

DATE: February 2021

FIGURE: 7

C:\Users\rmitc\Dropbox\2020 Trestle South Lake Tahoe\Summary Report\Figures\FIGURE 7 PCE CONCENTRATION CONTOURS.dwg 2-16-21 rmitc

FIGURE 16: PREFERENTIAL PATHWAY INVENTORY, REGIONAL PLUME CHARACTERIZATION SUMMARY REPORT: SOUTH "Y" PCE PLUME 2019-2020 FIELD SEASON (AECOM, 2022, ANNOTATED BY LAHONTAN WATER BOARD STAFF)

AECOM. 10 June 2022. Regional Plume Characterization Summary Report: South "Y" PCE Plume 2019-2020 Field Season.

Cleanup and Abatement Order
Figure 16

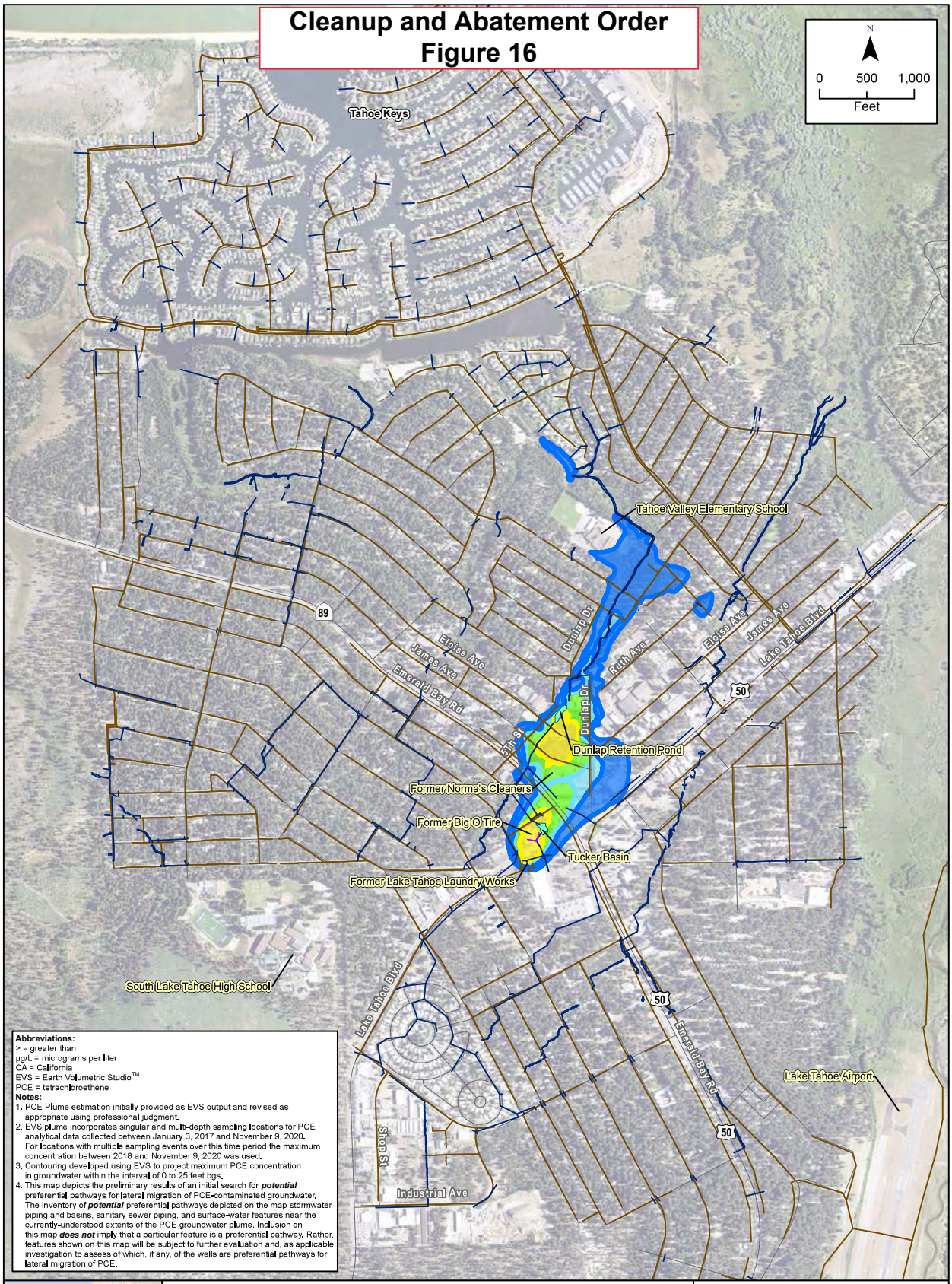


Figure 14
Preferential Pathway Inventory

South "Y" PCE Plume
South Lake Tahoe, CA

ATTACHMENTS

ATTACHMENT A: TIME SCHEDULE

TASK	DEADLINE[7]
Order No. 1, Conceptual Site Model	
Conceptual Site Model:	2 months after Order adoption
Order No. 2, Site Investigation Work Plan(s)	
Site Investigation Work Plan	2 months after Order adoption
Commence Site Investigation(s)	Within 2 months of Water Board acceptance
Complete Site Investigation	6 months after Order adoption
Site Investigation Completion Report	9 months after Order adoption
Order No. 3, Human Health and Ecological Risk Assessment	
Human Health and Ecological Risk Assessment	9 months after Order adoption
Order No. 4, Conduct Remedial Actions	
Interim Remedial Action Plan	9 months after Order adoption
Implement Interim Remedial Action Plan	Within 2 months of Executive Officer acceptance
Interim Remedial Action Progress Reports	Every 6 months after Order adoption until task completion
Interim Remedial Action Completion Report	24 months after Order adoption
Remedial Action Plan	24 months after Order adoption
Implement Remedial Action Plan	Within 2 months of Executive Officer acceptance
Remedial Action Plan Progress Reports	Quarterly; 15th of March, June, September, and December
Complete All Remedial Actions	5 years after Order adoption
Remedial Action Completion Report	2 months after remedial action completion

[7] Lahontan Water Board Staff recognizes the limited field season in the Tahoe area and understands extensions may be required due to weather and seasonal constraints. Extensions will be evaluated and granted as described by Order 13.

TASK	DEADLINE[8]
