Appendix A

Revised Tentative Order

CALIFORNIA REGIONAL WATER QUALITY CONTROL WATER BOARD
SAN FRANCISCO BAY REGION

ORDER NO. R2-2011-00XX

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS FOR:

GOLDEN GATE WAY, LLC
WILLIAM PEACOCK
YOLANDA M. PEACOCK
JEANNE K. STEWART
TOMMY LEE STEWART
JEANNE'S HAMLIN CLEANERS
JEANNE STEWART dba HAMLIN CLEANERS
LEONARD A. GROSS
LEONARD A. GROSS PROFESSIONAL CORPORATION
For the property located at

3425 GOLDEN GATE WAY
LAFAYETTE
CONTRA COSTA COUNTY

1. **Site Location**: The site is located at 3421, 3423, and 3425 Golden Gate Way, in a mixed residential and commercial area of Lafayette. The site is developed with a single-story office (3421 Golden Gate Way), a wood shop (3423 Golden Gate Way), and a warehouse building (3425 Golden Gate Way). The site layout is shown on attached Figure 1. As of December 2010, the northern portions of the 3423 and 3425 Golden Gate Way buildings are used for office space; the southern portions of the 3423 and 3425 Golden Gate Way buildings are used as a wood shop and a storage warehouse for construction supplies and equipment, respectively. The eastern and southern portions of the site consist of asphalt-paved parking and driveway areas. Surface topography is generally flat with an elevation of approximately 320 feet above mean sea level. The regional topography slopes gently to the south-southeast toward Lafayette Creek bounding the site to the southeast. A multi-family residential property is located immediately west of the site. Residential and commercial buildings are present north of the site, across Golden Gate Way.

2. **Site History**: The site consists of two distinct parcels: Assessor's Parcel No. 233-051-016 (016 Parcel), and 233-051-017 (017 Parcel). The site was originally developed with the current building in approximately 1950, and has housed four business addresses (3419, 3421, 3423, and 3425 Golden Gate Way) since the building was constructed. From approximately 1956 to 1999, a dry cleaning business (Hamlin Cleaners) operated on the 016 parcel, at the 3425 Golden Gate Way location. In 2008, dry cleaning solvent contamination was discovered in soil and groundwater beneath the 016 Parcel. The

subsequent environmental investigations indicated that the contamination has migrated beneath the adjacent 017 Parcel. There is no evidence that solvent using businesses ever operated at the 017 Parcel.

a. **Dry Cleaning Business Operation:** Hamlin Cleaners was started in 1956 by Zelma and Robert Hamlin. The Hamlins operated the business until 1960 when it was sold to Henry and Doreen Stross. The Strosses operated Hamlin Cleaners from 1960 until 1978. The Hamlins and the Strosses are all deceased.

Ronald Monroe purchased the business in 1978 from Henry and Doreen Stross. He operated and controlled the business from 1978 until his death in 1985, after which the business was sold to Jeanne K. Stewart in 1986. Ronald Monroe's sons (Scott Monroe and Matthew Monroe) worked in the business. Ronald Monroe and Matthew Monroe are both deceased.

Jeanne K. Stewart and Tommy Lee Stewart dba Hamlin Cleaners and Jeanne's Hamlin Cleaners operated a dry cleaning business at the site from March 1986 to March 1999.

Since 1999, Peacock Construction, Inc. has utilized the 3425 Golden Gate Way to store construction equipment and supplies.

b. **Land Ownership:** The 016 and 017 Parcels have been owned by several different owners since the 1950s. The chain of title to the respective parcels is as follows:

<u>Assessor's Parcel No. 233-051-016</u>
1950 - William M. Hamlin grants title to Robert L. Hamlin and Zelma Lee Hamlin
1953 - Zelma Lee Hamlin grants title to Robert L. Hamlin as sole owner
1978 - Robert L. Hamlin grants title to Henry A. Stross and Doreen M. Stross
1978 - Henry A. Stross and Doreen M. Stross grant title to Scott Vincent Monroe
1980 - Scott Vincent Monroe grants to Contractors Capital Corp., Trustee
1981 - Contractors Capital Corp., Trustee grants to Leonard A. Gross, and Leonard A. Gross Professional Corporation
1985 – Linda Capin Gross quitclaims and grants to Leonard A. Gross her interest in the property
1987 - Leonard A. Gross grants to William H. Peacock and Yolanda M. Peacock
1990 - William H. Peacock and Yolanda M. Peacock grant 10 percent of their title to James S. Peacock and Margaret M. Peacock
1990 - William H. Peacock, Yolanda M. Peacock, James S. Peacock, and Margaret M. Peacock grant title to Golden Gate Associates
2010 – Golden Gate Associates grants title to Golden Gate Way, LLC

<u>Assessor's Parcel No. 233-051-017</u>
1945 - Sewall Smith and Mary Siebert Smith grant title to John S Martino and

Emma Martino

1951 - John S Martino and Emma Martino grant title to Louis Martino and Geraldine Martino

1977 - Louis Martino and Geraldine Martino grant title to The Martino Family Trust, Louis J. Martino and Geraldine G. Martino Trustees

1984 - The Martino Family Trust, Louis J. Martino and Geraldine G. Martino Trustees grant title to William H. Peacock and Yolanda M. Peacock

1990 - William H. Peacock and Yolanda M. Peacock grant 10 percent of their title to James S. Peacock and Margaret M. Peacock

1990 - William H. Peacock, Yolanda M. Peacock, James S. Peacock, and Margaret M. Peacock grant title to Golden Gate Associates

2010 – Golden Gate Associates grants title to Golden Gate Way LLC

As stated above the Hamlins, the Strosses, and Ronald Monroe are deceased. Since mid-1980' both parcels were under the same ownership (Peacock's, Golden Gate Associates, and Golden Gate Way, LLC). In 2010, Golden Gate Associates merged out of existence in California into a new business entity, Golden Gate Way, LLC.

