

Appendix D


CLEANUP TEAM RESPONSE TO COMMENTS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESPONSE TO COMMENTS

TO: Dyan C. Whyte
Assistant Executive Officer

Date: October 28, 2014
File Nos. 07S0132 (KEB)
07S0204 (KEB)

FROM: 
Kevin D. Brown
Engineering Geologist

CONCUR: Laurent Meillier
Section Leader
Toxics Cleanup Division

Stephen A. Hill
Division Chief
Toxics Cleanup Division

SUBJECT: Cleanup Team's Responses to Comments on Tentative Orders for Site Cleanup Requirements, 1643 Contra Costa Boulevard (Site 1) and 1705 Contra Costa Boulevard (Site 2), Pleasant Hill, Contra Costa County

This document provides the Water Board Cleanup Team's (Staff) Response to Comments received on the Tentative Orders (TOs) for the Site Cleanup Requirements for the 1643 Contra Costa Boulevard (Site 1) and 1705 Contra Costa Boulevard (Site 2), Pleasant Hill, Contra Costa County.

The TOs were circulated for a 30-day public review, which opened on July 2, 2014, and closed on August 4, 2014. The comment period was reopened between August 21 and September 10, 2014, to allow interested parties an opportunity to provide additional comments or rebut comments submitted by other parties. The table below assigns a number to each comment letter received. Herein we respond to all comments and have ordered our responses in the order listed in the table.

The Water Board received comments from the following parties. The numbering groups separate comments from the same party (e.g., 1a and 1b are both from Gregory Village Partners).

Appendix D: Response to Comments

Comment letter No.	Date Received	Commenter
1a	8-4-14	Edward A. Firestone, Esq. on behalf of Gregory Village Partners, L.P.
1b	9-9-14	Gregory Village Partners, L.P. (GVP)
2	8-4-14	The Cronin Law Group (Alan R. Johnston, Esq.) on behalf of Joseph J. Lee and Grace M. Lee
3a	8-4-14	Chevron U.S.A. Inc. (Chevron)
3b	9-9-14	Chevron (A. Todd Littleworth, Esq.)
4	8-4-14	Buchman Provine Brothers Smith LLP (Horace W. Green, Esq.) on behalf of MB Enterprises, Inc.
5a	7-31-14	Barg Coffin Lewis & Trapp LLP (Donald E. Sobelman, Esq.) on behalf of Marjorie P. Robinson
5b	9-9-14	Barg Coffin Lewis & Trapp LLP (Donald E. Sobelman, Esq.) on behalf of Marjorie P. Robinson
6	9-10-14	Barg Coffin Lewis & Trapp LLP (Donald E. Sobelman, Esq.) on behalf of Jane A. Lehrman
7	8-4-14	Paladin Law Group LLP (John R. Till, Esq.) on behalf of Ryan and Anne Schaeffer
8a	8-4-14	Central Contra Costa Sanitary District (Roger S. Bailey, P.E.)
8b	9-10-14	Central Contra Costa Sanitary District (CCCSD)
8c	9-10-14	Meyers Nave (Kenton L. Alm, Esq.) on behalf of Central Contra Costa Sanitary District

Appendix C contains copies of all comments received.

1a. COMMENTS FROM EDWARD FIRESTONE (on behalf of Gregory Village Partners, L.P.)

1a.1 Comment: There should be one site cleanup order (not two), and the order should cover the entire area where chlorinated volatile organic compounds (CVOCs) impact soil and groundwater. The single order should name dischargers associated with both Site 1 and Site 2, since CVOCs from these two source areas are commingled in groundwater.

Response: The Water Board's standard practice when there are two distinct source areas on two separate commercial parcels, even when there are commingled plumes, is to issue separate orders. Our experience dictates that this helps streamline the regulatory process and can minimize disputes among responsible parties. The commenter does not present any compelling reason to issue one order instead of two.

1a.2 Comment: CCCSD should be named to the site cleanup order(s) for several reasons outlined in the July 2, 2014, Staff Report and as described in more detail below. Water Code section 13304 imposes "strict liability." If a party discharged waste then they should be named in a site cleanup order. According to Water Code section 13050(d) a waste includes: "sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal." GVP also submitted a detailed analysis of several CERCLA cases Staff cites in the TO as "useful guidance." GVP generally reiterates the point that it is *possible* to name owners and operators of sewers as dischargers.

Response: We disagree. As explained in the Staff Report, CCCSD does not meet the definition of a discharger under California Water Code section 13304. Section 13304(a) of the California Water Code (Water Code) states:

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.

There is no evidence that CCCSD discharged CVOCs in a manner leading to soil and groundwater contamination. The Staff Report identified State Board's criteria that are commonly applied when naming a responsible party in a 13304 Order. Our analysis took into account the possibility that CCCSD's sewers leaked CVOCs following discharges to drains or private sewer laterals at Site 1 and Site 2, and considered that soils around the main sewer lines may act as a preferential pathway. We determined that CCCSD does not

meet the definition of a discharger under 13304 of the Water Code.¹ We further note that Staff reviewed GVP's submissions regarding specific data points and locations of the sewer related to the above propositions, and determined that the information submitted is not sufficient to link sewer lines to the groundwater contamination in this case.

In response to the question as to whether there is legal precedent that supports naming CCCSD as a discharger, we assert that there is not. In the sole case we are aware of in which a Regional Water Board named a sewer owner as a discharger, there was evidence indicating that a release from the sewer main contributed to the groundwater plume; the sewer owner/operator knew of leaks and failed to repair them; the sewers were in poor condition, and; the sewer owner/operator was aware of or permitted the discharges of CVOCs into the sewers. (Staff Report, section VI) These factors are similar to the criteria analyzed in the three CERCLA cases Staff referenced as "useful guidance" in a footnote in the Staff Report. While we generally agree with GVP's conclusion that it is *possible* to name a sewer owner or operator as a discharger, we do not find sufficient facts to do so in this case. In evaluating the case of *Fireman's Fund Ins. Co. v. City of Lodi, Cal.* (9th Cir. 2002) 302 F.3d 928), GVP cites the same language that Staff find compelling: "it is doubtful whether Lodi may be considered a [potentially responsible party] PRP merely as a result of operating its sewer system," but then notes that on remand to the district court, the lower court determined Lodi was a PRP because of certain admissions Lodi made in court and a Cooperative Agreement Lodi entered into with DTSC in which Lodi accepted responsibility for cleaning up the site. (*Fireman's Fund Ins. Co. v. City of Lodi, Cal.* (E.D. Cal. 2003) 296 F.Supp.2d 1197, 1207-1212.) GVP does not present any evidence of any admissions of liability or agreements that would make CCCSD a discharger in this case.

GVP notes that the sewer owner/operator in the *Lincoln Properties* case successfully proved a third party defense where there was evidence that the county exercised due care and reasonable precautions with respect to operations of a the sewer system. (*Lincoln Properties, Ltd. v. Higgins* (E.D. Cal. 1992) 823 F.Supp. 1528, 1543-44). These facts are most closely aligned with the evidence in the record concerning CCCSD and further support our recommendation to not name CCCSD.

With respect to the *Adobe Lumber* case (*Adobe Lumber, Inc. v. Hellman* (E.D. Cal. 2009) 658 F. Supp. 2d 1188), the court found "evidence suggesting that the City practiced 'wilful or negligent blindness' in maintaining its sewer." As discussed in Section VI of the Staff Report and in the TO, Staff finds no such similar conduct on the part of CCCSD.

GVP cites an additional case, *Westfarm Assocs. v. Washington Suburban Sanitary Comm'n* (4th Cir. 1995) 66 F.3d 669, to support the argument that a sanitary sewer owner/operator may be held liable under CERCLA for a third party's discharge of PCE into the sewer. That case was factually distinct from the circumstances here. An expert in

¹ See State Water Resources Control Board webpage:
http://www.waterboards.ca.gov/laws_regulations/docs/portercologne.pdf

that case testified “the Tech Road Sewer was neither built in a workmanlike manner nor properly repaired.” (*Id.* at p. 674.) The evidence demonstrated that portions of the sewer near the source of PCE exhibited excessive infiltration in 1977, but at the time of a 1993 video inspection had yet to be repaired. (*Id.* at p. 675.) We have reviewed the evidence and determined that CCCSD was not negligent in regard to maintaining its sewer system. We conclude that the facts in this cited case are quite different than those that pertain to CCCSD and do not support the naming of CCCSD as a discharger.

GVP cites a 1992 memo by Chief Counsel William Attwater entitled *Responsibility of Operators of Publicly Owned and Operated Sewer Systems for Discharges From Their Systems Which Pollute Ground Water*. GVP notes that this memo concludes, similar to the cases above, that a sewer owner or operator may be named as a discharger for discharges of waste from its sewer system which creates or threatens to create a condition of pollution or nuisance. GVP’s analysis goes on to state that the fundamental question is whether or not sewer systems leak. Staff respectfully disagrees. The critical question is whether or not the release creates or threatens to create a condition of pollution or nuisance. Indeed, the first of the four criteria considered with respect to CCCSD is whether there was a release from the sewer main that contributed to the plume. (Staff Report, section VI.) Staff concludes that “[t]here is no direct evidence that leaking sewer lines under CCCSD ownership have caused or contributed significantly to the groundwater contamination.”

Finally, GVP describes a situation in Sacramento in which the Sacramento County Sanitation District 1 “voluntarily led the effort to clean up PCE that leaked from its sewers” (emphasis added). Staff welcomes CCCSD’s voluntary efforts to assist in cleanup in this instance, but, based upon the evidence in the administrative record and the analysis in the Staff Report, does not find sufficient information in the record to compel CCCSD to participate in the cleanup.

1a.3 Comment: Sanitary sewers leak, as detailed in the 1992 Central Valley Regional Water Board’s “Izzo” report; CCCSD’s sanitary sewer lines were installed with a substantial leakage tolerance; sanitary sewers built in the 1950s and 1960s used joint compounds that failed and leaked; over time sanitary sewer lines sag and break due to local earth movements; PCE, both as a liquid and as vapor, escapes from sanitary sewers as described in the Izzo report; and Exhibit D is a declaration from Bonneau Dickson, P.E., a sanitary sewer expert, discussing general background on sewer operations, construction practices, and how sewers leak and PCE enters the environment.

Response: We agree that the “Izzo” report is a well-cited reference for evaluating the mechanisms of chemical releases from dry cleaners, and especially the role sanitary sewers could play in the transport and distribution of PCE and other dry cleaning chemicals in the subsurface. The general statements concerning sources of sewer leaks and breaks are also well-documented. These general statements, however, are insufficient to link CCCSD to the specific soil and groundwater contamination in this case. Moreover, Staff has reviewed GVP’s submissions of specific data points and locations of the sewer related to the above propositions, and determined that the information

submitted is not sufficient to link CCCSD sewer lines to the groundwater contamination in this case.

1a.4 Comment: Exhibit C is a short presentation of some of the data by Erler & Kalinowski, Inc. (EKI) that provides strong evidence the sewers leaked in both the neighborhood and near the Chevron site, and that these leaks are sources of PCE that is detected in soil gas and groundwater.

