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File No.:  
3174.101

June 18, 2015

**VIA FEDEX**

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**Re: Petition for Review and Request for Hearing on Cleanup and Abatement  
Order No. R4-2015-0057 by the California Regional Water Quality Control  
Board, Los Angeles Region**

Site: Former Western Metal Lath  
15220 Canary Avenue  
La Mirada, California  
(Site ID No. 204CE00, SCP No. 0673)

Dear Ms. Crowl:

Pursuant to Water Code section 13320 and California Code of Regulations, title 23 ("Title 23"), section 2050, petitioner Canary Avenue, LLC c/o R.E. (Ted) Poliquin, Co-Trustee, Poliquin Credit Trust, Managing Member of Canary Avenue, LLC ("Petitioner") hereby petitions the State Water Resources Control Board (the "State Board") for a review and an order to rescind the Cleanup and Abatement Order No. R4-2015-0057 (the "Order") for the above-referenced former Western Metal Lath ("WML") facility, which the California Regional Water Quality Control Board, Los Angeles Region (the "Regional Board") issued to Petitioner on May 20, 2015. Petitioner also requests a hearing for the State Board to consider new and additional testimony, evidence and/or arguments pursuant to Title 23 section 2050.6.

The Petition and Request for Hearing are made on the grounds that: (1) any groundwater impacts from the WML facility are secondary and negligible to the primary impacts caused by upgradient sources such as U.S. Gypsum ("USG"), whose property is located immediately northwest of the WML facility at 14370 Gannet Street, La Mirada, California (the "USG Site"), where USG documented extensive contamination, including the highest trichloroethylene

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(“TCE”) values at the southeast corner of the USG Site (i.e., closest to the WML facility) dating back to 1988; (2) Petitioner believes the Regional Board has lost impartiality in these matters and is now acting, in part, to protect itself from embarrassment for prior actions and inactions in, among other things, allowing USG to use improperly surveyed monitoring wells, not requiring full off-site delineation of the USG plume prior to implementing remedial measures, then allowing USG to prematurely terminate its response actions; and (3) the extreme delay caused by the Regional Board’s lack of interest in the WML facility (complete inaction from 1993 to 2001), combined with the Regional Board’s and USG’s actions and inactions, amount to a *de facto* spoliation of evidence that has made it extremely difficult for Petitioner to now prove what really transpired.

In addition, Petitioner requests a hearing to present additional evidence on the grounds that WML has created plume maps based on newly installed groundwater monitoring wells (GMW-7 through GMW-9) which show relatively lower VOC concentrations between the WML facility and the USG Site, which is immediately downgradient from the area where USG completed its in-situ chemical oxidation activities in 2008 and 2009. This area is also immediately upgradient to the VOC “hot spot” in the area of WML’s well GMW-1.

The Petition and Request for Hearing are made based on this letter brief, the record before the Regional Board, new groundwater monitoring wells and data therefrom, and on such other oral and documentary evidence that may be presented at any hearing on this matter, and any other relevant evidence which, in the judgment of the State Board, should be considered to effectuate and implement the policies of Title 23.

## **I. THE PETITION**

### **A. Summary of Relevant Facts.**

The following summarizes the relevant facts in support of this Petition pursuant to Title 23 section 2050, subdivision (a):

*1. Name, address, telephone number and e-mail address of the Petitioner.*

Canary Avenue, LLC  
c/o R.E. (Ted) Poliquin, Co-Trustee,  
Poliquin Credit Trust,  
Managing Member of Canary Avenue, LLC  
263 North Covina Lane  
City of Industry, CA 91746

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Canary Avenue, LLC and Mr. Poliquin may be reached through John Van Vlear of Newmeyer & Dillion, LLP, attorneys of record for Canary Avenue, LLC:

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2. *The action or inaction of the Regional Water Board being petitioned, including a copy of the action being challenged or any refusal to act, if available. If a copy of the regional board action is not available, the petitioner must explain why it is not included.*

Cleanup and Abatement Order No. R4-2015-0057 for the WML facility dated May 20, 2015, issued by the Regional Board. A copy of the Order, including the Responsiveness Summary, is attached hereto as Exhibit "A".

3. *The date the Regional Water Board acted, refused to act, or was requested to act.*

Over objections and opposition, the Regional Board issued the Order via certified mail on May 20, 2015. (Exhibit "A".)

4. *A statement of the reasons the action or inaction was inappropriate or improper.*

As set forth in greater detail below, any volatile organic compound (VOC) impacts to groundwater from the WML facility are secondary and negligible to the primary impacts caused by massive upgradient sources such as USG (which the Regional Board basically admits in the Order have migrated beneath the WML facility). The USG Site is located immediately to the northwest of the WML facility, where USG has documented evidence of extensive contamination, including, among other things, highest values of TCE in the southeast corner closest to the WML facility, dating back to 1988. The Regional Board was the supervising environmental agency over investigation and cleanup at the USG Site but failed for years to require full investigation of the lateral and vertical

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extent of impacts from the USG Site. In fact, remediation efforts did not begin until 1995. Petitioner believes the Regional Board has lost impartiality in these matters and is now acting, in part, to protect itself from embarrassment for prior actions and inactions in, among other things, allowing USG to use improperly surveyed monitoring wells, not requiring off-site delineation of the USG plume prior to implementing remedial measures, then allowing USG to prematurely terminate its response actions. Also, the extreme delay caused by the Regional Board's lack of interest in the WML facility (complete inaction from 1993 to 2001), combined with the Regional Board's and USG's actions and inactions, amount to a *de facto* spoliation of evidence that has made it extremely difficult for Petitioner to now prove what really transpired. Finally, in attempting to find further evidence supporting its arguments, Petitioner sought the Regional Board's files concerning the USG site through a document request made pursuant to the California Public Records Act (Government Code section 6250 et seq.). The Regional Board withheld significant responsive documents claiming the "deliberative process" and refused to produce a privilege log.

5. *How the petitioner is aggrieved.*

The Order is arbitrary, capricious and unreasonable given the fact that WML facility's impact to the groundwater is, at worst, merely negligible compared to the waste caused by upgradient sources such as the USG Site, where high values of TCE was documented back in 1988 at its southeast corner closest to the WML facility, but remediation at the USG Site did not begin until 1995. This Order unnecessarily singles out and harms Petitioner by requiring it to incur disproportionately punitive costs for remediation for which it is not responsible.

