PES Environmental, Inc.
Engineering & Environmental Services

February 11, 2016

1021.001.01.008

RB6enfproceed@waterboards.ca.gov
California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

Re: Comments on Proposed Cleanup and Abatement Order No. R6T-2015-PROP
Former Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Dear Water Board Staff:

On behalf of Commerce Bank, as trustee of the Jack R. Lyddon Trust Two, as managing member of Real Estate Management Associates, LLC, as general partner of Seven Springs Limited Partnership, the entity that holds title to the South Y Center (collectively referred to as Seven Springs), PES Environmental, Inc. (PES) and Morrison & Foerster LLP provide these comments on the Proposed Cleanup and Abatement Order No. R6T-2015-PROP (Order) issued by the Lahontan Regional Water Quality Control Board (RWQCB) dated September 15, 2015, for the Former Lake Tahoe Laundry Works located at 1024 Lake Tahoe Boulevard, South Lake Tahoe, California (Site). Comments on the Order were originally due to the RWQCB by October 15, 2015; however, in accordance with a request from Seven Springs and Fox Capital Management Corporation (Fox) to review the results of an area-wide groundwater investigation, an extension was provided until January 15, 2016, to submit comments on the Order. On January 13, 2016, the RWQCB Prosecution Team submitted a request for an extension to submit comments until after the report on the area-wide investigation was released and a public workshop is conducted. On January 14, 2016, an extension was granted by the RWQCB and comments on the Order are due by February 11, 2016.

This letter outlines: (i) specific concerns Seven Springs has regarding the proposed Order, including discussion of the results of recent testing conducted at the Site; (ii) comments on the RWQCB's recent area-wide groundwater investigation; and (iii) potential alternatives to specific components of the Order so as to offer an approach that may be agreeable to all parties, thus continuing the cooperative efforts to address PCE issues by RWQCB, Seven Springs, and Fox.

As noted above, the RWQCB has conducted an area-wide groundwater investigation[1] to evaluate groundwater within an approximate nine-block area within South Lake Tahoe, California. On January 20, 2016, the RWQCB issued the report of the area-wide PCE investigation[2]. A public meeting was held on February 5, 2016 during which the RWQCB provided information regarding the area-wide tetrachloroethene (PCE) groundwater investigation conducted in October and November 2015.

Seven Springs also incorporates as part of this letter its comments regarding the consideration of no further action required for both the Lakeside Napa Auto and Big O Tires sites, to the extent that those comments indicate that the Lakeside Napa Auto and Big O Tires sites are sources of PCE contamination in groundwater in South Lake Tahoe. Moreover, Seven Springs incorporates these comments in response to Paragraphs 18 through 23 of the Order regarding these two sites. Seven Springs objects to the proposed closure of these sites despite evidence suggesting that these sites, not LTLW, may be sources of PCE contamination north of Lake Tahoe Boulevard.

I. COMMENTS ON THE ORDER

Regulatory History of the Site

The Order presents an inaccurate and misleading depiction of the regulatory history of the Site, leading the reader to believe that Seven Springs and Fox have not been involved in a long, extensive, and objectively successful cleanup of the Site. The Order briefly describes in Paragraphs 2-8 the basic history of the Site without mentioning the considerable efforts made by Seven Springs to address the presence of VOCs and be responsive to the RWQCB's concerns since 2003, when the RWQCB initially contacted Seven Springs.

Seven Springs and Fox have been cooperating fully with the RWQCB and engaged in a Site Cleanup Program with the RWQCB since 2008. The RWQCB has worked with Seven Springs and Fox since this time and has consistently approved the parties' work plans and remedial action plans aimed at addressing contamination at the Site. We ask that the RWQCB amend the Order accordingly to recognize the regulatory history of the Site, and we suggest the inclusion of a fuller regulatory history after Paragraph 8 of the Order.

To provide a brief history of Seven Springs' and Fox's ongoing cooperation, we submit the following: on June 4, 2009, after discussions with RWQCB concerning past PCE releases at the Site, an Interim Remedial Action Workplan[3] prepared for the Site was submitted to the RWQCB;

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[1] URS Corporation, 2015. *Lukins Service Area PCE Investigation Work Plan, 125 N. Main Street [sic]. Altaville [sic], California, South Lake Tahoe, California.* October 8.