Response: We disagree. Please refer to the Staff Report, pages 12 through 17. The information presented in Exhibit C was previously reviewed and evaluated by Staff. In regards to the former sanitary sewer main in Linda Drive adjacent to Site 2, the Staff Report states on page 14 “There is insufficient soil and groundwater data to reach the conclusion that the older sewer line was a release point.” None of the data presented in Exhibit C alters Staff’s conclusions.

1a.5 Comment: There is evidence that CCCSD sanitary sewers in the vicinity of Site 1 and Site 2 leaked because of tree roots and cracks and sags in the pipes.

Response: We agree there is evidence of historic leaks in the main sewer lines. Sanitary sewer lines composed of vitrified clay, like most of the circa 1950 pipes in this area of Pleasant Hill, are susceptible to root intrusion, cracking, and sagging. As pointed out on Page 14 of the Staff Report, according to available records, there is no direct correlation between damage to the CCCSD-owned main sewer lines and specific discharges of CVOCs to soil and groundwater.

1a.6 Comment: CCCSD was not a “mere conveyor” of waste; CCCSD accepted PCE into its sanitary sewers during the period when CVOCs were being used at Site 1 and Site 2.²

Response: We partly agree. Past ordinances from CCCSD did not specifically prohibit PCE discharges to the main sanitary sewer lines from private sanitary sewer laterals. Based on a review of records and the distribution of PCE and other CVOCs in soil and groundwater, PCE (and other CVOCs) were likely discharged to the main sewer lines via private sewer lateral connections at both Site 1 and Site 2. Such discharges likely occurred due to the historic disposal practices of hazardous chemicals at dry cleaners and automotive repair shops. However, there is no direct evidence that PCE leaked from the CCCSD main sewer lines.

Moreover, prior to 2007, CCCSD allowed for PCE to be discharged to the sanitary sewer within specified limits. For example, Ordinance No. 99 (adopted on July 11, 1974) allowed the discharge of “Total Identifiable Chlorinated Hydrocarbons” to sanitary sewers at a concentration not exceeding 0.002 mg/L for “50% of time” and not exceeding 0.004 mg/L for “10% of time.” We do not agree that prior to 1981, CCCSD allowed the

² Citing a number of cases, GVP also makes the argument that CCCSD could be analogized with owners of landfills who are held liable for cleanup of contamination. While staff has found some limited utility and “useful guidance” in CERCLA cases involving sewer owners/operators and PCE contamination, facts closely aligned with this TO, we are not inclined to expand the analysis to landfills which are expressly designed to store solid waste as opposed to convey liquid waste.

discharge of PCE based solely on temporal permitting limit rather than enabling discharge at specific concentration threshold for a specific time. CCCSD Ordinance No. 147 (adopted on August 27, 1981) states, “No person shall discharge wastewater containing in excess of “0.50 mg/l total identifiable chlorinated hydrocarbons.” Our Staff Report further noted on page 14, “The area along Linda Drive, a street establishing the western boundary of Site 2, is an area where Staff specifically identifies a need for additional data. The original vitrified clay sewer line in this area was replaced in 1987-1988 as part of Chevron’s station upgrade project, and the new cast iron line was put in a location different than the original clay line. The original sewer line served both the former Standard Oil Co. of California (Standard Oil) automotive repair station and the former dry cleaner. CCCSD has supplied several figures which show the locations of both the original and existing sewer lines. There is insufficient soil and groundwater data to reach the conclusion that the older sewer line was a release point.”

CCCSD did not specifically prohibit PCE discharges to their sewer collection system until 2007. However, prior to that time, the record indicates that it allowed for low levels of PCE to be discharged within specified limits. Nonetheless, there is no evidence PCE containing waste was discharged to the sewer collection system in excess of these limits or that PCE laden sewer water was discharged from the collection system.

1a.7 Comment: Awards to CCCSD for exemplary sanitary sewer operations have no bearing on the operations and disposal practices when PCE was being used at Site 1 and Site 2.

Response: We conclude, based on a review of all of the evidence, that CCCSD had a proactive strategy since at least the mid-1970s to properly maintain their sewer system. This is based on a review of records indicating that CCCSD has been an exemplary sanitary sewer district for a number of years. CCCSD implemented a robust program to identify problem areas then repair those areas to maintain the overall integrity of their sanitary sewer network.

1a.8 Comment: The four criteria for naming sanitary sewer agencies discussed in the Staff Report are novel and are not based on any statute or regulation or the City of Lodi court order.

Response: We disagree. The three primary criteria (see Response to Comment 1a.2) considered with respect to naming CCCSD as a discharger are the same three criteria used to evaluate *any* discharger, namely, whether the party:

- 1) owned the property where the discharge occurred;
- 2) had knowledge of the discharge or activities that caused the discharge; and,
- 3) had legal ability to prevent the discharge.

Based upon an ordinary application of these standard criteria, Staff determined it was inappropriate to identify CCCSD as a discharger.

In addition to the standard three criteria, Staff considered the following four criteria, derived from the cases cited in the Staff Report and the sole instance we are aware of in

which a Regional Water Board named a sanitary sewer owner or operator as a discharger in a cleanup and abatement order:

- i. There was a release from the sewer main that contributed to the plume;
- ii. The sewer owner/operator knew of leaks and failed to repair them;
- iii. The sewers were in poor condition and/or were not maintained; and,
- iv. The sewer owner/operator was aware of/or permitted discharges into a leaking sewer.

These four criteria essentially interpret the standard three discharger criteria as they would apply to a sewer owner/operator as opposed to a landowner/business directly responsible for a discharge.

Criterion (i) is similar to an ordinary discharger analysis. The discharge is released from the sewer mains, the portion of the sewer system that the owner/operator can control as opposed to private laterals, which are controlled, maintained, and repaired by individual property owners. This reflects standard criterion (3) above (had legal ability to prevent the discharge).

Criteria (ii) and (iii), knowledge of leaks and failure to repair and the poor condition/failure to maintain sewers, are similar to standard criteria (2) and (3) (had knowledge of the discharge or activities and ability to prevent the discharge).

Criterion (iv) (aware of/permitted discharges into a leaking sewer) is an offshoot of standard criteria (2) (had knowledge of the discharge or activities).

A summary of our analysis for this specific case and whether CCCSD should be named in regard to these criteria is described in Section VI in the Staff Report.

1a.9 Comment: Assuming that the four criteria are valid, CCCSD qualifies as a discharger under those criteria. Specifically, CCCSD's sewer maintenance practices have been reactive, and the lack of evidence of poor practices should not be used to infer good practices.

Response: We disagree. Staff has reviewed each of the specific data points and sewer locations GVP provided and conclude that CCCSD's sewers were not a release point. Finally, we conclude based on Staff's review of CCCSD's sanitary sewer maintenance records and an evaluation of the specific locations and events cited by GVP, that CCCSD had a proactive strategy over the past several decades to properly maintain their sewer system, rather than a reactive approach to maintenance.

1a.10 Comment: Lack of evidence should not be used to CCCSD's benefit. GVP suggests that because CCCSD does not have records before 1990 the Board should accept the inference that all sewer systems leak, therefore CCCSD's sewers leak, therefore CCCSD should be named as a discharger.

Response: We disagree. We have evaluated all of the data points for soil gas, soil and groundwater provided to the Board and concluded there is no direct evidence that leaking sewer lines under CCCSD ownership have caused or contributed significantly to the groundwater contamination. Without direct evidence – data – to support a theory that CCCSD sewer lines contributed to the groundwater plume, an inference that all sewers leak and therefore CCCSD’s sewer lines leaked is irrelevant to our analysis.

1a.11 Comment: There are policy reasons for naming CCCSD as a discharger. Naming CCCSD provides an incentive for good sanitary sewer maintenance and brings financial resources to bear. Many dry cleaner spill cases lack the necessary financial resources to accomplish cleanup. Failing to name CCCSD sends a message that sanitary districts are not liable for discharges in violation of the Water Code.

Response: We disagree, for three reasons. First, sanitary sewer agencies already have an incentive for good sewer maintenance, as they may be liable for any unauthorized discharges to surface or ground waters. Second, while we agree that many dry cleaner dischargers lack the funds to accomplish adequate cleanup, Staff still needs to establish a sufficient basis for naming parties, such as sanitary sewer agencies, who might be able to help fund the cleanup. Finally, the State Water Board and the courts provided criteria to evaluate whether to name sanitary sewer agencies. We evaluated the facts in this case against those criteria and concluded that CCCSD should not be named as a discharger (see section VI, page 12 of the Staff Report Section VI that was part of the TO package). Finally, it is worth repeating that Staff agrees that it *is possible* to name a sanitary sewer district as a discharger. However, given the facts in the administrative record in this case, as they pertain to CCCSD, we do not find sufficient evidence to do so.

1b. COMMENTS FROM GREGORY VILLAGE PARTNERS, L.P.

This second round of comments from Mary Haber, general counsel for Gregory Village Partners, L.P. (GVP), requests a reduction in the groundwater monitoring frequency at Site 1.

1b.1 Comment: GVP requests a modification to the TO. GVP is requesting a reduction in the sampling frequency for seven groundwater monitoring wells (from semi-annual to annual), an elimination of “Water Chemistry Constituents” for eleven monitoring wells, a reduction in the frequency of depth-to-groundwater measurements from all eleven wells (from semi-annual to annual), and modification to the reporting requirement (from semi-annual to annual).

Response: We disagree. Because it is important to observe seasonal changes in groundwater levels and potential fluctuations in the concentrations of critical contaminants, the sampling and monitoring frequency reduction proposal for groundwater monitoring wells associated with Site 1 is not acceptable at this time.

2. COMMENTS FROM THE CRONIN LAW GROUP (on behalf of Joseph J. Lee and Grace M. Lee)

2.1 **Comment:** Joseph J. Lee and Grace M. Lee should not be named as dischargers in the TO, for the reasons given in comments 2.2 through 2.5 below.

Response: As explained below, we conclude that Joseph J. Lee should be named and Grace M. Lee should not be named as a discharger in the TO.

2.2 **Comment:** Grace Lee passed away on February 17, 1997, so there is no rational basis to name her as a discharger in the TO.

Response: We agree. Ms. Lee is deceased, so it is no longer appropriate to name her as a discharger in the TO. The TO has been revised.

2.3 **Comment:** There is no substantial evidence of a waste discharge when the Lees operated a former dry cleaner at Site 1.

Response: We disagree. Based upon soil, soil vapor, and groundwater data, Staff concludes that the dry cleaner at the site used and discharged PCE. In addition, available phone books indicate a dry cleaner operated at Site 1 in the 1980s. The Lees concede that they operated the dry cleaner from 1984 to 1987. They do not deny using PCE, which was the predominant dry cleaning solvent used during this time frame. This also coincides with an era when standard dry cleaning practices included the disposal of separator wastewater and other PCE-laden waste into floor drains, sinks and toilets, or onto the ground surface behind the dry cleaner. It is commonly understood that leaks of PCE ordinarily occurred during PCE deliveries and spilled from the equipment during ordinary operations as a result of loose gaskets, boiler overflows, and other discharges from equipment. Based upon this evidence, the Lees likely discharged PCE. The improper use and/or disposal, or accidental spills of PCE during the Lees' operations at the dry cleaner likely contributed to the soil and groundwater impacts beneath and downgradient of Site 1.