6. *The action the petitioner requests the State Water Board to take.*

Petitioner requests the State Board to issue an order that the Order is rescinded or that the Regional Board rescind the Order. In the alternative, Petitioner requests an order modifying the Order by allocating Petitioner with a small share of the cleanup costs compared to other upgradient sources, such as USG.

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7. *A statement of points and authorities for any legal issues raised in the petition, including citations to documents or hearing transcripts that are referred to.*

*See* Statement of Points and Authorities below in Section B, which is incorporated herein as though fully set forth at length.

8. *A statement that copies of the petition have been sent to the Regional Water Board and to the discharger, if different from the petitioner.*

A copy of the Petition has been served on David Young of the Regional Board, and out of an abundance of caution and fairness, upon Tram Nguyen of USG.

9. *A statement that the issues raised in the petition were presented to the regional board before the regional board acted, or an explanation of why the petitioner could not raise those objections before the regional board.*

In response to the Regional Board's draft Order dated July 31 2014, Petitioner presented evidence supporting its position to the Regional Board in a response letter prepared by SCS Engineers ("SCS") dated July 31, 2014 to David Young of the Regional Board. On May 1, 2015, Petitioner also met with the Regional Board at the WML facility to discuss most of the issues raised in this Petition. However, despite Petitioner's efforts to raise these issues, the Regional Board issued the subject Order. Since the Order was issued, Petitioner has installed three additional new groundwater monitoring wells which further support the Petitioner's position. (Exhibit "K".)

**B. Statement of Points and Authorities.**

1. **Legal Standards.**

- a. **Standard of Review.**

When the State Board conducts a hearing, its decision will be based on the evidence and testimony in the record of the hearing. (Cal. Code Regs., tit. 23, § 2064.) When no hearing is held, the State Board's decision will be based on the record before the Regional Board. (Cal. Code Regs., tit. 23, § 2064.) Records may be supplemented by any other evidence and testimony accepted by the State Board pursuant to Title 23, section 2050.6. (Cal. Code Regs., tit. 23, § 2064.)

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b. Passive Migration.

Under DHS's/DTSC's Management Memo #90-11 (attached as Exhibit "T" hereto), which Petitioner understands the Regional Board and State Board also follow in principle, the agencies will not pursue enforcement actions against a responsible party solely based upon ownership of land overlying contaminated groundwater. Thus, it was improper for the Regional Board to issue the Order against the Petitioner and order cleanup of contamination migrating from upgradient sources like USG.

c. Comparative Fault.

In California, everyone is responsible for the consequences of his own wrong, and others shouldn't be compelled to incur costs which ought to have been paid by the wrongdoer. See, e.g., *Herrero v. Atkinson*, 227 Cal. App. 2d 69 (1964). The Order seeks to compel Petitioner to pay vastly more than its fair share by ordering it to cleanup contamination originating upgradient from sources like USG. This is unfair and in violation of law.

d. Spoliation of Evidence.

Destroying evidence in anticipation of a discovery request is a misuse of discovery within the meaning of section 2023, even if litigation has yet to commence. (*Cedars-Sinai Medical Center v. Superior Court* (1998) 18 Cal.4th 1, 12.) If a party willfully suppresses relevant evidence, the trial of fact may infer that the evidence would have been unfavorable to that party. (See, e.g., Evid. Code, § 413; CACI No. 204; BAJI No. 2.03.)

2. **Background Information and Interpretation.**

The investigations conducted at the former WML site have been, in actuality, largely responsible for defining the nature and extent of USG's VOC groundwater plume.<sup>1</sup> In 1988, USG's investigation documented how the highest TCE values were in the "southeast corner" nearest the WML facility. The Regional Board concluded that "[t]he contamination is extensive." (See Exhibit "H.") In addition, information obtained from the GeoTracker website indicates that only recently, decades after their massive VOC release, has USG has been required by the Regional Board to attempt to define the downgradient extent of the VOC plume emanating from the USG facility (upgradient of the former WML facility). The results of USG's recent downgradient investigation are summarized in the *Off-Site Groundwater Investigation Report* dated May 17, 2013 prepared by JAG Consulting Group, Inc. ("JAG"). The JAG

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<sup>1</sup> This response is, in part, based on the files held by the Regional Board for the USG and WML cases (SCP Case Numbers 0388 and 0673, respectively). Copies of Regional Board records for the USG and WML sites, along with records for the former Unocal facility (SCP Case Number 0364) located south of the USG/WML sites, as well as other reference material are provided on the enclosed DVD.

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investigation included drilling four borings downgradient (east and northeast) of the USG facility, collecting Hydropunch samples from each boring, and the subsequent installation and monitoring of three groundwater wells. One zone of groundwater, encountered between approximately 78 and 91 feet below ground surface (bgs), was identified and sampled during JAG's investigation. The results of their monitoring showed that 1,1-dichloroethene (1,1-DCE) and trichloroethene (TCE; up to 590 and 130 micrograms per liter [ $\mu\text{g/L}$ ], respectively) were the primary VOCs detected in groundwater, with lower and more sporadic detections of six other VOCs. It should be noted that soil samples collected from JAG's borings and three wells showed that 1,1-DCE was present in shallow soil in HP-23 and OS-5, indicating a release of VOCs in the area of investigation (eastern margins of the AirGas site, northeast of WML). Analytical data from surrounding borings, including one on the former WML site (DSV5 – at the northeast corner of the WML site), did not identify VOCs in shallow soils.<sup>2</sup>

Based on historic data from the USG facility and the three new groundwater wells (OS-5, OS-6 and OS-7), JAG concluded that groundwater flow was northeasterly in direction and suggested that the former WML site and/or the Unocal La Mirada Plant (14445 Alondra Boulevard, 1,000 feet to the south of the WML site) were upgradient sources of VOCs detected in groundwater. This conclusion ignores data showing consistently *southeasterly* groundwater flow beneath the former WML facility and is therefore **incorrect**. The results of re-surveying USG's wells in May 2014 showed that inaccurate reference point elevations have been used by USG for years, low by as much as **4.11 feet**, and therefore USG's calculated hydraulic heads and groundwater contour maps have been **inaccurate for years**. This information should call for a re-examination of all of the groundwater contour maps produced on behalf of USG, and, as necessary, a reevaluation of their technical conclusions regarding groundwater flow pathways within the USG monitoring well field. As shown in previous reports for the former WML site, groundwater flow is divergent east of the USG facility, ranging from northeasterly to southeasterly in flow direction. Monitoring for over 20 years shows the USG facility has been and remains upgradient of the former WML facility and, as discussed elsewhere in this letter, is the primary source of VOCs in groundwater beneath the former WML facility.