Golden Gate Associates and Golden Gate Way, LLC have thus far coordinated various tasks to facilitate the investigation and clean-up of the site.

3. Named Dischargers:

- GOLDEN GATE WAY, LLC is named as a discharger because it has owned the land since July 2010, has knowledge of land contamination, it had the legal ability to prevent migration of contaminants, and also because it is a surviving entity from the merger of Golden Gate Associates, the entity which purchased the land in 1987, at the time of the activity that resulted in the discharge, had knowledge of the discharge or the activities that caused the discharge, and had the legal ability to prevent the discharge and migration of contaminants. Golden Gate Associates leased the site to Jeanne Stewart dry cleaning operations from 1987 and 1999.

- WILLIAM H. PEACOCK AND YOLANDA M. PEACOCK are named as dischargers because they owned the land between November 2, 1987, and January 5, 1990, and they were general partners of Golden Gate Associates, that owned the land between January 5, 1990, and July 1, 2010, at the time of the activity that resulted in the discharge, had knowledge of the discharge or the activities that caused the discharge, and had the legal ability to prevent the discharge and migration of contaminants. They leased the site to Jeanne Stewart dry cleaning operations from 1987 and 1999 as individuals, and as representatives of Golden Gate Associates.

- LEONARD A. GROSS, AND LEONARD A. GROSS PROFESSIONAL CORPORATION are named as dischargers because they owned the land between September 16, 1981, and November 2, 1987, at the time of the activity that resulted in the discharge, had knowledge of the discharge or the activities that caused the discharge, and had the legal ability to prevent the discharge and migration of contaminants. They leased the site to two different dry cleaning operations: Ronald Monroe from 1981 to 1986, and the Stewarts from 1986 to 1987.

- JEANNE'S HAMLIN CLEANERS, JEANNE STEWART dba HAMLIN CLEANERS, JEANNE KAY STEWART, AND TOMMY LEE STEWART are named as dischargers because they conducted dry cleaning operations at the site between April 1, 1986 to 1999, that resulted in discharge of solvents into subsurface and contamination of soil and groundwater beneath the site, had knowledge of the discharge, and had the ability to prevent the discharge.

The owners of the 017 Parcel are not named as dischargers because there is no evidence that contamination originated at the 017 Parcel. If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the site where it entered or could have entered waters of the state, the Water Board will consider adding those parties' names to this order. The Board declines to exercise its discretion to name Scott Monroe to this Order for the reasons stated in the Response to Comments, the substance of which is incorporated herein by reference.

The parties named in this Order are "persons" within the meaning of Water Code section 13304, and have caused discharges as alleged herein consistent with the California Water Code, Water Quality Orders including but not limited to *In the Matter of Zoecon Corporation*, Order No. WQ 86-2 and *In the Matter of the Petition of Arthur Spitzer et. al*, Order No. WQ 89-8, and are therefore responsible for complying with the terms of this Order.

4. **Regulatory Status**: This site investigation and cleanup has been overseen by the Regional Water Board staff under the Site Cleanup Program although the site has not previously been subject to any Regional Water Board site cleanup order.

5. **Site Hydrogeology**: The site stratigraphy is relatively uniform. The near-surface lithology consists of fill material including mixtures of gravels, sands, and clays to approximately 5 feet below ground surface (bgs). Natural materials consist of approximately 37-foot-thick sequence of clays and silts, with discontinuous silt/sand intervals overlying a 2- to 9-foot layer of silty to gravelly sand. Groundwater flow within the on-site sediments is controlled by the presence of this sand layer. The sand layer is underlain by a silt and sandy silt sequence at least 10 feet thick. A very dense stiff soil, possibly semi-consolidated material or bedrock, is present beneath the silt and sandy silt layer at 53-56 to at least 63 feet bgs.

One distinct, continuous water-bearing zone of varying thickness is present throughout the site between approximately 37 and 53 feet bgs. This water bearing zone appears to be confined, with groundwater table stabilizing at approximately 14 to 15 feet bgs. The horizontal hydraulic gradient at the site is nearly flat beneath the site building, and ranges from 0.01 feet per foot (ft/ft) to 0.03 ft/ft south of the building. The apparent groundwater flow direction is to the south-southeast, which generally follows the regional topography sloping towards the Lafayette Creek southeast of the site. Lafayette Creek flows into Las Trampas Creek approximately 100 feet east of the site.

6. **Remedial Investigation:** Dry cleaning solvent contamination was discovered at the site in 2008. Additional site investigations were conducted in 2009 and 2010. These investigations confirmed the presence of volatile organic compounds (VOCs) in the subsurface, including tetrachloroethene (PCE) and related breakdown products: trichloroethene (TCE), cis-1,2-dichloroethene (cis-1.2-DCE), and vinyl chloride (VC). Consistent with the historic dry cleaning operations at the site, PCE is the primary constituent of potential concern. TCE, cis-1,2-DCE, and VC have been detected in few site locations and at much lower concentrations, indicating that limited reductive dechlorination of PCE is occurring.

a. **Subsurface Contamination:** The highest concentrations of PCE were detected in shallow soils near the former sump, immediately south of the warehouse portion of the building at 3425 Golden Gate Way, which was the former dry cleaning business location. The contamination migrated vertically to deeper soils and to groundwater, and also upward into soil vapor beneath the onsite commercial building, and potentially beneath the adjacent offsite apartment building. Impacted groundwater migrated laterally southeast, south and southwest, toward adjacent Lafayette Creek, and beneath the southeastern portion of the adjacent multi-family residential property.