2.4 **Comment:** Joseph J. Lee has no access to Site 1 and therefore cannot comply with the TO.

Response: It is immaterial whether Mr. Lee has direct access to Site 1 today. Physical access to Site 1 is not a prerequisite for naming a discharger in a site cleanup order. Please see the Responses to Comments 3a.14 and 3a.15 regarding former landowners and specifically the discussion regarding *In the Matter of John Stuart*, Order No. WQ 86-15.

2.5 **Comment:** Joseph J. Lee does not have the ability to pay for completing the tasks outlined in the TO.

Response: We have not received proof of an inability to pay cleanup costs. GVP has informed the Water Board that an insurance policy underwritten for Mr. Lee may be available for investigation and cleanup costs associated with Site 1. Therefore, if

insurance funds are available to help fund cleanup costs, it would be premature and inappropriate to release Mr. Lee from liability and the TO requirements for financial reasons.

3a. COMMENTS FROM CHEVRON U.S.A. INC.

We sorted Chevron's comments by categories listed below and present Staff responses in that order:

- a. There is no evidence of a CVOC release from the former waste oil tank (WOT); the Staff Report's discussion of data about the WOT is technically deficient; and any chemical release from the WOT was minor and was adequately investigated and would meet case closure criteria.
 - b. Chevron should not be named as a discharger in the TO in connection with any CVOC release from the previous WOT.
 - c. Independent dealers, not Chevron, operated the WOT, so they, not Chevron, should be named if there has been a WOT release.
 - d. There was a significant CVOC release to soil and groundwater from the former dry cleaner before Chevron owned the property, with a possible contribution from upgradient dry cleaners.
 - e. Chevron should not be named as a discharger in the TO in connection with the CVOC release from the former dry cleaner because Chevron was not the property owner at the time of the discharge.
 - f. The CVOC groundwater plume originating at Site 2 has not commingled with the CVOC groundwater plume originating at Site 1.
 - g. CVOC releases from the sanitary sewer have contributed to the CVOC groundwater plume in this area.
 - h. The findings in the TO are inconsistent with the Water Board's 2005 "no further action" letter for Site 2.
 - i. Other
- a. **Responses to 3a.1 – 3a.4 address the following general comment:** *There is no evidence of a CVOC release from the former waste oil tank (WOT); the Staff Report's discussion of data about the WOT is technically deficient; and any chemical release from the WOT was minor and has been adequately investigated and would meet case closure criteria.*

3a.1 Comment: A steel WOT was once located downgradient of a former dry cleaner. The petroleum concentrations detected in soil at Site 2 are minimal, and the PCE and TCE concentrations detected in 1988, 2011, and 2014 soil samples are entirely consistent with an adjacent, upgradient source of PCE (the former dry cleaner business).

Response: A previously-leaking steel WOT, associated with an automotive repair facility constructed by Standard Oil, was located directly adjacent to and north of a former dry cleaner. The dry cleaner had a prior address of 1709 Contra Costa Boulevard. The location of the former WOT in relation to the former dry cleaner corresponds to the prevailing directions of shallow groundwater flow beneath Site 2, which Staff has determined is to the north and northwest.

We disagree that the concentrations of contaminants detected were minimal. The groundwater data, including the detections of separate-phase fuel hydrocarbons ("floating product") in several historic monitoring wells, clearly demonstrates there were significant releases to soil from leaking steel USTs in the past and during Chevron's operations

and/or ownership of Site 2. There is substantial evidence that both petroleum hydrocarbons and CVOCs were released from the former steel on-site WOT, and that both petroleum and chlorinated constituents are mixed in groundwater beneath and downgradient of Site 2.

The following soil and soil vapor data support our contention that the steel WOT leaked CVOCs to the subsurface during Standard Oil's/Chevron's operations at Site 2:

- On January 6, 1988, a replacement fiberglass WOT was removed at Site 2, and the soil two feet beneath the tank pit bottom was found to contain 0.2 mg/kg of PCE and 0.035 mg/kg of TCE.
- In May 1988, very high concentrations of PCE and TCE in soil vapor (up to 470 ppmv, or 3,188,189 $\mu\text{g}/\text{m}^3$, and 20 ppmv, or 135,664 $\mu\text{g}/\text{m}^3$, respectively) were detected by EA Engineering, Science, and Technology, Inc. (EA). The highest concentrations of CVOCs were detected in vapor samples from probe V10, which was advanced within the former steel WOT pit.
- On December 7, 2011, a soil sample collected at five feet below ground surface during the installation of vapor probe VP-1, a boring in the former steel WOT pit, contained PCE and TCE at 1.2 mg/kg and 1.4 mg/kg respectively. It is noted that the bottom of the original 1,000-gallon steel WOT was six feet below grade.
- Soil vapor samples collected on December 13, 2011, from VP-1 at a depth of five feet contained very high concentrations of PCE and TCE; 2,500,000 $\mu\text{g}/\text{m}^3$ and 2,100,000 $\mu\text{g}/\text{m}^3$, respectively.
- On December 20, 2011, a soil sample collected at 9.5 feet from CPT-13, a boring advanced adjacent to/within the former WOT pit, contained PCE at 0.34 mg/kg and TCE at 0.21 mg/kg, respectively.

A May 24, 1988, report from EA to Chevron U.S.A. Inc. specific to the investigation at Site 2 states, "Since tetrachloroethylene (PCE) is the predominant solvent used in dry cleaning in the United States, there is a high probability that PCE was stored at the site while the dry cleaner existed. PCE is used as a metal cleaning solvent, may also have gotten into the waste oil tank, which although it is more probable that the tank had trichloroethylene (TCE), since this is the major chlorinated solvent used in metal cleaning."

3a.2 Comment: Even if there was a CVOC release from the WOT, the release was minor, properly characterized and remediated by Chevron.

Response: We disagree. Soil, soil vapor, and groundwater data indicate a significant release of CVOCs at the former steel WOT location, a release that was not sufficiently characterized and, given the residual concentrations, not appropriately remediated by Chevron. The current levels of CVOC contamination are well above regulatory and risk-based standards, and the contamination poses a significant threat to human health, groundwater, and the environment. Remediation is necessary to reduce the CVOCs and other contaminants to acceptable levels.

Automotive service stations in the 1970s and 1980s used CVOCs in their operations to clean parts and especially brakes, carburetors, and engines. Even small releases of CVOCs (i.e., PCE and TCE) from the former steel WOT could create a significant groundwater quality problem. The circa 1972 WOT was in such poor condition that it broke apart upon removal in May 1986. Several holes were also observed in the steel. In comparison, the steel fuel USTs removed in 1986 were found to be in good condition. Please refer to page 3 of the Staff Report.

3a.3 Comment: Isotopic analysis by ZymaX Forensics of CVOCs detected in multiple groundwater samples collected from CPT borings demonstrate TCE detected in groundwater at Site 2 is a “breakdown product” of PCE.

Response: The October 9, 2013, ZymaX Forensics report aims to support the origin of TCE as a degradation product of PCE based on isotopic fractionation (i.e., compound specific isotopic analysis or CSIA). The report states the “goal of this study was to assess whether compound specific isotope fingerprinting tools could be used to assess the potential source(s) for volatile organic compounds (VOCs) that have been detected in the vicinity of these two properties.”

Ten groundwater samples were collected in December 2011 from six CPT borings and four active monitoring wells near the two former dry cleaners. Groundwater samples from several CPT borings advanced beneath Site 2 were not analyzed by ZymaX. PCE was detected in every groundwater sample at concentrations between 3.2 µg/L (CPT-18, advanced west of Site 2 in Linda Drive) and 1,200 µg/L (CPT-7, advanced directly north of Site 2 on the Gregory Village Shopping Center parcel). TCE was detected between 3.0 µg/L and 250 µg/L, with the highest concentration detected in CPT-1, advanced directly upgradient of the former P&K Cleaners site.

Several groundwater samples were not analyzed based on “low concentration and/or matrix interference.” It is unclear how a low concentration sample would prevent the analytical instrument from quantifying isotopic ratios. Additionally, “certain samples were not analyzed for hydrogen CSIA upon client’s request.” Indeed, only 50% of the TCE samples were analyzed for hydrogen isotopes. Of these TCE samples nearly half reported an “estimated” value for hydrogen isotopes. This analysis was not conducted for PCE samples. Additionally, samples were also analyzed for carbon and chlorine isotopes for a wider suite of CVOCs: PCE, TCE, and cis-DCE.

The ZymaX report concludes the origin of TCE as a “daughter product of the released PCE, same for the other contaminants, such as cis-1,2-DCE.” However, based on the limited isotopic ratio variability between CVOCs, the data does not clearly support the origin of TCE as only a “breakdown” or degradation product of PCE. Since PCE was likely released at the former WOT, the ZymaX study does not eliminate the WOT as a contributing source of CVOCs in groundwater detected north and northwest of Site 2.

3a.4 Comment: Investigations conducted in 1988, before interim groundwater remediation activities were initiated, found no TCE and only low concentrations of PCE in soil below the groundwater table in samples collected from boring/monitoring well EA-2.

Response: Boring/monitoring well EA-2, which Chevron only recently confirmed had been installed within the steel WOT excavation cavity, was, according to EA in 1989, installed at “the point of highest chlorinated hydrocarbons in soil gas.” According to the boring log for EA-2, fill was encountered from one foot to at least eight feet below the ground surface. A layer of gravel, perhaps fill material, was encountered from eight to 13 feet below grade, and PCE was detected at a minor concentration in the gravel at 10 feet.

Before the start of interim groundwater “pump and treat” activities by Chevron in 1991 (over 4 ½ years after they purchased Site 2), TCE and PCE were detected in a groundwater sample from EA-2 on September 19, 1989, at concentrations of 2,700 µg/L and <25 µg/L, (the “<” [less than] symbol indicates there was a detection of PCE below the laboratory detection limit of 25 µg/L). Although TCE is a byproduct of PCE degradation, this data indicates there was a separate and distinct release of TCE from the previously leaking steel WOT.

b. **Responses to 3a.5 – 3a.6 address the following general comment:** *Chevron should not be named as a discharger in the TO in connection with any CVOC release from the former.*

3a.5 Comment: CVOCs were not released from the former steel WOT.

Response: As discussed above, and in detail in the Staff Report, there is substantial evidence of a CVOC release from the previously leaking steel WOT. No additional response is necessary.

3a.6 Comment: Chevron is not a discharger under the Water Code.

Response: The Staff Report explains the basis for naming Chevron as a discharger. Water Code section 13304 requires any person who caused or permitted 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, to clean up or abate the effects of the waste.