The following information and interpretation is based on reviewing previous reports, for both the USG and WML cases.

- **Historical USG Impacts.** The USG facility contained up to 22 underground storage tanks (USTs), including chlorinated solvent USTs, and was the source of significant releases of VOCs to soil and groundwater. USG's 1,1,1-trichloroethane (1,1,1-TCA) and other VOC releases dates back to at least 1988, and probably much

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<sup>2</sup> Information regarding historical impacts was obtained from the Regional Board's Waste Discharge Requirements for the USG site (Order No. R4-2002-0026, dated January 24, 2002).

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earlier. One to two inch diameter holes were observed in the 1,1,1-TCA UST upon removal in 1990. 1,1,1-TCA was detected at a concentration of 840 milligrams per kilogram (mg/kg) in a composite soil sample from the USG site, over **350 times higher** than any discrete soil samples from the former WML site (maximum of 2.2 mg/kg). Remediation efforts at USG (groundwater pumping [1995 to 2007], soil vapor extraction [approximately 260,000 pounds extracted from 1996 to 2005], and in situ chemical oxidation [2002 and 2006 to 2009]) have removed at least several hundred thousand pounds of VOCs. In spite of these efforts, the downgradient extent of USG's VOC plume in groundwater has never been fully defined, and no significant off-site groundwater investigation was conducted by USG's consultants until 2010, at least 20 years after known VOC releases. The concentrations of VOCs detected in groundwater downgradient of the USG site in 2010, after 20 years of downgradient migration, by JAG are likely only residuals of concentrations that were hundreds of times higher in prior decades. Groundwater flow paths indicate that the former WML facility is entirely downgradient of the USG plume.

- **WML 1,1,1-TCA UST.** The 1,1,1-TCA UST at the former WML facility was removed in 1988, and there were no indications of holes in this UST, no obvious signs of contamination, and no VOCs were detected in soil samples at that time. As noted above, a maximum of 2.2 mg/kg of 1,1,1-TCA, with most samples far less (below 0.6 mg/kg) was detected in soil prior to and after removal of the UST. A copy of the UST removal letter (for the 1,1,1-TCA tank and two fuel tanks) prepared by Al Simmons and dated April 17, 1988, including photographs of the 1,1,1-TCA UST, showing it in excellent condition, is enclosed in the DVD which is attached to this Petition. Notes on photographs of the Simmons' letter indicate "Mr. Miller looking at hole (i.e., the excavation) condition and depth, no visible contamination, no odor." These qualitative findings are consistent with the soil samples collected by SCS from the bottom of the excavation during the UST removal at WML. These samples contained no detectable concentrations of EPA 8010 compounds. 1,1,1-TCA and 1,1-DCE were non-detect, below 5 µg/kg (SCS Tank Closure Report, April 1988).



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- **Initial WML Groundwater Investigations.** Groundwater well GMW-1 was installed in 1987 at the location of the former 1,1,1-TCA UST, and monitored 12 times between July 1987 and March 1990. During this monitoring, 1,1-DCE was never detected, 1,1,1-TCA concentrations were generally less than 100 µg/L, and the predominant VOC detected in groundwater was TCE (up to 300 µg/L). A summary table (Table 1) of WML groundwater monitoring results is attached hereto as Exhibit “B”.
- **Timing of USG Solvent Releases and Remediation Efforts.** It should be noted that it was five years after the discovery of the leaking UST by USG before they initiated on-site groundwater pumping (in 1995) in an attempt to control the migration of their VOCs. Of course, based on the large holes, the UST was likely leaking for many years prior to its removal. This delay in the start of remediation would have allowed years of solvent migration and prevented the capture of contaminated groundwater that had moved downgradient.

To make matters worse, USG has never produced a map showing the limits of their contamination in groundwater, and therefore there is no documentation of their success or failure in remediating the groundwater. This is shocking to Petitioner. Why didn't the Regional Board require such? In fact, monitoring at the WML site shows USG's remedial efforts have failed to control the migration of their VOCs. The Regional Board basically admits to such in the Responsiveness Summary to the Order: “Some commingling of the plumes from the two facilities may be occurring based on the concentrations of TCE seen in USG wells GT13 and GT14 (directly upgradient from WML) and the on-site WML groundwater wells” and “[t]he Regional Board will consider the potential contribution of chlorinated solvent impacted groundwater migration beneath the WML site from any off sites sources(s) when evaluating remedial cleanup goals for groundwater at the WML site.” (Order, Responsiveness Summary, point #4, p. 3 of 15 and point #6, p. 5 of 15, Exhibit “A”).

- **Subsequent WML Groundwater Investigations.** In 1993, five years after removal of WML's 1,1,1-TCA tank, wells GMW-2, GMW-3, and GMW-4 were installed at the former WML facility, and monitoring of these wells confirmed that TCE was the primary

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VOC detected in the groundwater beneath (up to 244 µg/L). No other VOCs were detected in GMW-4, 8 µg/L of chloroform was the only other VOC in well GMW-2, and GMW-3 contained traces of chloroform, toluene, 1,1-DCE, and 1,1,1-TCA (all at concentrations less than 20 µg/L). Regional Board interest in the former WML site waned, presumably given *the lack of impacts*, and the Regional Board required no environmental response actions for 8 years (from 1993 to 2001). When the Regional Board refocused on the former WML site, and monitoring resumed under agency directive in 2001, 14 years after UST removal at the WML site, VOC concentrations had significantly increased in all four wells. Importantly, this increase was observed regardless of well location with respect to the former on-site 1,1,1-TCA UST (i.e., whether cross or downgradient). The only colorable inference from these facts is that virtually all of the increased VOC levels came from an upgradient source, not from WML's former 1,1,1-TCA UST. It should also be noted that WML defined the extent of VOCs in groundwater through the installation of one downgradient well southeast of the La Mirada Flood Control Channel. This well, GMW-5, was installed and monitored on two occasions with no significant detections of VOCs, and was subsequently abandoned with Regional Board approval. The extreme delay caused by the Regional Board's lack of interest in the WML Facility, combined with USG's remedial activities upgradient and lack of USG's defining its downgradient impacts, made it extremely difficult for Petitioner to prove what really transpired. A *de facto* spoliation of evidence has occurred as a result of the Regional Board's and USG's actions and inactions. Petitioner is the victim of such.