Soil: PCE and TCE were detected in soil beneath the site at concentrations up to 42.8 mg/Kg and 0.811 mg/Kg, respectively. Cis-1,2-DCE was not detected in shallow soil (at 5-6 feet bgs), but minor concentrations (up to 0.505 mg/Kg) were detected in deeper soil (at 10-30 feet bgs). VC was not detected.

Groundwater: PCE, TCE, cis-1,2-DCE, and VC have been detected in groundwater beneath the site at concentrations up to 290,000 ug/L, 280 ug/L, 70 ug/L, and 14 ug/L, respectively. The highest dissolved PCE concentrations were detected near the former sump, south of the warehouse portion of the building which was the former dry cleaning business location. The VOCs concentrations at the western property boundary (near the adjacent offsite apartment building) were up to 416 ug/L of PCE, 68.3 ug/L of TCE, and 13.6 ug/L of cis-1,2-DCE. The

VOCs concentrations near Lafayette Creek (30 feet of the northern creek bank) were up to 12,200 ug/L of PCE, 206 ug/L of TCE, and 224 ug/L of cis-1,2-DCE.

Surface Water: Low concentration of cis-1,2-DCE (0.34 ug/L) was detected in a downstream creek water sample.

Soil Vapor: PCE has been detected in soil gas at the site at concentrations up to 1,900,000 $\mu g/m^3$. The highest concentrations are present beneath the southern portion of the former dry cleaning building. Up to 4,200 $\mu g/m^3$ of PCE were detected in shallow soil gas at the property western boundary, near the adjacent offsite apartment building. TCE (up to 32,000 $\mu g/m^3$), and/or cis-1,2-DCE (up to 6,200 $\mu g/m^3$) were reported to be present in soil gas in few locations. VC was reported only in one soil-gas sample (near the former sump area) at 960 $\mu g/m^3$.

b. **Data Gaps:** Currently, a network of five groundwater monitoring wells (MW-01 through MW-05), and three soil vapor probes (SVP-1 through SVP-3) exist at the site. However, no regular monitoring and sampling of these wells has been performed, therefore, the long term groundwater flow direction and concentration trends at the site have not been determined. Task 3 addresses this data gap.

The lateral extent of high PCE and TCE concentrations is largely limited to the area near and immediately downgradient of the former sump. The dissolved plume extends to the southeast and south (toward Lafayette Creek), and southwest (toward the offsite apartment building), and potentially has migrated offsite. The plume has not been delineated to the southeast, south, and southwest. Tasks 4 and 5 address this data gap.

High VOCs concentrations were detected in subsurface near the northern bank of Lafayette Creek, about 30 feet north of the creek channel, and cis-1,2-DCE was detected in the creek water downstream. However, only a very limited investigation of creek water was conducted, and no sediment sampling has been performed. Further investigation of the creek is necessary to confirm the assumption that the surface water migration/exposure pathway is not complete. Tasks 4 and 5 address this data gap.

Indoor air in the buildings within the plume has not been sampled for VOCs. Tasks 4 and 5 address this data gap.

c. **Interim Remediation:** PCE concentrations in soil gas beneath portions of the onsite commercial building at 3425 and 3423 addresses indicate a potential health risk to the building occupants. A soil vapor extraction (SVE) system was installed at the site to reduce VOCs concentrations in onsite soil vapor, control migration of contaminated soil vapor toward the adjacent offsite residential building, and

mitigate potential human health risks associated with VOCs vapor intrusion into the onsite commercial and offsite residential buildings. The system consists of two horizontal vapor extraction wells: the original well located beneath the onsite warehouse building, and the perimeter well located near the offsite apartment building (approximately 10 feet east of the western property boundary). The wells are connected to the granular activated carbon vessels, and SVE blower located inside the warehouse building. The original SVE system (horizontal well beneath the warehouse building) has been operating since September 2009. The perimeter SVE system has been placed into operation in February 2011. As of March 2011 approximately 145 pounds of VOCs have been removed from the subsurface. The SVE system works as an interim measure to address immediate risks to human health from potential VOCs vapor intrusion to indoor air, however, does not appear to sufficiently address the long term site cleanup goals. Task 6 addresses this matter.

7. **Adjacent Sites**: There are no known contaminant release sites in the immediate upgradient or crossgradient vicinity of the site. Three closed petroleum impacted sites are located within 1,000 feet upgradient of the site.

8. **Environmental Risk Assessment**: A screening level environmental risk assessment was carried out to evaluate potential environmental concerns related to identified soil gas, soil, and groundwater impacts. Chemicals evaluated in the risk assessment include PCE which is the primary constituent of potential concern (COPC), and also the PCE biodegradation products, TCE, cis-1,2-DCE, and VC which are detected at lower concentrations.

   The primary human exposure pathway considered complete for the site is the inhalation of COPCs in indoor air, volatilizing from contaminated subsurface soil and groundwater, by onsite and offsite commercial/industrial workers and residents. An additional potential exposure pathway is the direct contact with surface water/sediment and/or inhalation of volatile chemicals in the creek. However, the low to nondetect concentrations of VOCs in the creek water samples indicate that potential human health risks from exposure to VOCs from surface water/sediment is very low. Similarly, potential risks to fresh water habitats in the creeks adjacent to the site are very low.