[2] URS Corporation, 2016. *Final PCE Investigation Report, South Lake Tahoe, California.* January 19.

[3] E2CR, 2009a. *Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe.* June 4.

and on August 26, 2009, an Addendum to Interim Remedial Action Workplan[4] was submitted to the RWQCB. In correspondence dated September 1, 2009[5], the Interim Remedial Action Workplan and Addendum to Interim Remedial Action Workplan were accepted by the RWQCB. In accordance with the Interim Remedial Action Workplan and Addendum to Interim Remedial Action Workplan, a soil vapor extraction and groundwater air sparge system (SVE/GASS) was installed at the Site.

In April 2010, a 60-day pilot study was conducted on the SVE/GASS at the Site and the pilot study indicated vacuum influence was exerted over the entire Site and a groundwater air sparge zone of influence (ZOI) of approximately 25 feet was observed[7]. Following the pilot study the SVE/GASS continuously operated at the Site, with minor interruptions. On April 12, 2010, a Draft Remedial Action Plan[6] (RAP) was submitted to the RWQCB. The RAP proposed remediation of the vadose zone using SVE and remediation of shallow groundwater using GASS. On October 31, 2012, a recommendation[7] was made to the RWQCB that the SVE/GASS be shut-down and that pulsed ozone sparging be conducted. The recommendation to shut down the SVE/GASS and utilize pulsed ozone sparging was made due to the presence of low levels of VOCs in soil vapor and groundwater and an increased rate of VOC removal via pulsed ozone sparging. That recommendation was approved by the RWQCB in correspondence[8] dated December 3, 2012.

In June 2013, the RWQCB initiated a 30-day public comment period to solicit comments from the public regarding the Draft RAP. The public comment period closed on July 15, 2013. No comments were received by the RWQCB during the public comment period. On August 2, 2013, the RWQCB issued correspondence[9] accepting the cleanup plan proposed in the Draft RAP, including groundwater remediation using ozone sparging. Site remediation has proceeded in accordance with the RWQCB accepted RAP and RWQCB letter dated August 2, 2013.

On November 1, 2013, the RWQCB issued Investigative Order No. R6T-2013-0090, which required that the SVE/GASS be re-started at the Site as PCE concentrations in groundwater increased to greater than 50 micrograms per liter (µg/L) from the First Quarter 2013 to the

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4 E2CR, 2009b. *Addendum to Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe.* August 26.

5 RWQCB, 2009. *Acceptance of Interim Remedial Action Workplan and Addendum, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County.* September 1.

6 E2CR, 2010. *Interim Remedial System Installation/Pilot Testing Report of Findings and Draft Remedial Action Plan for Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California.* August 12.

7 E2CR, 2012. *Third Quarter 2012 Groundwater Monitoring Report and Interim Remediation Status Report, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe.* October 31.

8 RWQCB, 2012. *Electronic correspondence from Lisa Dernbach to Bill Lawson at E2CR.* December 3.

9 RWQCB, 2013. *Acceptance of Work Plan for Remediation and Order to Submit Technical Reports, Former Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County.* August 2.

Second Quarter 2013. With few exceptions, the SVE/GASS has continuously operated at the Site since November 5, 2013.

In addition to the above regulatory history, Seven Springs offers the following specific comments on this history section of the Order:

- Paragraph 4 of the Order fails to note that high concentrations of solvents, including PCE, TCE, and DCE, were identified in groundwater beneath the Lakeside Napa Auto and Big O Tires facilities. PCE contamination at these sites was measured at up to 3,000 micograms per liter [µg/L] and 4,700 µg/L, respectively. Seven Springs, in comments to the RWQCB's proposal to close investigations at those sites, has offered substantial evidence indicating that these sites are sources of PCE in the South Lake Tahoe area, and that PCE from the Site has not significantly impacted groundwater beyond Lake Tahoe Boulevard to the north of the Site.