A former landowner that did not actually cause a discharge may nevertheless be found to have permitted waste to be discharged. Specifically, under the State Water Boards’ precedential orders, former landowners and former lessees who permitted waste to be released can be named as dischargers if: 1) they owned or were in possession of the site at the time of the discharge, and 2) had knowledge of the activities which resulted in the discharge, and 3) had the legal ability to prevent the discharge from migrating. (*In the Matter of Wenwest et al.*, Order No. WQ 93-13; *In the Matter of John Stuart*, Order No. WQ 86-15.)

Furthermore, “The State Board has held that actual knowledge of contamination is not needed where it is reasonable for a person to be aware of the dangers inherent in an activity. (*In the Matter of John Stuart*. Order No. WQ 86-15.) As the former Chief Counsel for the State Water Board noted, this approach is legally supportable and good public policy: “[s]o long as the owner of a piece of land is aware of what is happening on the land (or should be expected to be aware) and has the power to regulate the conduct of which he or she is aware, the landowner, not the public treasury, should bear the costs of cleaning up pollution and nuisances that occur on the land.” (Memo from William R. Attwater to State Water Board, May 4, 1987.)

In the Matter of Exxon, Order No. WQ 85-2 established that there must be substantial evidence to support a finding of responsibility. This means credible and reasonable evidence indicating the named party has responsibility. Under State Water Board Resolution 92-49, the Regional Water Board may use any evidence, whether direct or circumstantial, including, but not limited to:

- a. Documentation of historical activities, waste characteristics, chemical use;
- b. Site characteristics and location in relation to other potential sources of a discharge;
- c. Hydrologic and hydrogeologic information;
- d. Industry-wide operational practices that historically have led to discharges;
- e. Lack of documentation of responsible management of wastes; and,
- f. Physical evidence, such as analytical data and soil and/or pavement staining.

Applying the above standards, Chevron is a properly-named discharger. It fully owned and controlled Site 2 from 1987 to 2003. Chevron and its predecessor, Standard Oil, leased and operated at Site 2 from 1950 until 1987. Standard Oil and Chevron leased the site to independent auto repair shops/operators, an activity that is generally known to involve the use of CVOCs, including PCE and TCE, in the operations (e.g., brake repairs, engine cleaning, parts degreasing, etc.).

In addition, Chevron was fully aware of CVOC contamination from the dry cleaner when it purchased Site 2 on December 31, 1986. As noted in our July 20, 2011, letter to Chevron in September 1986, four months prior to Chevron’s acquisition of Site 2, a laboratory noted that analyzed groundwater samples “May contain compounds from sources other than gasoline.” In spite of suspected contamination resulting from the past dry cleaning activities, Chevron proceeded to purchase Site 2 and then completed an extensive renovation of the property in 1987 and 1988.

From August 1991 to July 1996, Chevron undertook an interim cleanup at Site 2 by pumping and treating contaminated groundwater from beneath the former WOT and, in 1992, near the fuel UST pit, but contaminated groundwater was never extracted directly below the former dry cleaner parcel.

The above facts, and those presented in the Staff Report, demonstrate that Chevron: 1) was in possession of the site at the time of the discharge, and; 2) had knowledge of the activities which resulted in the discharge, and; 3) had the legal ability to prevent the discharge from migrating, and even undertook an interim remedial measure to prevent CVOCs in groundwater from migrating offsite.

- c. **Responses to 3a.7 – 3a.9 address the following general comment:** *Independent dealers, not Chevron, operated the WOT, so they, not Chevron, should be named if there has been a WOT release.*

3a.7 Comment: Independent automotive dealers operated the previous WOTs.

Response: To date, Chevron has not provided the names of previous independent dealers, who operated at Site 2 under direct lease agreements with Standard Oil and Chevron, so we cannot include operators of the previous automotive service station at this time. We do not recommend waiting to issue the cleanup order for Site 2, but we are receptive to adding additional parties as dischargers if and when we have sufficient evidence. Even if independent automotive dealers were to be named to the cleanup order, this would not justify removing Chevron from the TO with respect to historic WOT releases, since Standard Oil/Chevron was the master lessee during WOT operations and the company meets the criteria for being named as a discharger as described above.

3a.8 Comment: Automotive repair stations formerly located at Site 2 did not use CVOCs.

Response: We disagree. Based on soil, soil vapor, and groundwater data, and the fact automotive repair stations commonly used multiple CVOCs in their operations in the 1970s and 1980s, it is highly likely PCE and TCE were used and released during Standard Oil's/Chevron's operations at Site 2.

Additionally, a February 3, 1989, report from EA (Chevron's consultant) to Chevron contained this conclusion:

The chlorinated hydrocarbons detected at the Pleasant Hill site are tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (DCE), trans-1,2-dichloroethylene (also DCE), vinyl chloride (VC), chloromethane, methylene chloride, chloroform, and 1,2-dichloroethane. There are two suspected sources of these compounds at the site: the former dry cleaner and the former waste oil tank.

We also note that chloromethane, methylene chloride, chloroform, and 1,2-dichloroethane are chemical constituents related to automotive fuels and other uses and are not chemicals typically associated with dry cleaners. This further supports our conclusion that the WOT, as opposed to the dry cleaner, is a source at this location.

3a.9 Comment: Between 1950 and 1972, the time when Standard Oil operated, there is no evidence automobiles were serviced at Site 2.

Response: Advertisements in multiple telephone books covering the time period of 1955 to 1972 describe the existence of several automotive repair and service stations at Site 2 who were involved with changing oil, repairing brakes and carburetors, etc. Site maps provided by Chevron covering the time period when a major station upgrade/remodel took place in the early 1970s, along with available building permits, describe an “existing service station.” This is ample evidence automobile repairs were being conducted on the property before the construction of the large automotive repair facility in 1972.

- d. **Responses to 3a.10 – 3a.13 address the following general comment:** *There was a significant CVOC release from the former dry cleaner before Chevron owned the property, with a possible contribution from upgradient dry cleaners.*

3a.10 Comment: In its “Dry Cleaners, A Major Source of PCE in Ground Water” 1992 report the Central Valley Regional Water Quality Control Board, concluded that “dry cleaning uses a large quantity of PCE solvent compared to other potential sources,” and that “PCE vapor plumes” were found only near dry cleaners.

Response: So noted, nonetheless this study cannot be used to discount the available data which indicate that the WOT is a pollution source. Please refer to earlier Comment 3a.2 above. No additional response is necessary.

3a.11 Comment: A 2014 investigation includes additional soil data to support the past release of PCE at the former dry cleaner.

Response: We agree that recent soil data provided by Chevron provides additional evidence the former dry cleaner is a significant source of PCE in soil at Site 2. However, this data does not support Chevron’s contention that the dry cleaner is the sole source of the PCE discharged at Site 2.

3a.12 Comment: Two former dry cleaners were located upgradient of Site 2, one at 1942 Linda Drive and the other at 1745 Contra Costa Boulevard. These sites could be the source of PCE detected in groundwater beneath and around Site 2.

Response: We disagree. There is no evidence that an upgradient source contributed any of the CVOCs detected in groundwater beneath Site 2. Chevron has not provided any groundwater data to support its hypothesis of an upgradient contributing CVOC source. A July 1956 telephone book lists a One Hour Martinizing dry cleaner at 1942 Linda Drive, a commercial site located approximately 300 feet southwest of Site 2. According to a document recently provided to Staff by Chevron (“NOTICE OF INTENDED SALE”), dated April 20, 1961, the “Gregory Village Annex Launderette” once operated at 1745 Contra Costa Boulevard, which is located approximately 200 feet south of Site 2. There is no evidence that either of these sites are upgradient sources of the CVOCs detected beneath Site 2. In fact, a launderette was defined by Merriam-Webster as “a place that has machines to use for washing and drying clothes, towels, sheets, etc.,” so that location may not have even used dry cleaning chemicals such as PCE. Chevron has not provided any groundwater data, or other data, to support its hypothesis that either property released CVOCs and are upgradient contributing sources of CVOCs.

3a.13 Comment: Further assessment of the previous dry cleaner parcel on Site 2 is necessary.

Response: We agree, as outlined in the Staff Report and the TO.

e. **Responses to 3a.14 – 3a.15 address the following general comment:** *Chevron should not be named as a discharger in the TO in connection with the CVOC release from the former dry cleaner.*

3a.14 Comment: Regional Water Board staff ignored the scientific data supporting not naming Chevron as a discharger.

Response: We disagree. Staff has considered all available and relevant data. We also note that for many years, Chevron recognized that both the former steel WOT and the previous dry cleaner were contributing sources of the CVOC contamination detected at Site 2.

3a.15 Comment: The State Water Resources Control Board’s Zoecon decision does not support naming Chevron as a discharger in this case.

Response: We disagree. Chevron argues that *In the Matter of the Petition of Zoecon Corporation*, Order No. WQ 86-2 (February 20, 1986) (*Zoecon*) only pertains to current owners of property and, because Chevron is not the current owner of the property, *Zoecon* is not a basis for naming Chevron a discharger.

Zoecon is relevant to address Chevron’s argument that it is not responsible for any discharge from the former dry cleaner located at Site 2. The petitioner in *Zoecon* similarly argued that it had never discharged, deposited, or in any way contributed to the contamination of the property. The State Board rejected this argument, finding that there was “an actual movement of waste from soils to ground water and from contaminated to uncontaminated ground water at the site which is sufficient to constitute a ‘discharge’ by the petitioner.” (*Zoecon* at p. 4. See also *In the Matter of the Petitions of Spitzer, et al*, Order No. WQ 89-8 (*Spitzer*) [“A long line of State Board orders have upheld Regional Board orders holding landowners responsible for cleanup of pollution on their property, regardless of their involvement in the activities that initially caused the pollution.”].)

To the extent Chevron focuses on the fact that it is not the current owner of the property, the State Board has spoken on the question of former landowners as dischargers in a number of orders, including *In the Matter of the Petition of Harold and Joyce Logsdon*, Order No. WQ 84-6 (*Logsdon*). In *Logsdon*, the petitioners owned the property and leased to a tenant who discharged wood preserving chemicals. The petitioners no longer owned the property at the time of the cleanup and abatement order. The State Board focused on the property owner’s “actual knowledge of the condition and an opportunity and the ability to obviate it.” The evidence in the record demonstrates that Chevron was aware of the contamination from the previous dry cleaner before purchasing Site 2, and took some steps to attempt to remediate the groundwater contamination.

In addition, CVOCs beneath Site 2 continued to migrate during Chevron's ownership. From the time Chevron acquired Site 2, it took over 4 ½ years to implement an interim groundwater remedial action (pumping and treating of groundwater) to address the CVOC contamination. Chevron did not conduct any soil remediation activities to appropriately address the CVOC contamination during its ownership of Site 2 (over 16 years). In *Spitzer*, a dry cleaner operated at the site in question, but ceased operations before the time of the cleanup and abatement order. The State Board found that "The discharge continues as long as the PCE remains in the soil and groundwater." Under these facts, Chevron is appropriately identified as a discharger because a discharge occurred during Chevron's ownership of Site 2. Chevron knew of the discharge and took steps to remediate the contaminated groundwater. Because those steps were not effective, and the discharge continued, it is necessary to address the remaining contamination in the proposed TO. Chevron's "lack of present control is not relevant. Responsibility for a problem created in the past is." (*In the Matter of John Stuart Petroleum*, Order No. WQ 86-15 at pp. 8-9.).