- **TCE Source is USG.** TCE has *never* been used at the former WML site, nor has TCE been detected at anything other than trace concentrations in soil or soil vapor on the WML site. In contrast, substantial TCE has been documented in soil and migrating in groundwater from the upgradient USG site. Therefore, TCE serves as a "tracer" which documents the migration of groundwater from the USG site. Although USG's groundwater contour maps tend to confuse the issue, it is unmistakable that large portions of the USG site are upgradient from WML site. The TCE in groundwater beneath WML must therefore have migrated from the USG site. These facts compel the finding that virtually all of the TCE

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detected in groundwater in the area and beneath the former WML site originated from the upgradient USG facility. Perhaps more importantly, this establishes USG as at least one potential source for the other VOCs in groundwater beneath the WML site. It is unreasonable to concede that TCE in groundwater is derived from the USG site, but that other VOCs are not. 1,1-DCE impacts to groundwater will result from degradation of TCE. This potential source of 1,1-DCE contamination in groundwater should not be overlooked. The 1,1-DCE found beneath the WML site is a tracer from the TCE and TCA that was released from the USG site.

- **Comparison of VOC Concentrations at USG and WML.** VOC concentrations at the former WML facility have been far less than those at the upgradient USG facility in soil, soil vapor, and – for at least 6 years from 1987 to 1993 – in groundwater. In contrast to the thorough investigation of groundwater at the WML site, *there were no significant investigations to define the downgradient nature and extent of VOCs in groundwater from the USG facility until at least 20 years after their known documented release prior to 1988.* At an estimated flow velocity of 75 feet per year, this means that there was plenty of time for contaminated groundwater to migrate from USG to WML, which is only about 80 feet away. Other than TCE, there were relatively low concentrations of VOCs in groundwater beneath the former WML facility from 1987 to 1993.

Then, in 2001, WML well GMW-3 was found to contain 6,710 µg/L (equivalent to 6.71 milligrams per liter [mg/L] or parts per million [ppm]) of 1,1,-DCE, which is about 10 times higher than any equivalent concentrations detected in soil (generally in the range of 0.6 mg/kg [ppm] or less) beneath the former WML 1,1,1-TCA UST. If all 0.6 mg/kg of 1,1-DCE in soil beneath the former 1,1,1-TCA UST were to have migrated into groundwater, this would account for only about 10% (0.6 ppm ÷ 6.71 ppm) of the 6,710 µg/L of 1,1-DCE detected in groundwater. Thus, at least 90 percent of the 1,1-DCE is from another source. In addition, if the concentration of 1,1-DCE measured in groundwater in 2001 in GMW-1 (158 µg/L) reflects the contribution of the release from the former WML 1,1,1-TCA UST, this is only about 2.3 percent (158 µg/L ÷ 6,710 µg/L) of the mass of 1,1-DCE detected in

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GMW-3 (6,710 µg/L). Under these assumptions, 98 percent of the 1,1-DCE was from another source. This information, combined with the fact that 1,1,1-TCA concentrations in soil at the USG site were up to 840 mg/kg or 350 times higher than those found at the former WML site, indicates that USG is responsible for all but a fraction of the VOCs detected groundwater beneath the former WML facility.

- **1,4-Dioxane.** 1,4-Dioxane has been detected at concentrations up to 18,000 µg/L in on-site well GMW-1, and 1,4-dioxane levels range from about half to as much as 5 times the concentrations of 1,1-DCE (**Table 1**). Other WML wells contain relatively minor concentrations (less than 36 µg/L) of 1,4-dioxane, and far less (below 5%) as a percentage of the 1,1-DCE levels. These data should be considered by the State Board in at least two ways with respect to potential sources: (1) fate and transport, and (2) relative concentration compared to other related VOCs.

*Fate and Transport.* 1,4-Dioxane is essentially 100% soluble in water, environmentally persistent in oxygenated environments, and has a low organic carbon-water partitioning coefficient (K<sub>oc</sub>) in soil that results in little sorption and retardation in a migrating groundwater plume. For these reasons, once groundwater has been impacted, 1,4-dioxane is one of the “leading edge” VOC compounds, migrating farther and faster than the other chlorinated VOCs in groundwater, such as 1,1,1-TCA and 1,1-DCE.

*Relative Concentration.* 1,4-Dioxane was added as a stabilizer to 1,1,1-TCA at concentrations of about 3 to 4.5%. Therefore, with a spill of “pure” 1,1,1-TCA product, one would expect the 1,4-dioxane concentration to be about 3 to 4.5% of the 1,1,1-TCA concentration or, if 100 percent of the 1,1,1-TCA has hydrolyzed to 1,1-DCE, about 3 to 4.5% of the 1,1-DCE concentration. With this information and by way of example, a maximum release of 2.2 mg/kg of 1,1,1-TCA would yield 1,4-dioxane concentration in soil of about 0.099 mg/kg, and a concentration in groundwater of about 99 µg/L. The ratio of concentrations of 1,4-dioxane and 1,1,1-TCA/1,1-DCE that were found in GMW-1 in 2011 through 2014 discredit any theory that chemicals came from the WML site. For example, the 1,4-dioxane concentration of 491 µg/L (5/31/11)

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would need to be accompanied by a 1,1,1-TCA/1,1-DCE combined concentration of about five times that value or about 2,500 µg/L (based on the degradation product ratios between 1,1,-DCE and acetic acid of 20/80 percent, as discussed later). On that date, the combined 1,1,1-TCA/1,1-DCE concentration was 837 µg/L. The 1,4-dioxane concentrations, especially the spike in concentration (18,000 µg/L) that occurred on the 11/5/13 sample, is indicative of an upgradient release of 1,1,1-TCA with 1,4 dioxane additive. Ratios of these VOCs consistent with a release at the WML site are not found at the WML site, therefore the 1,4-dioxane now found at the WML wells came from an upgradient source like USG.

Twenty-eight years after removal of the 1,1,1-TCA UST at WML, one would expect that the maximum groundwater impacts have migrated far downgradient. Instead, 27 years after removal of the WML UST, the November 2013 monitoring event shows the 1,4-dioxane concentration peaked at 18,000 µg/L in well GWM-1. This concentration is about 180 times the maximum anticipated concentration of 100 µg/L. Based on the available information regarding the release at the WML site, this scenario is chemically impossible.