Order No. 5, Public Participation Plan	
Baseline Community Assessment	2 months after Order adoption
Interested Persons Contact List	2 months after Order adoption
Draft Fact Sheet	2 months after Order adoption
Send Approved Final Fact Sheet	On schedule to be determined by Executive Officer
Order No. 6, Conduct Groundwater Monitoring	
Groundwater Monitoring and Reporting	See Attachment B for monitoring frequencies and reporting requirements (if necessary)

[8] Lahontan Water Board Staff recognizes the limited field season in the Tahoe area and understands extensions may be required due to weather and seasonal constraints. Extensions will be evaluated and granted as described by Order 13.

ATTACHMENT B: MONITORING AND REPORTING PROGRAM FOR CLEANUP AND ABATEMENT ORDER NO. R6-2025-0005

MONITORING AND REPORTING PROGRAM FOR CLEANUP AND ABATEMENT ORDER NO. R6-2025-0005

This Monitoring and Reporting Program is part of Cleanup and Abatement Order No. R6-2025-0005 (CAO). Failure to comply with this program constitutes noncompliance with the CAO and California Water Code, which can result in the imposition of civil monetary liability. All sampling and analyses shall be by United States Environmental Protection Agency (USEPA) approved methods. The test methods chosen for detection of the constituents of concern shall be subject to review and concurrence by the Regional Water Board.

Laboratory analytical reports to be included in technical reports shall contain a complete list of chemical constituents, which are tested for and reported on by the testing laboratory. In addition, the reports shall include both the method detection limit and the practical quantification limit for the testing methods. All samples shall be analyzed within allowable holding time. All quality assurance/quality control (QA/QC) samples must be run on the same dates when samples were actually analyzed. Proper chain of custody procedures must be followed, and a copy of the completed chain of custody form and laboratory sample receipt forms shall be submitted with the report. All analyses must be performed by a State Water Resources Control Board Division of Drinking Water accredited laboratory.