3a.16 Comment: The "Wenwest" decision supports Chevron's position that, as a former owner of Site 2, Chevron cannot be named as a discharger because it did not cause the discharge and no longer owns the property.

Response: We disagree. The *Wenwest* Order is a narrowly-focused order and factually distinct from this TO. Specifically, *Wenwest* declined to include Wendy's as a discharger based on a number of specific considerations. The unique factors in the *Wenwest* case are:

- Wendy's purchased the site specifically for the purpose of conveying it to a franchisee.
- Wendy's owned the site for a very brief period of time.
- The franchisee who bought the property from Wendy's is named in the order.
- Wendy's did not conduct activities which caused leaks.
- Wendy's never engaged in any cleanup or other activity on the site which may have exacerbated the problem.
- While Wendy's had some knowledge of a pollution problem at the site, the focus at the time was, on a single spill, not an on-going leak.
- Wendy's purchased the site in 1984, at a time when leaking underground fuel tanks were just being recognized as a general problem and before most of the underground tank legislation was enacted.
- There are several responsible parties who are properly-named in the order.
- The cleanup is proceeding.

In *Wenwest*, the State Board held that Wendy's International, a former landowner who acquired contaminated property for the sole purpose of conveying the property to a franchisee, and who owned the property for only four months, was improperly named as a discharger. The State Board declined to hold Wendy's International responsible for ongoing pollution at the property based on the unique facts of that case.

This current case involving Chevron does not have circumstances comparable to *Wenwest*. Unlike Wendy's International, Chevron was not an "innocent" owner, but in fact owned Site 2 for over 16 years and operated at Site 2 for over 50 years. Chevron was aware of the types of operations at the site, including automotive repair facilities and the use of a WOT to store chemical products used in the auto repair trade. In fact, Chevron's predecessor, Standard Oil, constructed a new auto repair facility and installed a steel WOT at Site 2 in 1972. It is common knowledge that automotive repair facilities frequently used CVOCs. PCE and TCE have been detected in soil, soil vapor, and groundwater in the area of a former steel WOT owned and operated by Standard Oil. This data clearly supports our conclusion that CVOCs were used and released during past automotive repair activities when Standard Oil leased much of Site 2.

Staff recognizes that Chevron did not own the parcel where and when a dry cleaner operated. However, prior to Chevron purchasing Site 2, they had knowledge that the source of at least some of the CVOCs detected in groundwater originated from the former dry cleaner. In 1986, the dry cleaner building was located on the property Chevron purchased. Staff agrees that Chevron did not operate the dry cleaner. The building that housed the dry cleaner was in Chevron's possession for approximately one year before Chevron demolished the structure during renovation activities at Site 2 in late 1987. After the station renovation and car wash construction projects were completed, Chevron proceeded to conduct interim remediation of contaminated groundwater to halt the spread of the pollution, an effort that was unsuccessful, as demonstrated by historic and recent sampling data. Based on Chevron's knowledge of CVOC releases, their subsequent ownership of Site 2, and the fact that Chevron initiated clean up at Site 2, Chevron is an appropriate discharger.

A more apt order than *Wenwest* is *In re John Stuart*, Order No. 86-15. In that case, Arnold, the property owner, leased the property to John Stuart Petroleum, who in turn leased the site to several service station operators. Similar to Chevron, the site had releases and contamination associated with operations at the service station. John Stuart Petroleum never owned the site and was not a lessee or lessor at the time of the cleanup and abatement order. Nevertheless, the State Board determined that John Stuart Petroleum was an appropriate discharger:

At all times during the lease period, petitioner had an important legal interest in the property and derived income from it. It is disingenuous for petitioner to argue that he had nothing at stake in the property. Accordingly, we find the action of naming the petitioner, along with the lessor and the sublessees, as a party responsible for the cleanup to be appropriate and proper.

The State Board went on to conclude that John Stuart Petroleum had sufficient legal control over the property to be held responsible for what took place there. Like John Stuart Petroleum, Chevron was involved in the automotive servicing activities conducted at Site 2 and presumably derived benefit from leasing the site to automotive repair shops.

- f. **Responses to 3a.17 – 3a.21 address the following general comment:** *The CVOC groundwater plume originating at Site 2 has not commingled with the CVOC groundwater plume originating at Site 1. Chevron admits that PCE from the previous dry cleaner at Site 2 is present in the groundwater beneath the Gregory Village Shopping Center.*

3a.17 Comment: Isotopic analysis of chlorinated solvents at Site 2 indicates that TCE, DCE and VC are all breakdown products of PCE. USEPA determined that PCE was rarely used as a degreasing agent. There is no evidence PCE or TCE was ever used at the former automotive fueling facility. Chevron admits that PCE from the former dry cleaner located at 1709 Contra Costa Boulevard is present in groundwater beneath the Gregory Village Center.

Response: While TCE, DCE and VC are breakdown (degradation) products of PCE, DCE and VC are also independent breakdown products of TCE. Therefore, Chevron's assertion that PCE was not used in the past for automotive repair and maintenance activities, which is not backed by site-specific evidence, does not negate the probability that TCE was used.

Page 3 of the Staff Report points out that PCE and TCE were common solvents used at automotive repair and service stations. A 2006 Cal/EPA (DTSC) report cited in our Staff Report states "Historically, chlorinated solvents were extensively used in automotive aerosol cleaning products." It is likely that historic waste storage and disposal practices during the time Standard Oil operated at Site 2 resulted in the discharge of PCE and TCE to soil and groundwater.

Chevron acknowledges the presence of a steel WOT, otherwise known as a "used oil" tank, at Site 2 from 1972 to May 1986. According to the California Health and Safety Code section 25250.1, used oil is defined as "Oil that has been refined from crude oil, or any synthetic oil, that has been used, and as a result of use or as a consequence of extended storage, or spillage, has been contaminated with physical or chemical impurities." In California, since 1986, used oil has been regulated as a hazardous waste material. As noted in Response to Comment 3a.3, State Board Resolution 92-49 allows Staff to use direct or circumstantial evidence in evaluating whether the usage of certain chemicals may have occurred at a particular site. Therefore, since both PCE and TCE have been detected in the soil, soil vapor, and groundwater beneath Site 2, we logically conclude PCE and TCE were used at Site 2 in the past during automotive repair and maintenance activities.

The above conclusions are supported by data from the site as discussed in Response to Comment 3a.1.

3a.18 Comment: Grab groundwater data collected from open boreholes (e.g., direct-push or CPT) are less reliable than samples obtained from monitoring wells.

Response: Grab groundwater data and long-term monitoring well data have independent utility; both may be unreliable taken independently; the data from grab groundwater

samples in this case confirm other information. Typically, groundwater samples collected from direct-push or CPT holes are taken from short intervals, and the laboratory analysis of the samples are used to determine if contamination is present and to what degree. These samples may be used to “ground-truth” data from monitoring wells or they may be helpful in plume characterization. We would not necessarily rely on these types of samples for long-term monitoring of groundwater.

Monitoring wells are typically installed to characterize one or more water-bearing zones and detect changes and trends in groundwater levels and contaminant concentrations. We note that for long-screen monitoring wells, such as the ones installed by Chevron to monitor petroleum and CVOC groundwater pollution at Site 2 for nearly 20 years, sampling data may be biased low if two or more water-bearing zones are intercepted by the well screens. In other words, uncontaminated water mixing with polluted water would dilute groundwater samples and bias the sampling results.

In this case, the grab groundwater data confirms that CVOCs, and certain fuel constituents (e.g., TPH-gasoline and MTBE), are present in groundwater beneath the southern portion of the Gregory Village Shopping Center and directly upgradient of the former P&K Cleaners site; this data indicates that Site 2 is a source of these chemicals, and that the plume emanating from Site 2 has commingled with the CVOC plume from Site 1.

3a.19 Comment: The predominant groundwater flow direction beneath Site 2 has always been to the northeast, and a north to northwest groundwater flow direction is not supported by the historic data.

Response: We disagree. In 1986, Chevron determined that the predominant groundwater flow direction beneath Site 2 was to the northeast. This flow direction was determined due to the location of Walnut Creek and after only two monitoring wells had been installed on the gas station parcel. The two monitoring wells sited by Chevron were aligned in a northeast axis, creating a bias in determining the groundwater flow direction. It is standard practice to install a minimum of three monitoring wells to determine the direction of groundwater flow. Over time, additional groundwater monitoring wells were installed to support the original supposition that shallow groundwater flow moved toward Walnut Creek, so no monitoring wells were installed to the northwest of Site 2. It is not surprising that the groundwater data after nearly 20 years of monitoring supported a northeast flow direction. However, there were several times when the reported flow direction was north and northwest, and there was even one instance when the flow direction was calculated as southeast.

The January 3, 2005, Site Closure Summary, prepared by the Regional Water Board at the time of the UST case closure (January 14, 2005), indicates the groundwater flow direction beneath Site 2 is to the “Northwest.” Chevron never contested this finding. Based on the distribution of CVOCs in groundwater north and northwest of Site 2, including the fact that CVOC concentrations in groundwater generally increase from east to west beneath the Gregory Village Shopping Center parking lot, the groundwater flow direction is to the north and northwest. In other words, the distribution of CVOCs in

groundwater supports a north to northwest groundwater flow direction, consistent with the local topography, and not to the northeast as postulated by Chevron; Chevron's original estimate that groundwater flow direction was toward a surface water body, Walnut Creek, was incorrect, so downgradient monitoring wells were not placed in the optimal locations.

Chevron never constructed any upgradient groundwater monitoring wells for Site 2. Neither EA-2, installed within the former steel WOT pit, or EA-3, a cross-gradient well installed to the west of the former dry cleaner in Linda Drive, are considered upgradient monitoring wells. This is important because upgradient wells are needed to establish background contaminant concentrations, evaluate whether upgradient sources are contributing to the groundwater pollution, and to aid in delineating groundwater flow direction and gradient. Both EA-2 and EA-3 contained significant concentrations of dissolved-phase CVOCs over their monitoring history.

Currently, there is insufficient well data to draw reliable conclusions about the predominant groundwater flow direction. Therefore, we must interpret groundwater contaminant distribution and groundwater water chemistry data to infer flow direction. New, properly-screened groundwater monitoring wells will aid in determining the true groundwater direction flow.

3a.20 Comment: The Gregory Village Shopping Center is not directly downgradient of Site 2.

Response: We disagree. The Gregory Village Shopping Center is downgradient of Site 2 based on the distribution of various petroleum hydrocarbons and CVOCs in groundwater beneath the southern part of Site 1, which is directly north and northwest of Site 2. The chemicals are consistent with those released and detected at Site 2. This is discussed in the detail on page 11 of the Staff Report.