This impossible scenario at WML should be compared to the available data from the USG site. Considering the release of 840 mg/kg of 1,1,1-TCA at the USG site, one would expect maximum 1,4-dioxane concentrations of about 37.8 mg/kg in soil or 37,800 µg/L in the underlying groundwater, and given the decades that have passed since USG's release, one would expect to find thousands of µg/L of 1,4-dioxane in a well that is about 450 feet downgradient of the USG site such as WML's GWM-1. This scenario is entirely plausible, and in fact, should be expected and indicates that the 1,4-dioxane that has been measured at the WML wells came from upgradient.

- **Isotope Analysis.** Three samples, from wells GTI-3 (a USG well) and GMW-1 and GMW-6 (WML wells), were collected during the November 5, 2013 monitoring event for compound specific isotope analysis (CSIA) in order to further evaluate possible VOC sources. CSIA results were summarized in an SCS letter dated April 14, 2014. The results for  $\delta^{37}\text{Cl}$  show that all three samples have

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essentially the same  $\delta^{37}\text{Cl}$  value, which is consistent with a single product source for the 1,1-DCE in groundwater. The results for  $\delta^{13}\text{C}$  values showed that well GWM-6 had the most  $^{13}\text{C}$  enrichment in 1,1-DCE from biological or chemical degradation. However, this well is not on a direct groundwater flow path from GTI-3 or GMW-1, and thus these CSIA results are not as useful as the comparison between GTI-3 and GMW-6, which are on the same flow path. The  $\delta^{13}\text{C}$  results for wells GTI-3 and GMW-6 showed the upgradient well, GTI-3, with a moderate level of 1,1-DCE degradation with a  $\delta^{13}\text{C}$  of -21.60‰. Well GMW-1 showed the least evidence of degradation with a  $\delta^{13}\text{C}$  of -24.33‰. Note also that USG conducted in-situ chemical oxidation (ISCO, using catalyzed sodium persulfate) of residual VOCs in soil and groundwater along the eastern margin of their site in 2006 and 2007, 16 years after removal of their leaking tank. The 16 year gap between the last known release at USG and the start of ISCO would have allowed a significant “slug” of VOC contaminated water to migrate downgradient. The ISCO program to enhance VOC degradation would be expected to have a subsequent effect in downgradient wells, such as in well GTI-3, resulting in less negative  $\delta^{13}\text{C}$  values for VOCs. However, VOCs that migrated downgradient of USG in the 16 or more years prior to USG’s ISCO program would be expected to have experienced less degradation and subsequently have more negative  $\delta^{13}\text{C}$  values. The inverse relationship in  $\delta^{13}\text{C}$  values between wells GTI-3 and GMW-1 – showing more degradation upgradient and less degradation downgradient – is to be expected based on the known timing of release at USG (prior to 1990 when the USTs were removed) and the history of ISCO 16 years later in 2006/2007.

It is important to note here that upon receipt of the CSIA data, the Regional Board’s only outwardly apparent move was to issue a letter dated May 27, 2014, giving USG an opportunity to review and comment on the CSIA results. It is again shocking that the Regional Board issued the draft CAO without itself commenting on the CSIA report, or even waiting for the USG response. Further, the Regional Board has apparently only asked the primary responsible party for this regional issue, USG, for an interpretation and opinion on the CSIA report – a party clearly adverse to the downgradient recipient of the draft CAO.

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- **Groundwater Elevations.** The May 2014 monitoring event was the first event to incorporate resurveyed groundwater elevation data from USG's wells, and the first to incorporate groundwater elevation data from Chevron's well MW-25L in Canary Avenue, which is screened in the same groundwater zone as WML wells. As a part of this monitoring event, Chevron had a number of wells re-surveyed at the USG and former WML facilities, as well as their own wells. This re-survey showed that where the WML well reference points showed elevation changes of about 1 inch, the USG well reference point elevations were changed from 1 to 4 feet. **It is now clear that USG may have, for years, been incorrectly representing groundwater contours and flow direction in monitoring reports.**
  - In their letter dated July 15, 2014, which provides a response to the Regional Board's request to review SCS' CSIA analysis, JAG provided a regional map showing groundwater contours in May 2014 at the USG site and off-site to the northeast.<sup>3</sup> While this map shows groundwater elevation data at the former WML, it inexplicably fails to include groundwater contours at the WML site. Further, as shown in SCS's hand-written correction of the groundwater contours and flow direction, which is attached hereto and incorporated herein as Exhibit "D", the 6-foot groundwater contour as drawn by JAG is incorrect because it ignores the southern groundwater flow direction in the southeastern portion of the USG Site.
  - Finally, as shown in Exhibit "C", there are a number of groundwater monitoring wells in the eastern portion of the USG site that appear to have anomalously low groundwater elevations compared to wells farther east and west. Information regarding the construction details of these wells is not readily available, and JAG provides no explanation in their reports. Anomalous groundwater elevations may be the result of these wells having perforated multiple groundwater zones. Multiple zone perforations would also have spread the contamination from shallow to deeper groundwater.

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<sup>3</sup> Attached hereto and incorporated herein as Exhibit "C" is a copy of the regional map and groundwater contours attached to JAG's July 15, 2014 letter.

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In summary, multiple lines of evidence show that there was no significant release of VOCs at the former WML facility, and that soil, soil vapor, and groundwater at the former WML facility have been sufficiently characterized, and that any contamination attributable to WML has dissipated to undetectable or below action levels. Evidence of the insignificant nature of the release at the WML site includes:

- The relatively low (less than 0.6 mg/kg) concentrations of VOCs detected in the majority of soil samples collected and analyzed during the UST removal (April 1988) and in borings surrounding the former UST area. This is indicative of a relatively low mass of VOCs in soil.
- Groundwater monitoring at well GMW-1, immediately adjacent to the former WML 1,1,1-TCA UST, showed low concentrations of 1,1,1-TCA (in the range of 6 to 75 µg/L, with one anomalous result of 160 µg/L) through 11 quarterly monitoring events in 3.5 years from 1987 through December 1989, and no detectable concentrations of 1,1-DCE. However, TCE was also present during this period, at concentrations between 8.9 to 300 µg/L. Since TCE was not used at WML, the TCE “tracer” provides evidence of groundwater from an upgradient source, such as the USG facility, migrating beneath the former WML site.
- When groundwater wells GMW-2 through GMW-4 were installed and sampled in 1993, the analytical results showed TCE as the primary contaminant, up to 244 µg/L in GWM-3. GMW-3 was the only well to contain 1,1,1-TCA and 1,1-DCE; at concentrations of 20 and 11 µg/L, respectively. These data show no evidence of a significant VOC release at the former WML site. However, the higher TCE concentrations again provide evidence of USG’s TCE plume migrating beneath the former WML site.