   Direct human exposures (i.e., ingestion, dermal contact, and inhalation) to VOC-bearing soil and groundwater are not considered complete for the current site commercial users and offsite residents because the plume area is largely covered with buildings and asphalt pavement. However, the direct exposure pathway may become complete for construction/maintenance workers, or future site users if the soil is disturbed.

   Potential exposures associated with the use of shallow groundwater are also not considered complete because currently water for drinking and other uses is supplied to the site and its vicinity by East Bay Municipal Utilities District from imported surface water. Although the

shallow groundwater at the site is not likely to be developed for beneficial use in the foreseeable future, groundwater in the region is designated as the drinking water source. Therefore, groundwater ingestion, and soil leaching to groundwater are considered potential future exposure pathways.

a. **Screening Levels:** As part of the assessment, site data were compared to Environmental Screening Levels (ESLs) compiled by Water Board staff. The presence of chemicals at concentrations above the ESLs indicates that additional evaluation of potential threats to human health and the environment is warranted. Screening levels for groundwater address the following environmental concerns: 1) drinking water impacts (toxicity and taste and odor), 2) impacts to indoor air and 3) migration and impacts to aquatic habitats. Screening levels for soil address: 1) direct exposure, 2) impacts to indoor air, 3) leaching to groundwater and 4) nuisance issues. Screening levels for soil gas address indoor air vapor intrusion concerns. Screening levels for drinking water are based on the lowest of toxicity-based standards (e.g., promulgated Primary Maximum Contaminant Levels (MCLs) or equivalent) and standards based on taste and odor concerns (e.g., Secondary MCLs or equivalent). Chemical-specific screening levels for other human health concerns (i.e., indoor air and direct-exposure) are based on a target excess cancer risk of $1x10^{-6}$ for carcinogens and a target Hazard Quotient of 0.2 for noncarcinogens. Groundwater screening levels for the protection of aquatic habitats are based on promulgated surface water standards (or equivalent). The Water Board considers a cumulative excess cancer risk range of $1x10^{-4}$ of $1x10^{-6}$ and a target Hazard Index of 1.0 to be generally acceptable for human health concerns at remediation sites. Soil screening levels for potential leaching concerns are intended to prevent impacts to groundwater above target groundwater goals (e.g., drinking water standards). Soil screening levels for nuisance concerns are intended to address potential odor and other aesthetic issues.

b. **Soil Assessment:** PCE and TCE were detected in shallow soil beneath the site. As indicated in the table below PCE exceeds its ESLs for direct exposure (for construction worker, commercial/industrial, and residential receptors), and soil leaching concerns. TCE slightly exceed its ESL for soil leaching concerns.

Constituent of Concern	Maximum Reported Concentration in Shallow Soil	ESL for Soil Direct Exposure Concern (mg/Kg)	ESL for Soil Leaching Concern (mg/Kg)

	(mg/Kg)	Construction Work. Receptor	Exceeded?	Commercial/Industr. Receptor	Exceeded?	Residential Receptor	Exceeded?		Exceeded?
PCE	42.8	30	**YES**	0.95	**YES**	0.37	**YES**	0.7	**YES**
TCE	0.811	170	No	4.1	No	1.9	No	0.46	**YES**

c. **Groundwater Assessment:** As indicated in the table below, PCE, TCE, cis-1,2-DCE, and VC exceed their screening levels for drinking water concerns. In addition, PCE exceeds the groundwater screening levels for vapor intrusion and aquatic habitat concerns, and VC exceeds the groundwater screening level for vapor intrusion concerns.

Constituent of Concern	Maximum Reported Concentr. (ug/L)	ESL for Drinking Water Concerns (ug/L)		ESL for Aquatic Habitat Concerns (ug/L)		ESL for Indoor-Air Vapor Intrusion Concerns (ug/L)			
			Exceeded ?		Exceeded ?	Residential Land Use	Exceeded?	Commercial Land Use	Exceeded?
PCE	290,000	5	**YES**	120	**YES**	120	**YES**	420	**YES**
TCE	280	5	**YES**	360	No	530	No	1800	No
cis-1,2 DCE	70	6	**YES**	590	No	620	No	17000	No
VC	14	0.5	**YES**	780	No	3.8	**YES**	13	**YES**

d. **Soil Gas Assessment:** As indicated in the table below, PCE, TCE, and VC exceed their residential ESLs for indoor-air vapor intrusion concerns. TCE also exceeds its Cis-1,2-DCE was detected at concentrations below the residential ESL.

Constituent of Concern		Maximum Reported Concentration in Soil Gas @ 5 feet bgs (ug/m^3)	ESL for Indoor-Air Vapor Intrusion Concerns (ug/m^3)			
			Residential Land Use	Exceeded?	Commercial Land Use	Exceeded?
on-site	PCE	1,900,000	410	**YES**	1,400	**YES**
	TCE	32,000	1,200	**YES**	4,100	**YES**
	Cis-1,2-DCE	6,200	7,300	No	20,000	No
	VC	960	31	**YES**	100	**YES**
off-site	PCE	4,200	410	**YES**	1,400	**YES**
	TCE	20	1,200	No	4,100	No
	Cis-1,2-DCE	<10	7,300	No	20,000	No

	VC	<6.6	31	No	100	No

Note: Off-site concentrations were based on concentrations detected in the sample collected from vapor probe SVP-1, located on-site but near (approximately 5 feet west) of the adjacent off-site apartment building.

e. **Conclusions:** Remedial action is needed due to the exceedances of the ESLs for VOCs for vapor intrusion, soil leaching, aquatic habitat concerns, and potential future direct exposure and drinking water concerns.