3a.21 Comment: TPH-gasoline detected in groundwater samples beneath the Gregory Village Center is actually PCE.

Response: We disagree. Chevron has presented an unconvincing argument that TPH-gasoline detected in groundwater samples beneath the downgradient Gregory Village Shopping Center are actually false positives of PCE and are therefore unrelated to historic fuel releases at Site 2. Chevron has not provided any chromatograms related to the laboratory analyses of groundwater samples, so Staff could not independently verify if certain peaks or spikes in the chromatograms actually correspond to CVOCs (e.g., PCE and TCE) versus the standard peaks for TPH-gasoline. Even if Chevron is correct, and TPH-gasoline is actually not present in groundwater downgradient of Site 2, the fuel additive MTBE was detected in numerous groundwater samples collected by them and others beneath the Gregory Village Shopping Center main parking lot. Site 2 is the likely source of this MTBE in groundwater, further supporting Staff's conclusion that the groundwater plume from Site 2 has migrated and commingled with the plume at Site 1.

g. ***Responses to 3a.22 – 3a.25 address the following general comment: CVOC releases from the sanitary sewer have contributed to the CVOC groundwater plume in this area.***

3a.22 Comment: There has been no investigation beneath a former main sewer line in Linda Drive that once serviced the former dry cleaning business at Site 2.

Response: We agree. However, the lack of an investigation does not, by itself, constitute evidence of a PCE release from the sanitary sewer in this location.

3a.23 Comment: Additional investigation is needed to confirm whether sewer lines and/or pipe backfills are sources of CVOCs in groundwater.

Response: We agree, as discussed in the Staff Report. However, this additional investigation should not delay issuance of site cleanup orders, since many tasks in the TOs are unrelated to the sanitary sewers (e.g., on-site source control).

3a.24 Comment: Additional investigation is needed to determine whether other sewer lines upgradient of Site 2 are discharge points for PCE from former upgradient dry cleaners.

Response: To date, the Regional Water Board has only been provided with the addresses of two former dry cleaners upgradient of Site 2. Available groundwater data does not support the conclusion that these two properties are contributing sources of the CVOCs detected in groundwater beneath and downgradient of Site 2.

3a.25 Comment: CVOCs detected beneath the Gregory Village Shopping Center may originate from a former CCCSD sanitary sewer line in Linda Drive.

Response: Available data does not support this hypothesis. Additional information is needed to better evaluate whether the former sanitary sewer main in Linda Drive was a possible CVOC release area.

h. Responses to 3a.26 – 3a.28 address the following general comment: The findings in the TO are inconsistent with the Water Board’s 2005 “no further action” letter for Site 2.

3a.26 Comment: Chevron’s past interim remedial actions were effective at Site 2.

Response: We disagree. Chevron operated a groundwater pump and treat remediation system for approximately five years (August 1991 to July 1996) as an interim remedial measure to initially mitigate high concentrations of CVOCs and, later, petroleum hydrocarbons in the first-encountered shallow groundwater zone beneath two different areas of Site 2. The system was originally designed to only utilize monitoring well EA-2, a well installed within the former steel WOT pit, with the intent to optimize the remedial efforts by adding extra wells in the future. In mid-1992, Chevron added a second well, C-1/MW-D located north of the UST pit, to the pump and treat system after free-product gasoline was detected in that well. According to Chevron, approximately 1.9 million gallons of contaminated groundwater were pumped, treated via carbon absorption, and discharged to an on-site sanitary sewer lateral and then the main sewer system under permit with CCCSD.

The interim remedial efforts described above have not been effective in remediating the CVOCs in groundwater. In an October 21, 1996, letter from Chevron, they agreed the groundwater remediation was ineffective, stating "...despite continuous remediation efforts since August 1991, no significant impact has been seen on dissolved hydrocarbons in the subsurface." The letter also states, "Levels of dissolved constituents in samples collected were consistent with previous results and groundwater flow, ..." On May 12, 2003, wells EA-1, EA-2, and EA-3 were sampled for the final time, and PCE and TCE were detected in all three wells. The highest concentrations of PCE and TCE were 3,100 µg/L and 3,600 µg/L, respectively, both from EA-2, and degradation compounds, including cis-1,2-DCE and vinyl chloride, were also detected. The analysis of groundwater samples collected on May 14, 2004, from on-site wells MW-C and C-1/MW-D and off-site wells EA-3 and EA-5 also detected PCE, TCE, and several degradation compounds.

During and after Chevron's interim remediation activities, there was little effort to characterize the vertical and lateral extent of PCE contamination in soil and groundwater associated with the former dry cleaner or WOT. Soil remediation (i.e., source removal) was not conducted at Site 2, and onsite studies conducted since 2011 indicate a significant mass of CVOCs remain beneath Site 2 and continue to migrate.

Based on the known data at the time of the 2005 case closure, and data collected on the Gregory Village Shopping Center property downgradient of Site 2, the current concentrations of CVOCs in soil, soil vapor, and groundwater pose significant risks to human health, groundwater and the environment.

3a.27 Comment: In 2005, the Regional Water Board believed that additional assessment and remediation was not necessary and the case was closed.

Response: We agree. This conclusion, however, was based on data and analysis from Chevron that the CVOC plume was limited in extent. Based upon more recent data, Staff has determined that site characterization was incomplete because the vertical and lateral extent of CVOC contamination in soil and groundwater was not defined. The current CVOC pollution associated with Site 2 poses a threat to human health, groundwater quality, and the environment.

3a.28 Comment: Case closure required the annual monitoring of EA-5, with the understanding those increasing contaminant concentrations at this "sentry well" should trigger remedial action. However, trigger levels at EA-5 have not been exceeded. According to Chevron, Conditions of the Site Management Plan have continued to satisfy the requirements of case closure based on the lack of CVOC detections at sentry well EA-5.

Response: In 2005, based on the data presented by Chevron, we agreed that EA-5 could be used as a future "sentry well" to monitor CVOCs in groundwater. A sentry well is generally defined as a monitoring well placed between a source area and an identified receptor and outside of a defined plume boundary. Sentry wells are used to determine if a groundwater plume is expanding. It is very unusual to require additional groundwater monitoring following the issuance of a case closure letter. However, the presence of a

sentry well suggests that the residual CVOCs in groundwater in 2005 were still a concern for Chevron and the Regional Water Board.

We have since determined that monitoring well EA-5 cannot act as a viable sentry well, primarily because the CVOC plume emanating from Site 2 is oriented north to northwest. It is not surprising that CVOC trigger levels have not been exceeded in EA-5, considering its location in relation to the overall CVOC plume associated with Site 2; EA-5 is located on the fringe of the plume and not within the center or core.

Based upon available data, the remaining contamination poses a threat to human health, groundwater and the environment beyond the boundaries of Sites 1 and 2 and the area. Thus, Staff reopened the closed UST case in order to require the completion of the characterization and remediation of the CVOC groundwater plume.

i. Responses to 3a.29 – 3a.35 address the following general comment: Other

3a.29 Comment: The assessor’s parcel numbers referenced in the TO should be corrected as follows: 1705 Contra Costa Boulevard was 150-103-011, and 1709 Contra Costa Boulevard was 150-103-012.

Response: We agree. The TO has been revised.

3a.30 Comment: Historical report figures from Chevron inaccurately located essential features at Site 2.

Response: We agree. Staff recognizes that inaccurate site plans were submitted by Chevron to the Regional Water Board over many years. Since “as-built” drawings depicting the locations of the current features at Site 2 have been available for over 25 years, Staff does not understand why inaccurate site plans were submitted, especially since one groundwater monitoring well (and perhaps more) was mislocated.

An informal email communication in June 2014 from Staff informed Chevron that EA-2, a critical monitoring/remediation well, was probably mislocated on historic site plans. Chevron resurveyed the position of the well in July 2014, and determined EA-2 had been installed directly within the former steel WOT pit and was not located within the footprint of the previous dry cleaner as originally postulated. Staff believes this error points to a distinct possibility that the historic survey and groundwater elevation data for all groundwater monitoring wells could be erroneous. Therefore, groundwater flow direction data interpreted over many years could also be inaccurate.

3a.31 Comment: The table in the TO is misleading. The table lists groundwater data from both grab and monitoring wells samples, which is inappropriate. Also, the table should include pre- and post-remediation soil data.

Response: We disagree; the table is not misleading. The purpose of the table is to list the maximum detected concentrations of certain chemicals in groundwater, soil and soil vapor for Site 2. Including groundwater data from borings and monitoring wells is

appropriate, since essentially all of the samples collected to date are “grab” in nature. We agree the table should be improved to include new soil data provided by Chevron in early August 2014; the table has been revised. Since soil remediation has not been conducted at Site 2, we are unclear as to why Chevron thinks pre- and post-remediation soil data is appropriate.

3a.32 Comment: Technical reports submitted by the due dates in the TO should not be determined by the Executive Officer, at a later date, to be unacceptable. If a technical report is found unacceptable, a new due date should be created for accepting a revised report.

Response: We disagree. The TO needs to include a “yardstick” for technical report acceptability. Otherwise, dischargers could submit clearly deficient reports and suffer no enforcement consequences. We conclude that the TO provides a reasonable “yardstick” for report acceptability. First, it clearly defines the task elements to be addressed in the report. Second, it delegates to the Executive Officer the determination of whether the report adequately addresses the task elements.

3a.33 Comment: New CVOC soil data from July 2014 should be included in the TO.

Response: We agree. The table in the TO has been updated to include the additional soil data collected during Chevron’s self-directed study in July 2014.

3a.34 Comment: Soil vapor was not investigated in the area of CPT-14 and CPT-23.

Response: We agree that a soil vapor assessment has not been conducted in the area of CPT borings 14 and 23; such an investigation is necessary and is required by the TO.

3a.35 Comment: The source of the TPH-gasoline soil vapor concentrations shown in the table in the TO should be provided.

Response: The source of the TPH-gasoline soil vapor data is the Chevron-commissioned “Report of Investigation,” a technical report by EA dated February 3, 1989. According to that report, Chevron “requested that EA conduct a soil vapor contaminant assessment (SVCA) for petroleum hydrocarbons; the SVCA was conducted on 29 October 1987. The SVCA, or soil gas survey, was used to assess the extent of petroleum hydrocarbons in the soil vapor.” The data shown on the table is from the EA report.

3b. COMMENTS FROM CHEVRON U.S.A. INC. (A. Todd Littleworth, Esq.)

This second round of comments from Chevron addresses four points raised by GVP.

3b.1 Comment: Chevron believes that a single cleanup order should not be issued for Site 1 and Site 2.

Response: We agree. Please refer to the Response to Comment 1a.1. No additional response is necessary.

3b.2 **Comment:** Chevron believes CCCSD should be named as a discharger in both TOs.

Response: CCCSD does not meet the definition of “discharger” and therefore should not be named in either TO. Please refer to the Staff Report (section VI) and the Response to Comment 1a.2. No additional response is necessary.

3b.3 **Comment:** Chevron should not be named as discharger because of construction activities undertaken at Site 2 in 1987 and 1988.