In contrast, there are multiple lines of evidence documenting that hundreds of thousands of pounds of VOCs were released at the USG site, and that those VOCs have migrated downgradient and impacted groundwater beneath the former WML site. Evidence of the major VOC release at the USG site that has now migrated to WML includes:



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- TCE is a known groundwater contaminant from the USG site and serves as a “tracer” of groundwater from the USG site. Groundwater containing TCE has been present throughout the area from 1987 to the present – at the USG site and to the east and south – which is irrefutable evidence that groundwater throughout the area does and can contain, any VOC released at the USG site.
- Hundreds of thousands of pounds of VOCs were recovered through operation of remediation systems at the USG site.
- TCE will break down to 1,1-DCE (Mattes, et al, 2010).<sup>4</sup> 1,1-DCE has been detected in groundwater at both the USG and WML sites. Levels of 1,1-DCE in groundwater spiked at the WML site long after the 1,1,1-TCA UST was removed from the WML site.
- 1,4-Dioxane. The concentrations of 1,4-dioxane measured at the WML site demonstrate an upgradient release.

The fact that USG has never provided a map showing the extent of their VOC plumes in groundwater, and that their groundwater contour maps have failed to adequately represent flow conditions for years, should not obscure the facts stated above. If and when accurate groundwater plume maps are produced for the USG release (which is typically required for a significant release) they will show the true extent of the USG groundwater plume and the impacts to the WML facility.

### 3. **Specific Responses to Statements in the Order.**

Specific comments, formatted to follow the numbered responses in the “Responsiveness Summary,” are as follows:

**Response #1:** The Regional Board states “At no time in the last 20 years of consistent monitoring have the two USG downgradient wells GTI3 and GTI4 shown concentrations of solvents in groundwater near the levels seen beneath the WML facility.” The State Board should consider two issues with regard to this statement. *First*, these two wells, an estimated 110 feet apart, and may not be

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<sup>4</sup> Mattes, Timothy E., Alexander, Anne K., & Coleman, Nicholas V., 2010. *Federation of European Microbiological Societies, Aerobic biodegradation of the chloroethenes: pathways, enzymes, ecology, and evolution*, which is attached hereto as Exhibit “E”.

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appropriately monitoring groundwater downgradient of USG's former USTs. As discussed above, a re-survey of wells in 2014 showed that groundwater elevations were low by over 4 feet in elevation and incorrectly reported by USG for the last 21 years. Therefore, it is not possible to know whether GTI3 and GTI4 are adequately monitoring the flow path of the groundwater plume from USG's former UST release. It is entirely possible that the bulk of USG's contaminant plume is migrating between these wells, or to the north or south of these wells.

*Second*, wells GTI3 and GTI4 were installed the week of February 15, 1990, monitored on February 21, 1990, and found to contain relatively low levels of chlorinated VOCs (less than 30 µg/L of any one VOC) (GTI, May 18, 1990). No additional monitoring of these wells was conducted for over four years, until July 5, 1994, and no remedial efforts were undertaken by USG during this period. When monitoring of these wells resumed in 1994, these wells were contaminated with significantly elevated concentrations of VOCs (JAG, December 3, 2014, Table 4), the concentrations of which have fluctuated wildly during the last 21 years of monitoring. For example, in well GTI3, the concentration of 1,1-DCE was at 70 µg/L in July 1994, up to 650 µg/L in January 1996, down to less than 1.0 µg/L in June 2003, up to 280 µg/L in November 2003, and was then again less than 1.0 µg/L in June 2008. These significant fluctuations in VOC levels show that "slugs" of VOC have been migrating downgradient, and beneath the WML facility, for years.

**Response #2:** The Regional Board uses the term "extensive" in describing WML's soil vapor plume. The soil vapor plume is relatively minimal in shallow soil (SCS, February 2012). The most "extensive" portion of the soil vapor plume is in deep soil, adjacent to the contaminated groundwater, which is expected with significant impacts to groundwater. This information is not, by itself, evidence of a release at WML.

**Response #3:** The Regional Board states that "1,1,1-TCA was detected in well GMW-1 during each of the 12 monitoring events at elevated concentrations up to 624 µg/L," apparently as evidence of a release at the WML facility. This statement ignores additional data, such as the presence of trichloroethene (TCE) at concentrations up to 300 µg/L, which is an acknowledged VOC from, and tracer of, USG's contaminant plume. This information shows, beyond any reasonable doubt, that groundwater beneath the WML facility was and still is impacted by the releases from the USG site. Further, this statement is misleading regarding the levels of 1,1,1-TCA in GMW-1 during this period. During the first 11 monitoring events (July 1987 to December 1989), 1,1,1-TCA concentrations ranged from 6 to

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160 µg/L, far less than the 624 µg/L detected during the 12<sup>th</sup> monitoring event in March 1990.

**Response #4:** The Regional Board states that some comingling of the plumes “may” be occurring. As discussed above, there is a preponderance of evidence that the USG and WML plumes **MUST** be comingled.

The Regional Board goes on to state that they have “determined that the high levels of 1,1-DCE detected in soil, soil vapor, and groundwater beneath the area of the former 1,1,1-TCA UST on the WML site, are the result of discharges that occurred on-site.” As discussed above, this “determination” appears to have been made without regard and consideration of the evidence regarding the mass of VOCs and the timing of releases. When all evidence is considered, it is clear that USG is a significant source of the VOCs detected beneath the WML facility.

**Response #5:** The Regional Board again states that information “may” indicate comingling of groundwater plumes. The Regional Board has previously acknowledged that the TCE in regional groundwater is from the USG site. As discussed above, there is a preponderance of evidence that the USG and WML plumes **MUST** be comingled.

**Response #6:** The Regional Board again states that USG and WML groundwater plumes “may” have comingling. Again, there is a preponderance of evidence that the USG and WML plumes **MUST** be comingled.

**Response #7:** The Regional Board calculated that with groundwater flow at 75 feet per year and 500 feet between USG’s USTs and WML’s well GMW-1, the travel time is 4-5 years. This is incorrect: 500 divided by 75 equals 6.66 years of travel time, and that travel time does not account for retardation, which would slow the VOC plume migration and likely add years to the travel time.