Due to excessive risk that will be present at the site pending remediation, institutional constraints are appropriate to limit onsite exposure to acceptable levels. Institutional constraints include a deed restriction that notifies future owners of sub-surface contamination, prohibits the use of shallow groundwater beneath the site, and prohibits sensitive uses of the site such as day care centers and residences.

9. Basis for Cleanup Standards

a. **General**: State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. The site investigation results confirm the Regional Water Board's conclusion that background levels of water quality cannot be restored. This order and its requirements are consistent with Resolution No. 68-16.

State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

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

Water Board Resolution No. 88-63, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels. Groundwater underlying and adjacent to the site qualifies as a potential source of drinking water.

The Basin Plan designates the following potential beneficial uses of groundwater underlying and adjacent to the site:

- Municipal and domestic water supply
- Industrial process water supply
- Industrial service water supply
- Agricultural water supply
- Freshwater replenishment to surface waters (Lafayette Creek and Las Trampas Creek)

At present, there is no known use of groundwater underlying the site for the above purposes.

The Basin Plan does not designate any existing and potential beneficial uses for Lafayette Creek and Las Trampas Creek. However, under the tributary clause beneficiary uses for Walnut Creek are applicable. Therefore, the following existing and potential beneficial uses are applicable for Lafayette Creek and Las Trampas Creek:

- Warm freshwater habitat
- Cold freshwater habitat
- Fish migration
- Fish spawning
- Wildlife habitat
- Contact water recreation (potential)
- Noncontact water recreation (potential)

c. **Basis for Groundwater Cleanup Standards**: The groundwater cleanup standards for the site are based on applicable water quality objectives and are the more stringent of EPA and California maximum contaminant levels (MCLs). Cleanup to this level will protect beneficial use of groundwater and will result in acceptable residual risk to humans.

d. **Basis for Soil Cleanup Standards**: The soil cleanup standards for the site are based on soil leaching concerns. Cleanup to this level is intended to prevent leaching of contaminants to groundwater and will result in acceptable residual risk to humans.

e. **Basis for Soil Gas Cleanup Standards**: The soil gas cleanup standards for the site are based on indoor-air vapor intrusion concerns. Cleanup to this level is intended to prevent intrusion of soil gas to indoor air and will result in acceptable residual risk to humans.

10. **Future Changes to Cleanup Standards**: The goal of this remedial action is to restore the beneficial uses of groundwater underlying and adjacent to the site. Results from other sites suggest that full restoration of beneficial uses to groundwater as a result of active remediation at this site may not be possible. If full restoration of beneficial uses is not technologically nor economically achievable within a reasonable period of time, then the dischargers may request modification to the cleanup standards or establishment of a containment zone, a limited groundwater pollution zone where water quality objectives are exceeded. Conversely, if new technical information indicates that cleanup standards can be surpassed, the Water Board may decide that further cleanup actions should be taken.

11. **Reuse or Disposal of Extracted Groundwater**: Water Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.

12. **Basis for 13304 Order**: California Water Code Section 13304 authorizes the Water Board to issue orders requiring dischargers to cleanup and abate waste where the dischargers have caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

13. **Cost Recovery**: Pursuant to California Water Code Section 13304, the dischargers are hereby notified that the Water Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order.

14. **CEQA**: This action is an order to enforce the laws and regulations administered by the Water Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.

15. **Notification**: The Regional Water Board has notified the dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.

16. **Public Hearing**: The Regional Water Board, at a public meeting, heard and considered all comments pertaining to this discharge.

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

A. PROHIBITIONS

1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.

2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. REMEDIAL ACTION AND CLEANUP STANDARDS

1. **Continue Operation of SVE System.** The dischargers shall continue operation of the SVE system as an interim remedial measure to address human health risks from volatilization of VOCs vapors from subsurface to indoor air.

2. **Remedial Action Plan (RAP)**: The dischargers shall implement the RAP for the site, following its preparation and approval pursuant to tasks listed below.

3. **Cleanup Standards:** A deed restriction limiting site uses shall be placed on the site until the cleanup standards are met.

   a. **Groundwater Cleanup Standards**: The following groundwater cleanup standards shall be met in all wells identified in the Self-Monitoring Program:

Constituent	Standard (ug/l)	Basis
PCE	5	USEPA primary MCL
TCE	5	USEPA primary MCL
Cis-1,2-DCE	6	USEPA primary MCL

VC	0.5	USEPA primary MCL

NOTE: MCL = Maximum Contaminant Level

b. Soil Cleanup Standard: The following soil cleanup standards shall be met in all vadose-zone soils, and shall be verified onsite by collecting soil samples in the plume area.

Constituent	Standard (mg/Kg)	Basis
PCE	0.70	ESL for Soil Leaching
TCE	0.46	ESL for Soil Leaching

NOTE: ESL = RWQCB Environmental Screening Level from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Volume 2, Water Board, November 2007 (Tables A-1 and A-2).

c. Soil Gas Cleanup Standards: The following soil gas cleanup standards for VOCs shall be met in all site vadose-zone soils. These standards shall be verified by collecting vapor samples from permanent onsite soil vapor probes.