Response: Our recommendation to name Chevron as a discharger is not based on construction activities. Although Chevron demolished the building where the dry cleaner was located, and presumably disturbed the earth by removing foundations and floor slabs, utilities, etc., we concur that there is insufficient data at this time to suggest that Chevron’s construction activities were or are a source area for contamination.

There are sufficient reasons for naming Chevron as a discharger apart from this point. See our response to Comment 7.1 and Section IV of the Staff Report.

3b.4 **Comment:** The tasks outlined in the cleanup order for Site 2 should not be modified, but due dates should be changed.

Response: The tasks outlined in the TO for Site 2 have not been revised. Staff has modified the due dates for the specific tasks, as necessary.

4. COMMENTS FROM BUCHMAN PROVINE BROTHERS SMITH LLP (on behalf of MB Enterprises, Inc.)

4.1 **Comment:** MB Enterprises, Inc. should not be named in the Site 2 cleanup order.

Response: We disagree. MB Enterprises, Inc. is a current landowner. Under Water Code section 13304, “any person 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 waters of the state...shall upon order of the regional board, clean up the waste or abate the effects of the waste...”

Landowners, past and current, are responsible for the discharges regardless of whether they personally caused the active discharge because they “permit” or threaten to permit the discharges. “[M]ovement of contamination, albeit slow, is still a discharge to waters of the state that must be regulated.” (*In re Matter of Zoecon*, Order No. WQ 86-2.) There is sufficient evidence of ongoing migration of contamination from source areas on the property to allow the Regional Water Board to exercise its authority under the Water Code in naming MB Enterprises, Inc., as a discharger in the TO.

In addition, numerous State Board Orders note the necessity of naming a current landowner of the property as a discharger to ensure that all parties have sufficient access to the property and cooperation of the landowner to effectuate cleanup. The fact that Zoecon Corp. was the current landowner was a compelling fact in *In re the Matter of the Petition of Zoecon Corporation*:

Yet it is this very role that puts Zoecon in the position of being well suited to carrying out the needed onsite cleanup. The petitioner has exclusive control over access to the property. As such, it must share in responsibility for the clean up.

4.2 **Comment:** The Staff Report does not establish that the CVOCs detected in soil samples are from onsite activities conducted by MB Enterprises, Inc.

Response: We agree. We are not aware of any information that suggests MB Enterprises, Inc., used or released CVOCs at Site 2. However, MB Enterprises, Inc., is named in the TO because it is the current property owner (see Response to Comment 4.1).

4.3 **Comment:** MB Enterprises, Inc. was unaware of the contamination beneath Site 2 in 2003 when they purchased the property.

Response: Whether MB Enterprises, Inc. knew or did not know about the contamination in 2003 when they purchased Site 2 is irrelevant (although the history of the CVOC contamination should have been disclosed to them). In 2003, the standard of practice was for a prospective purchaser of a gas station to retain the services of an environmental consultant to conduct a Phase I “Environmental Site Assessment” to identify environmental conditions that could affect their decision to purchase the property. We do

not know whether a Phase I evaluation was conducted by or for MB Enterprises, Inc., nor do we know what Chevron told MB Enterprises, Inc., about the residual contamination beneath Site 2.

The State Water Board addressed this same argument in *In the Matter of Zoecon Corporation*, Order No. 86-2, in which Zoecon Corporation claimed that it should not be held responsible for contamination when it purchased the property in 1972, but did not learn of the contamination until 1980. In response, the State Board stated:

We believe that our determination that present property owners are also responsible for waste discharges will encourage potential buyers to more thoroughly examine the condition of property which they may acquire.

4.4 Comment: The two sources of on-Site CVOCs – the previous steel WOT and the former dry cleaner – were not present when MB Enterprises, Inc. purchased the property in 2003.

Response: While it is true the former WOT and dry cleaner were removed before MB Enterprises, Inc. purchased the property in 2003, a significant mass of CVOC contamination in soil and groundwater was present at that time and remains an ongoing source at Site 2.

4.5 Comment: There is no ongoing discharge of pollutants at Site 2.

Response: We disagree. There is a significant mass of CVOC contamination in soil and groundwater beneath and downgradient of Site 2. The remaining pollution is an ongoing discharge as it continues to migrate. (See Response to Comment 4.1 above, *supra*, citing *Zoecon*.)

5a. COMMENTS FROM BARG COFFIN LEWIS & TRAPP LLP (on behalf of Marjorie P. Robinson)

5a.1 Comment: There is no substantial evidence which supports naming Marjorie P. Robinson as a discharger. Ms. Robinson should not be named in the TO for Site 2.

Response: We disagree. The recommendation to name Ms. Robinson as a discharger is consistent with section 13304 of the Water Code and numerous State Water Board cleanup orders because she: (1) owned the property at the time of discharges; (2) had knowledge of the activities which resulted in the discharges; and, (3) had the legal ability to prevent the discharges. The fact that Ms. Robinson was an owner of Site 2 from 1965 through 1986, a time period when CVOCs likely were released, is sufficient in naming her as a discharger in the TO (as a former landowner). Ms. Robinson admits in her declaration that she recognized her signature on the deed to Site 2, and was further aware that she and her husband leased Site 2 to a gas station. She and her husband presumably benefitted from the leases of their property to the dry cleaner and service station for the 21 years they owned the property. Please see the Responses to Comments 3a.14 and 3a.15 concerning former owners, and specifically the discussion of *In Re John Stuart Petroleum*, Order No. 86-15.

5a.2 Comment: The burden imposed on Marjorie P. Robinson in naming her as a discharger is unreasonable.

Response: To date, proof of inability to pay toward cleanup costs has not been submitted to Staff. Moreover, because of Ms. Robinson's status as a former landowner of a UST site, there may be funds available from the UST fund to assist with investigation and remediation. Notably, the Governor recently signed SB 445 (Hill) into law; this legislation will allow a portion of the funds from the UST cleanup fund to be used to clean up contaminated sites without regard to the source of the contamination. It is therefore premature and inappropriate to release Ms. Robinson from the TO.

5a.3 Comment: Marjorie P. Robinson had limited involvement with Site 2 (as the spouse of a passive real estate investor), and was not involved in releasing any chemicals at Site 2.

Response: See Response to Comment 5a.1. No further response is necessary. The TO has been amended to note that Ms. Robinson is named in her individual capacity and also as the heir to the estate of her husband, Ned Robinson.

5a.4 Comment: No chemical releases have been identified in the time frame of 1965 to 1987, the period of time when Marjorie P. Robinson was a part owner of Site 2.

Response: There is evidence that the historic dry cleaner and former steel WOT leaked CVOCs to the subsurface before Chevron purchased Site 2 in late 1986. Moreover, standard operations, poor housekeeping, and accidents are known to have caused releases to soil and groundwater at dry cleaners and automotive service stations that operated in the 1960s, 1970s, and 1980s. For additional information related to naming a past landowner as a discharger, refer to Response to Comments 3a.6 and 3a.14-3a.16 above.

5a.5 Comment: The TO denotes the Robinsons and Ms. Lehrman owned the property from 1960 to 1986. However, they actually owned Site 2 from June 25, 1965, to December 26, 1986.

Response: We agree. The TO has been revised.

5a.6 Comment: Merle D. Hall Company and Max W. Parker were also previous owners of Site 2.

Response: We recognized that Merle D. Hall Company and Max W. Parker were previous owners of Site 2. However, our property ownership research indicates these parties were intermediaries involved with conveying the property title to Chevron. According to the comment submitted by Barg Coffin Lewis & Trapp LLP, *“The undisputed evidence cited in Part I.B, above, shows that they each were conveyed a one-half interest in the Property on December 26, 1986, which they then reconveyed the same day to Chevron.”*

This is similar to a matter that came before the Water Board in December 2011 (Regional Water Board Order No. R2-2011-0088). In that case, the Board evaluated whether to name as a discharger the son of a former property owner, Scott Vincent Monroe, who was 18 years old at the time he held title to an active dry cleaner; he held title in name only, had no financial gain from his involvement with the property, and had no managerial or other duties overseeing tenants or activities on the property. This Regional Water Board determined that Scott Vincent Monroe was not an appropriate discharger. The current TO is consistent with Regional Water Board Order No. R2-2011-0088.

5a.7 Comment: The Regional Water Board has not provided substantial evidence of a commingled groundwater plume.

Response: We disagree. There is evidence that the CVOC plume from Site 2 migrated in groundwater to the north and northwest and beneath the Gregory Village Shopping Center, and commingled with the CVOC plume associated with Site 1. The mixed plume has migrated beneath commercial and residential properties north of Site 1. Please refer to the Staff Report and the TO for additional information.

5b. COMMENTS FROM BARG COFFIN LEWIS & TRAPP LLP (on behalf of Marjorie P. Robinson)

This second round of comments from Donald E. Sobelman, counsel representing Ms. Marjorie P. Robinson, disputes the evidence of a commingled groundwater plume.

5b.1 Comment: There is no evidence the groundwater plume from Site 2 has commingled with the groundwater plume from Site 1.

Response: We disagree. Please refer to the Staff Report (section V).

6. COMMENTS FROM BARG COFFIN LEWIS & TRAPP LLP (on behalf of Jane A. Lehrman)

6.1 Comment: Jane A. Lehrman was not provided with the TO in a timely manner.

Response: The TO was mailed to Ms. Lehrman at the address we had on file for her. We understand she has received the TO. Since the original comment period deadline of August 4, 2014, was extended, and Ms. Lehrman has provided and submitted a timely response to comments, the extension of the comment period and delay of the hearing until November has cured any prejudice in the delay in receiving the original TO.

6.2 Comment: Ms. Lehrman objects to being named as a discharger in the TO for Site 2.

Response: Ms. Lehrman, as a former property owner of Site 2 from June 1965 to late December 1986, meets the definition of a discharger under the Water Code. She and Ms. Robinson owned the property during the same time period, and our basis for naming her is similar to the reasoning above regarding Ms. Robinson. The letter from attorney Don Sobelman admits that Ms. Lehrman executed leases. Ms. Lehrman presumably benefitted from the leases of the property to the dry cleaner and service station for the 21 years she and her husband owned the property. Please refer to Responses to Comments 3a.14 and 3a.15 concerning former owners, and specifically the discussion of *In Re John Stuart Petroleum*, Order No. 86-15.

6.3 Comment: The burden imposed on Jane A. Lehrman in naming her as a discharger in the TO is unreasonable, considering she is elderly, in poor physical and mental health, and lacks the necessary finances to contribute to a cleanup of Site 2.

Response: Please see the Response to Comment 5a.2. It is premature and inappropriate to release Ms. Lehrman from the TO at this time.

6.4 Comment: Philip M. Lehrman, Jane Lehrman's former husband, passed away in January 2014, so it is no longer appropriate to name him as a discharger in the TO.

Response: We agree. The TO has been revised to remove Mr. Lehrman from the TO.

6.5 Comment: Ms. Lehrman had limited involvement with Site 2 (as the spouse of a passive real estate investor), and was not involved in releasing any chemical contaminants.