Assuming the release from the 1- to 2-inch diameter holes in USG’s 1,1,1-TCA USTs occurred in the early to mid-1980s, long before their removal in 1990, the travel time to WML’s well GMW-1 (about 500 feet downgradient) would be at least 7 years and perhaps as much as 10 or more years. Under this scenario, one would expect to find relatively minor VOC contamination in well GMW-1 until the plume arrived.

This is precisely what the data show. Monitoring of GWM-1 showed relatively “minor” VOC contamination (with the exception of USG’s TCE) during 11

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monitoring events in the period from July 1987 to December 1989, with a spike in 1,1,1-TCA levels (to 624 µg/L) during the next monitoring event in March 1990 (SCS, December 2014). Plausible explanations for this “spike” in 1,1,1-TCA concentrations in well GWM-1 in 1990 (and thereafter) must include the possibility of a mid-1980s release from USG’s 1,1,1-TCA USTs and downgradient migration and impacts to GWM-1. Based on the 1- to 2-inch diameter holes and soil concentrations (up to 840 mg/kg in a composite soil sample), it is a known fact that a significant release occurred from USG’s 1,1,1-TCA USTs. Petitioner does not believe that the mass of VOCs and timing of that release have been appropriately considered by the Regional Board in evaluating this case, as discussed elsewhere in this letter.

**Response #8:** The Regional Board indicates that “1,4-dioxane has been detected at only relatively minor concentrations in the two UST downgradient groundwater wells GTI3 and GTI4 (directly upgradient of WML).” USG’s monitoring for 1,4-dioxane started in December 2006, at least 16 years after removal of the leaking UST (JAG, *Semi-Annual Groundwater Monitoring Report, November 2014*, dated December 3, 2014, Table 4). Given that 1,4-dioxane readily migrates in groundwater with little retardation, the 1,4-dioxane monitoring results from 2006 to the present in wells GTI3 and GTI4 would be expected, and should be not construed as evidence of “no significant release.”

The Regional Board goes on to state that the evaluation by SCS of the relative concentrations of 1,4-dioxane to 1,1,1-TCA does not provide representative data for comparative analysis based on the two factors: 1. The release(s) occurred decades ago ...; and, 2. 1,1,1-TCA readily degrades whereas 1,4-dioxane does not. While Petitioner concur regarding these two factors, the Regional Board’s analysis is incomplete and ignores SCS’s analysis of the principal VOC degradation product of the hydrolysis of 1,1,1-TCA, 1,1-DCE, which is environmentally persistent in oxygenated environments and can be used, and was used by SCS in their July 31, 2014 letter, as a proxy to compare the relative ratio of 1,4-dioxane to a theoretical release of 1,1,1-TCA. As indicated in the July 31, 2014 letter:

For example, the 1,4-dioxane concentration of 491 µg/L (5/31/11) would need to be accompanied by a 1,1,1-TCA/1,1-DCE combined concentration of about five times that value or about 2,500 µg/L (based on the degradation product ratios between 1,1,-DCE and acetic acid of 20/80 percent, as discussed later). On that date, the combined 1,1,1-TCA/1,1-DCE concentration was 837 µg/L. The 1,4-dioxane concentrations, especially the spike in concentration (18,000 µg/L) that

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occurred on the 11/5/13 sample, is indicative of an upgradient release of 1,1,1-TCA with 1,4-dioxane additive.

**Response #9:** The Regional Board concluded that the results of the isotope analysis were inconclusive based on five issues. As a general comment, and as indicated in the compound specific isotope analysis (CSIA) report (SCS, April 14, 2014), “the purpose of the CSIA evaluation was to further develop lines of evidence regarding possible sources of VOCs in groundwater. The results of this study can be used in conjunction with other lines of evidence – such as groundwater flow direction, types of VOCs, timing of suspected releases, aquifer properties, etc. – in development of a Site Conceptual Model.” The CSIA was not meant to be conclusive, and cannot be conclusive, without other lines of evidence. In this regard, Petitioner concurs with the Regional Board’s summary. With regard to specific comments:

- The Regional Board stated that “ $\delta^{37}\text{Cl}$  values were not reported relative to an appropriate standard reference, thus making comparative analysis with data results from other sites and research impossible” While true, this is NOT how the results were used. As stated on page 3 of the CSIA letter “Note that the  $\delta^{37}\text{Cl}$  results of this study are relative to each other and the laboratory’s in-house standard.” Based on this limitation, the  $\delta^{37}\text{Cl}$  values for all three samples were compared to each other and found to be essentially the same value. This finding *is consistent* with a single product source for the 1,1-DCE in groundwater.

In this regard, the Regional Board should note this CSIA evaluation is consistent with the Site Conceptual Model outlined in this and previous submittals, that is, any impacts to groundwater from the WML facility are secondary and negligible to the primary impacts caused by upgradient sources such as USG.

In an additional comment for Response #9, the Regional Board states that groundwater pump and treat in 1995 to 2007 “might” have reversed the normal flow of groundwater. This statement would support the fact that for years prior to 1995, when USG’s plume was at its highest concentrations and freely flowing downgradient, groundwater beneath the WML facility was being impacted by the USG VOC plume. This comment by the Regional Board supports Petitioner’s contention that any impacts to groundwater from the WML facility are secondary and negligible to the primary impacts caused by upgradient sources such as USG.

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**Response #10:** The Regional Board acknowledges that groundwater flows southeasterly in direction at the WML facility. The Regional Board erred in utilizing years of uncorrected USG groundwater monitoring reports as a basis for the Order. Until such time as previous monitoring reports are corrected, these reports should not be relied upon to support findings and conclusions regarding the nature and extent of VOC impacts in groundwater upgradient of the WML facility.

**Response #11:** The Regional Board's response focuses on the degradation of 1,1,1-TCA, but does not comment on the issue of VOC mass and 1,4-dioxane and 1,1,1-TCA/1,1-DCE ratios. Refer to Response #8 above for a discussion of this topic.

**Response #12:** Refer to Response #8 above.

**Response #13:** The Regional Board's response generally indicates that historic borings at the WML facility missed the most impacted soil beneath the former 1,1,1-TCA UST, and implied that higher VOC concentrations exist in soil at the WML site. WML has complied with all sampling and investigation requested by the Regional Board and those investigation have not identified VOC concentrations in soil that could rationally account for the VOC levels in groundwater. Conclusions regarding the nature and extent of contamination should be based on actual data, and not on speculation regarding "hidden" contaminants.