Constituent	Standard (ug/m^3)	Basis
PCE	410	ESL for Vapor Intrusion into Residential Buildings
TCE	1,200	ESL for Vapor Intrusion into Residential Buildings
Cis-1,2-DCE	7,300	ESL for Vapor Intrusion into Residential Buildings
Vinyl Chloride	31	ESL for Vapor Intrusion into Residential Buildings

NOTE: ESL = RWQCB Environmental Screening Level from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Volume 2, Water Board, November 2007. Residential standards are used because apartment buildings are located immediately downgradient of the site.

C. TASKS

1. PROPOSED INSTITUTIONAL CONSTRAINTS

COMPLIANCE DATE: January 30, 2012

Submit a technical report acceptable to the Executive Officer documenting procedures to be used by the dischargers to prevent or minimize human exposure to soil and groundwater contamination prior to meeting cleanup standards. Such procedures shall include a deed restriction that notifies future owners about subsurface contamination; prohibits the use of shallow groundwater beneath the site as a source of drinking water until cleanup standards are met; and prohibits sensitive uses of the site such as day care centers and residences.

2. IMPLEMENTATION OF INSTITUTIONAL CONSTRAINTS

COMPLIANCE DATE: 60 days after Executive Officer approval of Task 1

Submit a technical report acceptable to the Executive Officer documenting that the proposed institutional constraints have been implemented.

3. QUARTERLY GROUNDWATER AND SOIL VAPOR MONITORING

COMPLIANCE DATE: 30 days after the end of each quarter
(first report due by April 30, 2012)

Implement quarterly monitoring and sampling of site groundwater monitoring wells and soil vapor probes (per attached self-monitoring program) to determine long term groundwater flow direction and VOCs concentration trends in subsurface, and to evaluate SVE system effectiveness. Submit quarterly monitoring reports acceptable to the Executive Officer summarizing groundwater and soil vapor monitoring/sampling procedures and results.

4. WORK PLAN FOR ADDITIONAL SITE INVESTIGATION
COMPLIANCE DATE: May 30, 2012

Submit a work plan acceptable to the Executive Officer for: 1) completing delineation of the dissolved VOCs plume; 2) sampling of creek sediment, and confirmation sampling of creek water; and 3) sampling of indoor air in buildings within the plume to confirm effectiveness of the SVE system. The work plan should specify investigation methods, sampling locations and analyses, and include an implementation schedule.

5. ADDITIONAL SITE INVESTIGATION REPORT

COMPLIANCE DATE: 90 days after Executive Officer approval of Task 3 work plan.

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 4 work plan. The technical report should define the lateral extent of pollution down to concentrations at or below cleanup standards for groundwater, determine sediment condition in the creek, provide the updated site conceptual model and risk evaluation. The report shall also evaluate the SVE system effectiveness, feasibility of other potential remedial methods, and shall recommend the most effective method for the final site cleanup.

6. REMEDIAL ACTION PLAN

COMPLIANCE DATE: 90 days after Executive Officer approval of Task 5 recommended final site cleanup method

Submit a Remedial Action Plan (RAP) acceptable to the Executive Officer for the site. The RAP shall provide detailed description of the proposed final remedial action methods and procedures, and include implementation schedule.

7. IMPLEMENTATION OF FINAL REMEDIAL ACTION

COMPLIANCE DATE: 90 days after Executive Officer approval of Task 6 RAP

Submit a report acceptable to the Executive Officer documenting implementation of the final remedial action.

8. FIVE-YEAR STATUS REPORT

COMPLIANCE DATE: January 30, 2017, and every five years thereafter

Submit a technical report acceptable to the Executive Officer evaluating the effectiveness of the approved remedial action plan. The report should include:

a. Summary of effectiveness in controlling contaminant migration and protecting human health and the environment
b. Comparison of contaminant concentration trends with cleanup standards
c. Comparison of anticipated versus actual costs of cleanup activities
d. Performance data (e.g. groundwater volume extracted, chemical mass removed, mass removed per million gallons extracted)
e. Cost effectiveness data (e.g. cost per pound of contaminant removed)
f. Summary of additional investigations (including results) and significant modifications to remediation systems
g. Additional remedial actions proposed to meet cleanup standards (if

applicable) including time schedule

If cleanup standards have not been met and are not projected to be met within a reasonable time, the report should assess the technical practicability of meeting cleanup standards and may propose an alternative cleanup strategy.

9. PROPOSED CURTAILMENT

COMPLIANCE DATE: 60 days prior to proposed curtailment

Submit a technical report acceptable to the Executive Officer containing a proposal to curtail remediation. Curtailment includes system closure (e.g., well abandonment), system suspension (e.g., cease extraction but wells retained), and significant system modification (e.g., major reduction in extraction rates, closure of individual extraction wells within extraction network). The report should include the rationale for curtailment. Proposals for final closure should demonstrate that cleanup standards have been met, contaminant concentrations are stable, and contaminant migration potential is minimal. The report should also address shallow soils beneath and near the dry cleaning machine and other related equipment.

10. IMPLEMENTATION OF CURTAILMENT

COMPLIANCE DATE: 60 days after Executive Officer approval of Task 9

Submit a technical report acceptable to the Executive Officer documenting completion of the tasks identified in Task 9.

11. WORKPLAN FOR INVESTIGATION BENEATH DRY-CLEANING EQUIPMENT

COMPLIANCE DATE: 30 days before demolition

If demolition of the on-site building will occur, submit a work plan acceptable to the Executive Officer to define the vertical and lateral extent of onsite soil and groundwater pollution under and adjacent to the former dry cleaning machines and related dry cleaning equipment. The work plan should specify investigation methods and a proposed time schedule.