Comments on Water Quality Monitoring Results Section of Order

The following presents Seven Springs' comments on the Water Quality Monitoring Results section (Items 9 through 17) of the Order. Items 9 through 17 draw the conclusion that groundwater affected with PCE has migrated from the Site and affected groundwater at off-Site well OS-1 (located approximately 730 feet N25°E of well LW-MW-1S at the Site) and other wells located in the vicinity of well OS-1 up to 2,000 feet northeast of the Site. The Order indicates groundwater velocity in the area is approximately 1 to 2 feet per year. Item 10 of the Order indicates concentrations of PCE detected in well OS-1 are reflective of concentrations observed at the Site 1.3 years prior due to the distance of well OS-1 from the Site and the rate of groundwater movement in the Site vicinity. Items 12 and 13 in this section discuss PCE impacts to "Hurzel monitoring well" located approximately 50 feet northwest of well OS-1 and a domestic well located at 883 Eloise Avenue, approximately 2,000 feet north-northeast of the Site. RWQCB staff prepared a map showing PCE concentrations in the wells discussed above and one Site well (LW-MW-1S). A copy of that map is attached to this letter.

As noted above in the Regulatory History of the Site section of this letter, the SVE/GASS system has been in operation since 2010. Periodic groundwater monitoring has been conducted since 2008 on some wells and 2009 on others. PES has modified the map provided by the RWQCB and a copy of that map is also attached to this letter. As shown on the modified version of the map, the direction of groundwater flow measured in the on-Site wells is predominately north-northwest. Also, as shown on that map, concentrations of PCE in the eastern-most wells LW-MW-11S and LW-MW-13S (closest to off-Site well OS-1, Hurzel monitoring well, and the domestic well located at 883 Eloise Avenue) have been below the State of California MCL (5 µg/L) for PCE since 2010, with the exception of a single detection of PCE at 6.19 µg/L in well LW-MW-11S in November 2012. These results are in direct contrast with the PCE levels detected in off-Site well OS-1. PCE levels detected in well OS-1 have ranged from 4.6 µg/L (September 2011) to 91.2 µg/L (March 2010). Well OS-1 has been sampled 22 times since

March 2010, and with the exception of the September 2011 sampling event when PCE was detected at 4.6 µg/L, the concentration of PCE detected in well OS-1 has exceeded the State of California MCL every sampling event. As shown on the map, the Site monitoring well with the highest PCE concentrations is well LW-MW-1S. This well is located on the western-portion of the Site and therefore farthest away from off-Site wells OS-1, Hurzel monitoring well, and the domestic well located at 883 Eloise Avenue.

Based on this distribution of PCE in groundwater (highest concentrations are detected in wells located on the western portion of the Site, the wells closest to the PCE-affected off-Site wells have been below the PCE MCL since 2010, with one minor exception), and the predominant direction of groundwater flow (north-northwest), it is not reasonable to assume that PCE-affected groundwater from the Site is the source of the PCE detected in the off-Site wells to the northeast. There is no plausible explanation that has been offered or that is technically sound that would explain the apparent change in groundwater flow direction that would be necessary for PCE to have left the Site flowing north-northwest and then have it veer directly east towards OS-1, the Hurzel monitoring well, and the domestic well located at 883 Eloise Avenue.Furthermore, during discussions with RWQCB, E2CR and PES representatives prior to the installation of well OS-1, it was explicitly recognized by RWQCB staff that the proposed location of well OS-1 would not be affected by on-Site remediation and the well was being installed to satisfy a request from RWQCB management. There have been no changes in groundwater flow direction or Site conditions that explain RWQCB's change in position.

With respect to the groundwater velocity and transport of PCE in groundwater from the Site to the area of off-Site well OS-1, the amount of time cited in the Order appears to consider groundwater velocity only and does not appear to consider retardation of PCE as the PCE is transported in groundwater. In Item 10 of Water Quality Monitoring Results of the Order, a contaminant transport rate of approximately 735 feet per 1.3 years is cited (equivalent to approximately 565 feet per year). Using a default value for total porosity of 0.30[10,11], a bulk density of 1.5 grams per cubic centimeter[12], a soil water partition coefficient of 0.53 cubic centimeters per gram, a soil organic carbon partition coefficient of 265 cubic centimeters per gram[12], and a fraction of organic carbon in soil value of 0.002 grams per gram[12], we estimate a PCE retardation factor of approximately 3.7 in the water-bearing zone. Therefore, PCE transport may be retarded to approximately 152 feet per year resulting in significantly more time than 1.3 years required for transport of PCE from the Site to an off-Site location approximately 730 feet away, with respect to the direction of groundwater flow. This suggests PCE impacts from the Site may require more than 4 years to reach off-Site well OS-1 and significantly up to 13 years to reach a well that is located approximately 2,000 feet away from the Site. This further supports the conclusion that another source or sources, and not the Site, are impacting the groundwater at off-Site wells northeast of the Site.