**Response #14:** The Regional Board discusses the upward migration of "heavier VOC vapor," and how it has not been demonstrated that impacted groundwater could account for the soil vapor detected at 5 feet below grade. This was not a conclusion or finding from previous investigations. WML has acknowledged an on-site VOC release. However, Petitioner's findings are that this release was "minimal," did not results in any significant vapor intrusion issue, and was limited in vertical extent. Further, use of the term "heavier" is irrelevant to the migration of relatively low vapor concentrations. Vapors migrate from areas of high concentrations to areas of low concentration in all directions, including upward from groundwater, as has been demonstrated at numerous sites.

**Response #15:** The Regional Board states that "there is no evidence supporting the movement of a 'slug' of VOCs, including 1,1-DCE and 1,4-dioxane, on to the WML site at the elevated concentrations seen in groundwater beneath the WML

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site.” As discussed above, monitoring of GWM-1 showed relatively “minor” VOC contamination (with the exception of USG’s TCE) during 11 monitoring events in the period from July 1987 to December 1989, with a spike in 1,1,1-TCA levels (to 624 µg/L) during the next monitoring event in March 1990. This data is consistent with, and is one line of evidence of, the movement of a slug of VOCs in groundwater beneath the WML site.

Further, the Regional Board’s statement assumes that USG’s groundwater monitoring efforts were sufficient to detect a VOC slug, which, as discussed above, they were not.

**4. The Regional Board Frustrated Petitioner’s Efforts to Uncover Relevant Documents Related to USG.**

On March 12, 2015, Petitioner requested access to copies of the Regional Board’s files concerning the USG Site pursuant to the Public Records Act (Government Code section 6250 et seq.) (the “PRA Request”) in efforts to find further evidence in support of its arguments. However, the Regional Board failed to produce complete copies of its responsive e-mails and other documents on the grounds of privilege, its claim that “emails [are not] available further back than 90 days” because “most Regional Board staffs’ email accounts are subject to a 90 day record retention schedule,” and “to protect the deliberative process [under a claim that] the public interest served by nondisclosure clearly outweighs the public interest served by disclosure” – without providing any privilege log, explaining why the Regional Board failed to preserve any of its e-mail correspondences related to monitoring the USG Site for over 20 years, or how its suppression of relevant documents outweigh its duty to disclose them.

The Regional Board should have anticipated document requests from Petitioner because it has been in discussion with the Petitioner for years concerning a potential cleanup and abatement order and knew from those discussions and from Petitioner’s prior appeal to the State Board that all documents related to the upstream USG Site, including e-mail correspondences referencing USG or the USG Site, are highly relevant to its Order. Nevertheless, the Regional Board suppressed all of its e-mails referring to the USG Site that are more than 90 days old.

Here, the Regional Board deliberately shielded itself from its 90-day e-mail retention policy and turned a blind eye to the fact that relevant e-mail correspondences older than 90 days could escape the reach of any document request. The Regional Board also failed to produce any privilege log to support the bases for such claimed privilege. Finally, the Regional Board’s failure to specifically state why its suppression of relevant documents “protect[s] the deliberative process” highlights the fact that it has the discretion to only disclose documents that are not unfavorable to itself.

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## **II. TWO-FOLD REQUEST FOR HEARING**

Petitioner installed three new groundwater monitoring wells (GMW-7 through GMW-9) after the Regional Board issued the Order. SCS expedited testing and provided results in its June 17, 2015 report entitled, “*Preliminary Groundwater Monitoring Data: May and June 2015 Former Western Metal Lath, 15220 Canary Avenue, La Mirada, California,*” which is attached hereto and incorporated herein as Exhibit “K”.

Data from these three new groundwater monitoring wells (GMW-7 through GMW-9), along with data from the USG Site, WML facility, and Rohm and Haas sites, were used to create regional groundwater contaminant plume maps for 1,1-DCE, TCE and 1,4-dioxane (the “Plume Maps”).<sup>5</sup> As shown in the Plume Maps, there is an area with relatively lower VOC concentrations located between the WML facility and the USG Site, which is immediately downgradient from the area where USG completed its in-situ chemical oxidation activities in 2008 and 2009. This area is also immediately upgradient to the VOC “hot spot” in the area of WML’s well GMW-1.

This new information provides additional evidence that releases at the USG Site have impacted groundwater beneath the former WML facility. Petitioner requests a hearing to present this new information which was not before the Regional Board when it issued its Order. Moreover, Petitioner requests a hearing to present its overall arguments and evidence. Given the totality of circumstances, which includes a *de facto* spoliation of evidence, loss of impartiality of the Regional Board, and the punitive costs of complying with the Order, due process mandates a hearing directly before the State Board. Petitioner respectfully requests one at the State Board’s first convenience.

## **III. CONCLUSION**

Based on the foregoing, Petitioner respectfully requests the State Board to issue an order rescinding the Order or ordering the Regional Board to rescind the Order. In the alternative, Petitioner requests the State Board to modify the Order by re-allocating the repair costs primarily to the upgradient sources, including USG, and reduce Petitioner’s shares to a lesser amount. Petitioner also requests the State Board to set a hearing on the Petition and regarding the admissibility of newly discovered evidence pursuant to Title 23 section 2050.6.

[Cont’d.]

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<sup>5</sup> See Exhibit “K”, Figure 2 through 6.



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Respectfully submitted,

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Attorneys for Petitioner  
CANARY AVENUE, LLC

Enclosures:

Exhibit "A" – Cleanup and Abatement Order No. R4-2015-0057 dated May 20, 2015.  
Exhibit "B" – Table 1 – Summary of WML Groundwater Monitoring Results  
Exhibit "C" – JAG Figure 3 (from Attachment C of JAG's July 15, 2014 letter)  
Exhibit "D" – JAG Figure 3 with SCS Corrections  
Exhibit "E" – Mattes, et al., 2010. FEMS, Aerobic biodegradation of the chloroethenes: pathways, enzymes, ecology, and evolution.  
Exhibit "F" – Chapter 12 "Chlorinated Solvents" by Morrison, Murphy and Doherty  
Exhibit "G" – Lists of References (Former Unocal, USG, and WML facilities)  
Exhibit "H" – 1988 Tank Contents Memo  
Exhibit "I" – DHS (DTSC) Policy Memo re Passive Migration  
Exhibit "J" – PRA Letter to Mr. Tanaka May 28, 2015  
Exhibit "K" – June 17, 2015 report: Preliminary Groundwater Monitoring Data: May and June 2015 Former Western Metal Lath, 15220 Canary Avenue, La Mirada, California

See also accompanying DVD with further supporting documents.

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