12. COMPLETION OF INVESTIGATION BENEATH DRY-CLEANING EQUIPMENT AND RAP (IF NESSESSARY)

COMPLIANCE DATE: 60 days after Executive Officer approval of Task 11

Workplan

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 11 work plan, and proposing a RAP (if necessary). The technical report should define the vertical and lateral extent of pollution down to concentrations at or below cleanup standards. If cleanup standards are exceeded, the report shall propose remedial action, and specify detailed cleanup methods and time schedule.

13. COMPLETION OF CLEANUP BENEATH DRY-CLEANING EQUIPMENT

COMPLIANCE DATE: 90 days after Executive Officer approval of Task 12 RAP

If cleanup beneath the dry cleaning equipment will be conducted, submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 12 RAP. The technical report should describe cleanup procedures, and provide information regarding cleanup effectiveness.

14. EVALUATION OF NEW HEALTH CRITERIA

COMPLIANCE DATE: 90 days after requested by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating the effect on the approved remedial action plan of revising one or more cleanup standards in response to revision of drinking water standards, maximum contaminant levels, or other health-based criteria.

15. EVALUATION OF NEW TECHNICAL INFORMATION

COMPLIANCE DATE: 90 days after requested by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating new technical information which bears on the approved remedial action plan and cleanup standards for this site. In the case of a new cleanup technology, the report should evaluate the technology using the same criteria used in the feasibility study. Such technical reports shall not be requested unless the Executive Officer determines that the new information is reasonably likely to warrant a revision in the approved Revised Remedial Action Plan or cleanup standards.

16. Delayed Compliance: If the dischargers are delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks,

the dischargers shall promptly notify the Executive Officer and the Water Board may consider revision to this Order.

D. PROVISIONS

1. **No Nuisance**: The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).

2. **Good O&M**: The dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

3. **Cost Recovery**: The dischargers shall be liable, pursuant to California Water Code Section 13304, to the Water Board for all reasonable costs actually incurred by the Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this Order is enrolled in a State Water Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the dischargers over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

4. **Access to Site and Records**: In accordance with California Water Code Section 13267(c), the dischargers shall permit the Water Board or its authorized representative:

   a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.

   b. Access to copy any records required to be kept under the requirements of this Order.

   c. Inspection of any monitoring or remediation facilities installed in response to this Order.

   d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.

5. **Self-Monitoring Program**: The dischargers shall comply with the Self-Monitoring Program as attached to this Order and as may be amended by the Executive Officer.

6. **Contractor / Consultant Qualifications**: All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.

7. **Lab Qualifications**: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Water Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Water Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).

8. **Document Distribution**: Electronic copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agencies:

   a. Contra Costa County Health Services Department

   The Executive Officer may modify this distribution list as needed. The dischargers will contact the above agencies to verify that electronic submittals alone will be adequate.

9. **Reporting of Changed Owner or Operator**: The dischargers shall file a technical report on any changes in site occupancy or ownership associated with the property described in this Order.

10. **Reporting of Hazardous Substance Release**: If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the dischargers shall report such discharge to the Water Board by calling (510) 622-2369 during regular office hours (Monday through Friday, 8:00 to 5:00).

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

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

11. **Periodic SCR Review**: The Water Board will review this Order periodically and may revise it when necessary.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on _____, 2011.