[10] Fetter, 1980.
[11] Driscoll, 1986.
[12] USEPA, 1996. Soil Screening Guidance Technical Background Document. May.

Additionally, the Order does not appear to consider natural attenuation processes which may result in a decrease in PCE concentrations with distance from the Site. Natural attenuation processes are a combination of biological, physical and chemical actions that affect the fate and transport of chemicals in groundwater. These in-situ natural attenuation processes can, under favorable conditions, result in a reduction of mass, toxicity, mobility, volume and/or concentration of chemicals in groundwater. These processes can include biodegradation, dispersion, dilution, sorption, volatilization, and chemical or biological stabilization, transformation, or destruction of constituents. Considering natural attenuation processes, we would expect further reduction of PCE concentrations in groundwater that has not been considered by RWQCB.

In consideration of the direction of groundwater flow measured at the Site since 2010 and taking into account regional groundwater flow, the characteristics of the area with respect to groundwater velocity and potential attenuation, and the distribution of PCE measured in samples from the Site groundwater monitoring wells relative to the location of off-Site well OS-1, Hurzel monitoring well, and the domestic well at 883 Eloise Avenue, it is apparent the Site is not the source of the off-Site contamination. This supports that the Site is not a source of PCE north of Lake Tahoe Boulevard and that there is a different source or sources of PCE causing groundwater impacts.

Comments on Elimination of Other Sources of Solvent Contamination Section of the Order

In Paragraphs 18 through 23 of the Order, there is a brief discussion of other potential sources of PCE contamination in the area. As stated above, Seven Springs incorporates as part of this letter its comments regarding the consideration of no further action required for both the Lakeside Napa Auto and Big O Tires sites. Seven Springs objects to the proposed closure of these sites despite evidence indicating that these sites, not LTLW, are likely sources of PCE contamination north of Lake Tahoe Boulevard.

As discussed later in this letter, groundwater sampling results from the recent PCE investigation of the area further supports Seven Springs' position that Lakeside Napa Auto and Big O Tires are PCE sources responsible for contamination north of Lake Tahoe Boulevard.

Comments on Responsible Parties Section of the Order

In Paragraph 26, the Order identifies Seven Springs as a responsible party pursuant to California Code of Regulations, title 23, section 2720. This section of the regulations is inapplicable to this matter and Seven Springs objects to its application here.

Comments on Remediation Efforts Section of the Order

In Paragraphs 27 through 34, the Order indicates that SVE/GASS shutdowns resulted in an increase in PCE concentrations in groundwater. Paragraph 32 in the Order draws attention to a shutdown that occurred in February 2013. The increases in PCE concentrations described in Paragraph 32 of the Order reflect PCE increases in well LW-MW-1S, which is located on-Site and is not a downgradient well. The extent of the PCE concentration increases should be viewed in the context of the PCE concentrations in the downgradient wells. Wells LW-MW-2S and LW-MW-5S are located at the northern edge of the Site and are the wells closest to and downgradient of well LW-MW-1S. Concentrations of PCE in wells LW-MW-2S and LW-MW-5S following the SVE/GASS shutdown in 2013 were measured at maximum values of 86 µg/L and 150 µg/L, respectively[8]. It should be noted these maximum values were limited in duration to one quarter and the PCE levels measured since those events have been below or near the MCL. The sustained reduction in PCE concentrations is directly related to the successful operation of the SVE/GASS, which continues to operate at the Site. Therefore, the monitoring data contradicts the assertions of large impacts to off-Site groundwater reflected in the Order.