The Los Angeles Water Board's *Quality Assurance Project Plan, September 2008*, can be used as a reference and guidance for project activities involving sample collection, handling, analysis, and data reporting. The guidance is available on the Water Board's website at:
http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/remediation/Board_SGV-SFVCleanupProgram_Sept2008_QAPP.pdf

GROUNDWATER MONITORING

The Dischargers shall collect groundwater samples from groundwater monitoring wells installed for the purpose of site investigation and monitoring. Any monitoring wells installed in the future shall be added to the groundwater monitoring program and sampled quarterly. The groundwater surface elevation (in feet above mean sea level [MSL]) in all monitoring wells shall be measured and used to determine the gradient and direction of groundwater flow.

The following shall constitute the monitoring program for groundwater.

Constituent	**EPA Method**
Volatile Organic Compounds (full scan)	EPA 8260B
Temperature	Field*
pH	Field*
Electrical Conductivity	Field*
Dissolved oxygen	Field*
Oxidation-Reduction Potential (ORP)	Field*
Turbidity	Field*

Field* - Field parameters shall be measured using appropriately calibrated instrumentation.

REMEDIATION SYSTEMS

Reports on remediation systems, if applicable, shall contain the following information regarding the site remediation systems:

1. Maps showing location of all remediation wells and groundwater monitoring wells, if applicable;

2. Status of each remediation system including amount of time operating and down time for maintenance and/or repair;

3. Air sparge well operating records including status of each well and volume and pressure of air being injected;

4. Soil vapor extraction well records including status of each well and photo-ionization detector (PID) readings or other acceptable methods of determining relative volatile concentrations taken at a minimum quarterly. Readings of volatile concentrations drawn from soil vapor extraction (SVE) wells need to be taken at a frequency that allows the efficient operation and evaluation of the SVE system. A system operation log to document the system's total hours of operation and parameters, including the system's flow rate, temperature, and applied vacuums at the SVE treatment system and the system manifold;

5. In-Situ well operating records including injection volume, pressure, type and specifications of the amendment being introduced. Prior to implementation of the injection, all in-situ remediation shall enroll under appropriate Waste Discharge Requirements from the Lahontan Water Board;

6. The report shall include documentation and manifest forms of waste generated during operation of the remedial system(s);

7. The report shall include copies of all required valid permits to construct and operate the remedial system(s);

8. The report shall include tables summarizing the operating and performance parameters for the remediation system(s); and

9. System inspection sheets shall document field and maintenance activities conducted during each Site visit and shall be included in quarterly monitoring reports.

MONITORING FREQUENCIES

Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted, or parameters and locations removed or added by the Executive Officer if Site conditions indicate that the changes are necessary.

REPORTING REQUIREMENTS

1. The Dischargers shall report all monitoring data and information as specified herein. Reports that do not comply with the required format will be REJECTED and the Dischargers shall be deemed to be in noncompliance with the Monitoring and Reporting Program.

2. Quarterly groundwater monitoring reports shall be submitted to the Regional Water Board according to the schedule below.

Monitoring Period	**Report Due**
January – March	May 15
April – June	August 15
July – September	November 15
October – December	February 15

   Groundwater monitoring reports shall include a contour map showing groundwater elevations at the Site and the groundwater flow direction. The quarterly groundwater monitoring reports shall include tables summarizing the historical depth-to-water, groundwater elevations, and historical analytical results for each monitoring well. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Water Board. Field monitoring well sampling sheets and well/wellhead inspection and maintenance data sheets shall be completed for each monitoring well sampled and included in the report.

3. Quarterly remediation progress reports shall be submitted to the Regional Water Board according to the schedule below.

Monitoring Period	**Report Due**
January – March	May 15
April – June	August 15
July – September	November 15
October – December	February 15

4. Remediation progress reports shall include an estimate of the cumulative mass of contaminant removed from the subsurface, system operating time, the effectiveness of the remediation system, any field notes pertaining to the operation and maintenance of the system, and, if applicable, the reasons for and duration of all interruptions in the operation of any remediation system and actions planned or taken to correct and prevent interruptions.

5. In reporting the monitoring data, the Dischargers shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements. All data shall be submitted in electronic form in a form acceptable to the Regional Water Board.