_____
Bruce H. Wolfe
Executive Officer

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

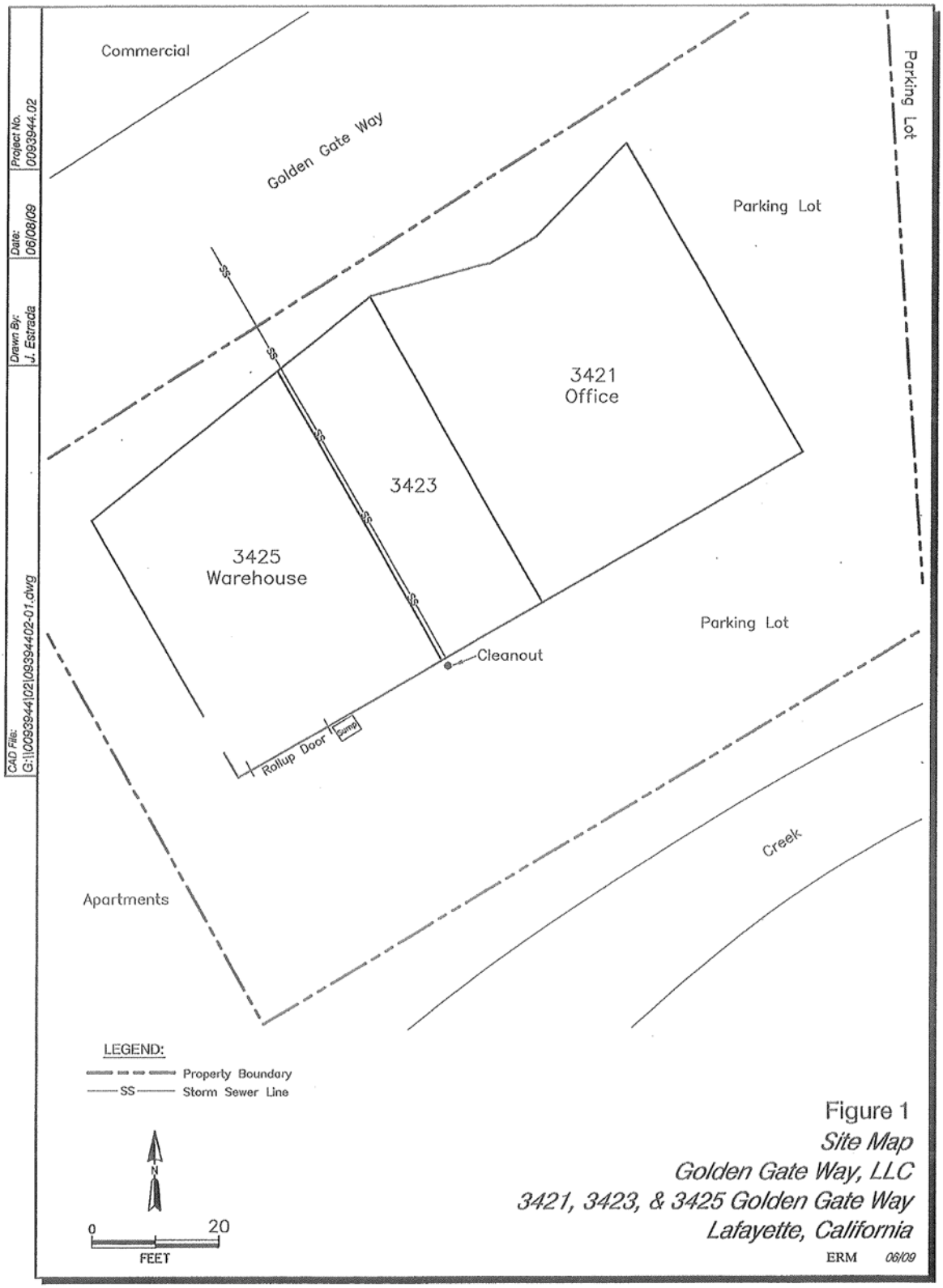

Figure 1
Site Map
Golden Gate Way, LLC
3421, 3423, & 3425 Golden Gate Way
Lafayette, California
ERM 06/09

CALIFORNIA REGIONAL WATER QUALITY CONTROL WATER BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

GOLDEN GATE WAY, LLC
WILLIAM PEACOCK
YOLANDA M. PEACOCK
JEANNE K. STEWART
TOMMY LEE STEWART
JEANNE'S HAMLIN CLEANERS
JEANNE STEWART dba HAMLIN CLEANERS
LEONARD A. GROSS
LEONARD A. GROSS PROFESSIONAL CORPORATION

For the property located at

3425 GOLDEN GATE WAY
LAFAYETTE
CONTRA COSTA COUNTY

1. **Authority and Purpose**: The Water Board requires the technical reports in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Water Board Order No. _____ (site cleanup requirements)

2. **Monitoring**: The dischargers shall measure groundwater elevations quarterly in all groundwater monitoring wells, and shall collect and analyze representative samples of groundwater or soil gas according to the following table:

Well #	Sampling Frequency	Analyses	Well #	Sampling Frequency	Analyses
MW-01	Quarterly	EPA 8260B	SVP-1	Quarterly	EPA TO15
MW-02	Quarterly	EPA 8260B	SVP-2	Quarterly	EPA TO15
MW-03	Quarterly	EPA 8260B	SVP-3	Quarterly	EPA TO15
MW-04	Quarterly	EPA 8260B			
MW-05	Quarterly	EPA 8260B			

Key: MW = groundwater monitoring well; SVP = soil vapor probe

The dischargers shall sample any new monitoring or extraction wells quarterly and analyze groundwater/soil gas samples for the same constituents as shown in the above

table. The dischargers may propose changes in the above table; any proposed changes are subject to Executive Officer approval.

The dischargers shall also perform routine SVE system monitoring and sampling. In addition to system monitoring and sampling required by the Bay Area Air Quality Management District permit, the dischargers shall collect vapor stream samples and vacuum data for evaluation of system performance, and perform confirmatory indoor air sampling (per Task 4 work plan).

3. **Quarterly Monitoring Reports**: The dischargers shall submit quarterly monitoring reports to the Regional Water Board no later than 30 days following the end of the quarter (e.g., report for first quarter of the year due April 30). Reports shall be submitted electronically to the GeoTracker web site (https://geotracker.waterboards.ca.gov) and in hard copy to the Water Board. The reports shall include:

a. Transmittal Letter: The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the dischargers's principal executive officers or their duly authorized representatives, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.

c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping - below).

d. SVE System Status and Operation: The system operation and monitoring data, and results of soil gas sampling shall be presented in tabular form. The sample locations shall be described, and the sample location map included. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Supporting data, such as lab data sheets, need not be included (however, see record keeping - below). The report shall provide periodic and total mass removal calculations, and evaluation of system performance and cleanup

progress. Proposals for further system expansion or modification may be included in the reports.

e. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g., site investigation, remedial measures) and work planned for the following quarter.

5. **Violation Reports**: If the dischargers violate requirements in the Site Cleanup Requirements, then the dischargers shall notify the Water Board office by telephone as soon as practicable once the dischargers have knowledge of the violation. Water Board staff may, depending on violation severity, require the dischargers to submit a separate technical report on the violation within five working days of telephone notification.

6. **Other Reports**: The dischargers shall notify the Water Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation.

7. **Record Keeping**: The dischargers or their agents shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Water Board upon request.

8. **SMP Revisions**: Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the dischargers. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.