Comments on Affected Beneficial Uses Section of the Order

In Paragraph 38 of the Order, the RWQCB implies that detections of PCE, TCE and DCE in off-Site wells, including those operated by South Tahoe Public Utility District, Lukins Brothers Well Company, a motel well, and private domestic wells have been affected by VOC-affected groundwater migrating from the Site. Groundwater remediation has been conducted at the Site since 2010, and with few exceptions since 2012 the PCE concentrations detected in downgradient wells have been close to or below drinking water standards. Furthermore, the distance of these affected off-Site wells from the Site and the direction of groundwater flow from the Site demonstrates that those impacts are not related to the migration of PCE-affected groundwater from the Site.

Comments on Legal Requirements – Authority Section of the Order

For the reasons described throughout this letter, Seven Springs objects to the statements made in the Order in this section alleging that Seven Springs and Fox have not contained PCE on-Site and is responsible for PCE contamination migrating off-Site. The Order presents no foundation for these statements, nor has any reasoned basis for holding Seven Springs and Fox accountable for PCE contamination in the area been offered by RQCWB staff.

For instance, in Paragraph 47, the Order proposes 5 corrective actions, including containment, off-site investigation, active cleanup and abatement of on-site contamination, off-site containment and remediation, and monitoring and reporting obligations. No reasonable evidence has been presented by RWQCB suggesting that existing on-Site cleanup is inadequate, given that monitoring reports consistently show decreasing levels of contaminants on Site, or that any off-Site containment and remediation is necessary or required, especially considering the effectiveness of current containment measures discussed in more detail below.

Comments on Order No. 2

Item No. 2 of the Orders section of the Order requires that Seven Springs and Fox, within 30 days of the Order, submit a work plan to the RWQCB proposing a method, other than the SVE/GASS or ozone sparge system currently in place, to contain migration of chlorinated VOCs in groundwater within the Site. Seven Springs proposes to negotiate with the RWQCB alternate methods of achieving its desired results. Based on our discussions with RWQCB staff during meetings and telephone conference calls, it appears RWQCB staff is concerned VOC-affected groundwater is migrating off-Site between downgradient perimeter groundwater monitoring wells at the Site, and affecting off-Site well OS-1, Hurzel monitoring well, and the domestic well located at 883 Eloise Avenue. Seven Springs has taken the RWQCB's concerns seriously and has made multiple efforts to investigate and address those concerns.

Concentrations of PCE in the eastern-most wells LW-MW-11S and LW-MW-13S (closest to off-Site well OS-1, Hurzel monitoring well, and the domestic well located at 883 Eloise Avenue) have been below the State of California MCL (5 µg/L) for PCE since 2010, with the exception of a single detection of PCE at 6.19 µg/L in well LW-MW-11S in November 2012. The concentrations of PCE detected in the eastern-most on-Site wells strongly suggests groundwater migrating off the Site is not affecting well OS-1, Hurzel monitoring well, and the domestic well located at 883 Eloise Avenue.

Following RWQCB approval, the SVE/GASS was installed at the Site in 2009. In April 2010, SVE/GASS pilot testing was conducted to assess the effectiveness of the remediation system. Based on the pilot testing conducted prior to the startup of the SVE/GASS, E2CR estimated an air sparge zone of influence (ZOI) of 25 feet[7]. Upon being presented with this information, RWQCB staff has suggested that the prior ZOI analysis conducted by E2CR was not sufficient and that it believes that a narrow plume of contaminated groundwater might be escaping between

groundwater wells and heading north-northeast towards OS-1. A reanalysis of the ZOI for the Site contradicts this hypothesis and confirms the effectiveness of Site containment.

The remediation contractor working on behalf of Seven Springs and Fox, E2CR, conducted air sparge ZOI confirmation tests in January 2016. A copy of the letter report prepared by E2CR is attached. The results of the air sparge ZOI confirmation tests confirm the design parameters of the SVE/GASS constructed and operated at the Site since 2010. Based on the results of the observations and measurements collected during the tests, E2CR estimates that the air sparge ZOI exceeds 25 feet. These findings are consistent with the previous pilot tests conducted and support that groundwater within the area of the Site being treated via air sparging is being effectively remediated.

Since November 2013, the SVE/GASS has operated in a mostly continuous manner, with one shutdown due to an electrical surge by the power provider. As a result of Seven Springs' and Fox's continuous remediation efforts, groundwater samples collected from the downgradient on-Site monitoring wells (LW-MW-2S, LW-MW-5S, and LW-MW-13S) indicate that PCE concentrations have decreased with time and that PCE concentrations are near Site cleanup goals. There is no persuasive evidence suggesting that significant contamination on the Site has not been contained since December 2013.