Response: Please see the Response to Comment 5a.1.

6.6 Comment: No chemical releases have been identified in the time frame from 1965 to 1987, the period of time when Ms. Lehrman was a part owner of Site 2.

Response: We disagree. She and Ms. Robinson owned the property during the same period and our basis for naming her is the same as for Ms. Robinson. See the Response to Comment 5a.4.

6.7 **Comment:** Ms. Lehrman's ownership interest in Site 2 was limited to 1965 to 1987.

Response: We agree. This period of time coincides with the time frame when CVOCs were likely used and released at Site 2.

6.8 **Comment:** No substantial evidence exists to support naming Ms. Lehrman to the TO for Site 2.

Response: We disagree. As outlined in the Staff Report and TO, there is substantial evidence in naming a former property owner to the TO for Site 2. Please refer to Responses to Comments 3a.14 and 3a.15 concerning former owners, and specifically the discussion of *In Re John Stuart Petroleum*, Order No. 86-15

7. COMMENTS FROM PALADIN LAW GROUP® LLP (on behalf of Ryan and Anne Schaeffer)

7.1 **Comment:** The TO for Site 2 should be revised to include additional reasons for naming Chevron. Chevron was the owner and/or operator at the property during at least two major upgrade projects that included trenching, grading, and WOT replacement, thereby disturbing and redistributing contaminated soil at Site 2.

Response: While the comment is factually correct in noting Chevron’s status as an owner and/or operator during major upgrade projects, the extent to which those activities redistributed or exacerbated contamination has not been sufficiently documented to cite as a basis for naming Chevron as a discharger. We have not changed the TO in response to this comment.

7.2 **Comment:** The definition of “Site” in both TOs should be expanded to include the entire area impacted by contaminants originating at the Site 1 and Site 2 properties, including the residential area overlying the commingled groundwater plume.

Response: A change in the “site” definition is not needed. Each TO defines the “site” as the source property, but both TOs describe the migration of site contaminants into downgradient areas and both TOs require the named dischargers to clean up those contaminants wherever they happen to be situated – see finding 14 of each TO (Basis for 13267 and 13304 Order).

7.3 **Comment:** The groundwater plume extends beneath both residential and commercial properties north of the Gregory Village Shopping Center.

Response: We agree, and the TOs require remedial work in this offsite area.

7.4 **Comment:** The Regional Water Board cannot conclude that CCCSD is not a discharger, given the pattern of elevated soil gas concentrations in the vicinity of Manhole 46. Furthermore, the TOs and Staff Report fail to state that a main sewer line conveys wastewater from Site 1 and Site 2 through a network of interconnected manholes.

Response: We disagree. Please refer to Section 1 of the Response to Comments above regarding this issue.

7.5 **Comment:** The Tentative Order does not recognize that dry cleaning equipment with solvent remained at Site 1 until at least 1999. Dry cleaning equipment was present at Site 1 from March 1991 until 1999, and releases of PCE could have occurred during this time frame.

Response: We agree and revised the TO for Site 1 accordingly.

8a. COMMENTS FROM CENTRAL CONTRA COSTA SANITARY DISTRICT (CCCSD)

8a.1 Comment: We support the Tentative Orders and the associated Staff Report, which do not name CCCSD.

Response: Comment noted. No further response is necessary.

8a.2 Comment: The Regional Water Board should expand upon the policy reasons why CCCSD should not be named as a discharger. It is not in the public interest to name sanitary sewer agencies to clean up contamination it did not cause merely because it provided sewerage disposal services to polluting businesses. There would be serious financial implications for sanitary sewer agencies if they could be named to cleanup orders just because of incidental leakage from their sewers. It would be inequitable to impose major cleanup costs on sanitary sewer agencies in the many situations where the polluting businesses are unable to afford adequate cleanup and where the sanitary sewers were properly operated.

Response: We conclude that it is not necessary to expand on the reasons for omitting CCCSD as a named discharger. The Staff Report clearly identifies the criteria which must be met to name sanitary sewer agencies to cleanup orders, based on precedential State Water Board and court decisions, and shows how those criteria are not met in this instance (see Section VI of the Staff Report).

8b. COMMENTS FROM CENTRAL CONTRA COSTA SANITARY DISTRICT (CCCSD)

This second round of comments from CCCSD rebuts the August 4, 2014, technical comments from GVP (Comment 1.a above).

8b.1 Comment: GVP alleges there were releases of CVOCs from the CCCSD sewer mains. Although the data indicates releases of CVOCs occurred at Site 1 and Site 2, CCCSD believes the migration and location of the CVOCs in groundwater are not consistent with releases from the sewer mains.

Response: We agree. Please refer to the Response to Response to Comments 1a.4 and 1a.5 above. See also section VI of the Staff Report.

8b.2 Comment: GVP alleges CCCSD knew of leaks in the sanitary mains and failed to repair the leaks in a timely manner. CCCSD maintains this is not the case.

Response: We agree with CCCSD. Based on our records review, CCCSD actively inspected their sanitary sewer system since at least 1973. When line leaks were discovered CCCSD promptly fixed the problems.

8b.3 Comment: GVP alleges the sewers were in poor condition and not properly maintained, but CCCSD refutes this claim.

Response: CCCSD submitted records that document the implementation of a sanitary sewer maintenance program that includes inspecting and repairing damaged sewer lines.

8b.4 Comment: GVP alleges that CCCSD was aware CVOCs were being released to the sewer mains, but CCCSD contends that historic ordinances contained reasonable narrative and numeric objectives that were typically exceeded at dry cleaners without their knowledge.

Response: We agree with CCCSD. Please refer to Section VI, bullets 3 and 4 on pages 16 and 17 of the Staff Report.

8b.5 Comment: GVP's expert, Bonneau Dickson, P.E., opines that gravity sewers composed of vitrified clay pipe (VCP) are not designed and constructed to be leak free and are prone to infiltration. CCCSD asserts that properly installed VCP pipes and joints are able to transmit sanitary sewer waste successfully to the wastewater treatment plant with minimal problems.

Response: Comment noted. Even if Dickson's point were correct, we would still need case-specific evidence of a CVOC release from the CCCSD sanitary sewers before we could name CCCSD as a discharger.

8b.6 Comment: Mr. Dickson asserts that the sanitary sewer lines sagged and the joints failed within a few years after construction, an opinion not shared by CCCSD.

Response: We agree with CCCSD. There is no evidence the sewer lines owned and operated by CCCSD in the area of Site 1 and Site 2, constructed circa 1950, significantly sagged and failed after installation. Furthermore, root intrusion into the lines does not appear to be a problem. There is no data to suggest that the sewers caused or contributed significantly to the groundwater contamination.

8b.7 Comment: Mr. Dickson believes the main sewers are prone to significant infiltration of groundwater and exfiltration of waste for various reasons, that PCE vapors can leak through the pipe walls, and that the slope of the sewer lines is too flat causing solids to accumulate. CCCSD contends these theories are not supported by the evidence.

Response: We generally agree with CCCSD. In order for the sewer mains in the area of Site 1 and Site 2 to be susceptible to significant infiltration and exfiltration, the pipes must be leaking and/or the joints displaced. We do not find sufficient evidence to support these assumptions. As for the theory that PCE vapors could build up significantly within the pipes and contaminate soil and water, there is insufficient evidence to support this hypothesis as well. Finally, the slope of the sewer lines appears to be sufficient to allow sewage to flow adequately under the influence of gravity, and routine inspection and cleaning (flushing) allow the lines to remain unobstructed. In summary, there is no data to suggest that the sewers caused or contributed significantly to the groundwater contamination.

8b.8 **Comment:** Mr. Dickson alleges the as-built nature of the sewer lines results in maintenance and cleaning issues, which CCCSD believes are unsubstantiated allegations.

Response: We agree with CCCSD. There is no data to support that the original construction of the VCP pipes has led to undue maintenance issues or caused or contributed significantly to the groundwater contamination.

8b.9 **Comment:** Mr. Dickson alleges that the mechanisms of PCE releases to sanitary sewer lines as discussed in the 1992 “Izzo” report have been accepted by the sanitary sewer industry, yet CCCSD disputes this assertion.

Response: The “Izzo” report was prepared in response to dry cleaner releases to sanitary sewers and the negative impact to municipal drinking water wells in the Central Valley of California. We agree that the five mechanisms described in the report are general conditions that should be evaluated for suspected releases at dry cleaners; however, this does not mean the CCCSD sanitary sewer mains have leaked and contributed to the distribution of CVOCs in the area of Site 1 and Site 2.

8b.10 **Comment:** Mr. Dickson alleges that the CCCSD operations and maintenance program was designed to keep sewage flowing through the lines and not to prevent leaks, a contention disputed by CCCSD.

Response: We agree with CCCSD. Mr. Dickson has not provided any specific evidence that CCCSD’s program failed to address sewer line leaks, and we have no reason to believe that this is the case.

Our review of the CCCSD response and available records indicates a robust operations and maintenance program has been in place for several decades. We agree with CCCSD that such a program is necessary to ensure the main sewer lines convey sewage through the lines with minimal disturbance, so the waste can reach the treatment plants.

8b.11 **Comment:** Mr. Dickson alleges if minor or major blockages in the CCCSD sewer mains occurred, CVOCs could have migrated in upstream sewer lines; CCCSD disagrees.

Response: We agree with CCCSD. Staff has reviewed no evidence to show sewer line blockages resulted in the movement of CVOCs into the “upstream” areas of the residential subdivision to the north of Site 1.

8b.12 **Comment:** Mr. Dickson alleges PCE vapors can migrate into upstream sewer lines and also within the backfill surrounding the pipes. CCCSD acknowledges that such a condition is theoretically possible, but the available data does not support the opinion.

Response: We agree with CCCSD. Assessment of several manholes by GVP’s consultant in 2009 did not reveal the presence of CVOCs, something that would be expected if PCE vapors were migrating in upstream sewers or their backfill.

8c. COMMENTS FROM MEYERS NAVE (on behalf of CCCSD)

This second round of comments from Kenton L. Alm, counsel to CCCSD, rebuts GVP's August 4, 2014, technical comments (Comments 1a above).

8c.1 Comment: Gregory Village's assertion that strict liability principles require the Regional Water Board to name the District is unfounded.

Response: We agree. Please see the Response to Comment 1a.3.

8c.2 Comment: Staff's analysis is legally supported, and the conclusions in the Staff Report conclusions are based upon substantial evidence. There is no substantial evidence to support naming CCCSD as a discharger in either TO. Controlling appellate court decisions support the Staff Report's conclusions and demonstrate a lack of causation for allegations against CCCSD.

Response: We agree. Please see the Staff Report (section VI) and Response to Comments 1a.2 through 1a.10.

8c.3 Comment: Gregory Village's assumption that liability insurance is available to pay for the District's cleanup costs is both improper and mistaken.

Response: Comment noted. As described above in Comment 1a.2 and 1a.3, we have concluded that CCCSD is not a proper discharger. Availability of liability insurance is therefore irrelevant.