Furthermore, in response to a request from RWQCB, Seven Springs and Fox voluntarily conducted indoor air sampling at select tenant spaces at the South Y Center in December 2015. The results of the indoor air sampling event conducted at 1022, 1024, and 1026 Lake Tahoe Boulevard and 1032 Emerald Bay Road within the South Y Center indicate the presence of levels of PCE in indoor air that were below conservative Environmental Screening Levels (ESL) established by the Regional Water Quality Control Board, San Francisco Bay Region for PCE in indoor air in a commercial/industrial setting (2.1 micrograms per cubic meter [$\mu g/m^3$]). PCE was detected in nine of the ten indoor air and pathway samples collected during the sampling event, at concentrations ranging from 0.079 $\mu g/m^3$ to 0.514 $\mu g/m^3$. These concentrations of PCE detected in the indoor air and pathway samples are significantly below the ESL of 2.1 $\mu g/m^3$. The conservative ESLs are based on a 1 $x10^{-6}$ risk level. The laboratory analytical results indicate that the risk associated with the detected concentrations of PCE in indoor air is less than a 1 $x10^{-6}$ risk level. These results indicate that the SVE/GASS in operation at the Site has been effective at reducing VOC concentrations in groundwater and soil vapor, resulting in minimal impact to indoor air.

Comments on Order No. 3

Item number 3 in the Orders section of the Order is so broad as to be unreasonable in its scope. Seven Springs cannot be held responsible for any future excess of chlorinated hydrocarbons in any water supply wells identified at any point downgradient from the Site. The only basis offered for associating the Site with a contamination of water supply wells is that the contamination must "result[s] from discharges from the Facility according to the Water Board." This is akin to the Water Board ordering that a party is responsible for any future release that the Water Board says the party is responsible for. Seven Springs proposes that, should in the future the RWQCB identify evidence it believes suggests that PCE from the Site is impacting water supply wells downgradient, the RWQCB should present that evidence to Seven Springs and Fox for discussion. It should not be part of this Order.

Comments on Order No. 4

Suggestions regarding potentially agreeable alternatives to Item number 4 in the Orders section are included in this letter's discussion of alternatives, below.

Comments on Order No. 5

This element of the Order is premature. As previously described, through Seven Springs' and Fox's efforts containment at the Site has been successful and there is no evidence of off-Site impacts that would support the type of broad remedial action proposed. Such action should not be considered, as suggested in the discussion of alternatives below, until further investigation reveals that it is actually necessary.

II. COMMENTS ON FINAL PCE INVESTIGATION REPORT

On January 20, 2016, the RWQCB released the Final PCE Investigation Report dated January 19, 2016, prepared by URS Corporation (Report). The following presents Seven Springs' comments on the Report.

According to the Report, the area-wide PCE groundwater investigation was conducted in response to detections of PCE in groundwater in two municipal wells and domestic wells in June 2014 and sampling of ten private wells conducted by RWQCB staff in 2014. Based on the locations of the affected wells, a groundwater investigation focused on a nine-block area of South Lake Tahoe was conducted by URS in October and November 2015.

During the investigation two groundwater samples were generally collected from each borehole advanced in the study area. A total of 42 groundwater samples were collected from 22 boreholes during the investigation. Groundwater samples were generally collected at two depths from each

borehole: (1) from the water table; and (2) from approximately 10 feet below the water table or as directed by RWQCB staff.

Additionally, RWQCB staff collected groundwater samples from six existing groundwater monitoring wells. Wells PATLNSS-S, MW-4A, EW-4A, and Hurzel-N are shallow wells with screened intervals between 9 feet below ground surface (bgs) and 30 feet bgs. Wells MW-4B and EW-4B are screened at deeper intervals with screened intervals between 35 and 50 feet bgs (MW-4B) and 60 and 77.5 feet bgs (EW-4B).

The results of the groundwater investigation indicate that PCE was not detected at or above the State of California Maximum Contaminant Level (MCL) of 5 µg/L in any of the 42 grab groundwater samples collected from the 22 boreholes. PCE was detected above the MCL in only two samples: the samples from well MW-4A (screened interval of 15 to 30 feet bgs) contained PCE at 14 µg/L and the samples from well MW-4B (screened interval of 35 to 50 feet bgs) contained PCE at 140 µg/L. Trichloroethene (TCE) was detected at 5.4 µg/L in the groundwater samples collected from well MW-4B. PCE was not detected at or above the MCL in well EW-4B (screened interval of 60 to 77.5 feet bgs).

Petroleum hydrocarbons were detected in groundwater samples collected primarily in the western portion of the project area and along Patricia Lane. TPHg and TPHd were both detected numerous grab groundwater samples in excess of the secondary MCLs of 5 µg/L and 100 µg/L, respectively.

The groundwater investigation does not identify the source of the PCE or petroleum hydrocarbons detected in the municipal and domestic wells sampled in 2014. The highest concentration of PCE was detected in well MW-4B which screens groundwater from 35 to 50 feet bgs, in the middle water-bearing zone.

The Report concluded that: (1) the highest concentrations of PCE were detected in the eastern portion of the study area; (2) separate sources are responsible for the PCE detections in the eastern and western portions of the study area; (3) petroleum hydrocarbon detections are not related to detections of PCE; and (4) potential sources may be located upgradient of the study area and/or downgradient of the western portion of the study area.

As noted by Seven Springs previously in comments provided to the RWQCB regarding the potential case closure of Lakeside Napa Auto and Big O Tires, groundwater affected by PCE beneath the Site is primarily limited to the shallow water-bearing zone. This is supported by the on-Site and off-Site investigations and the RWQCB-approved RAP prepared for the Site. Concentrations of PCE were detected in shallow and middle water-bearing zones on the Site. However, concentrations of PCE in the middle water-bearing zone are significantly lower. In addition, groundwater samples from the middle water-bearing zone collected downgradient from the Site indicate that LTLW is not the source of PCE in the middle water-bearing zone. Sampling shows that, as groundwater flows downgradient, PCE concentrations in the middle

water-bearing zone actually increase across the street from the Site. The maximum concentrations of PCE detected in the middle water-bearing zone beneath Lakeside Napa Auto (3,000 µg/L) and Big O Tire (4,700 µg/L) are indicative of a source of dense non-aqueous phase liquid (DNAPL). If the Site was the source of the PCE detected in the samples collected from the middle water-bearing zone beneath Lakeside Napa Auto and Big O Tires, groundwater samples collected from the shallow or middle water-bearing zones at locations in Lake Tahoe Boulevard would have reflected similar concentrations to those detected beneath Lakeside Napa Auto and Big O Tires. To the contrary, the results show significantly lower concentrations of PCE in samples collected in Lake Tahoe Boulevard from both water bearing zones. Attached are maps depicting the PCE concentrations detected on the Site, Lakeside Napa Auto, and Big O Tires in shallow and middle water-bearing zones prior to remediation of the Site. The results of the sampling are indicative of a source or sources of PCE contaminating the middle water-bearing zone that is across Lake Tahoe Boulevard from LTLW; PCE concentrations in this zone are highest beneath the Big O Tires site.

Based on the results of previous groundwater investigations conducted beneath Lakeside Napa Auto and Big O Tires sites, the highest concentrations of PCE beneath those sites are present in deeper groundwater and not in shallow groundwater. The source of the PCE detected in well MW-4B therefore does not appear to be associated with a release from the Site, based on the direction of groundwater flow from the Site and the vertical distribution of PCE on the Site, but is more likely from these other two sites of former documented PCE releases. Based on the results of the RWQCB PCE groundwater investigation, the results of the previous Site investigations, and the Site remediation program, the evidence indicates that other source(s), not LTLW, are the cause of the PCE detected in wells MW-4A and MW-4B.

We also note and repeat our comment to the RWQCB regarding the potential closure of the Big O Tires site that petroleum hydrocarbons have affected groundwater beneath Big O Tires. Given the findings in the Report of petroleum hydrocarbons in groundwater in the study area, combined with results indicating releases of petroleum hydrocarbons from Big O Tires, more investigation of the Big O Tires site must be conducted to assess that site's release of PCE in the subject area.

Based on the results of the RWQCB PCE Groundwater Investigation conducted in October 2015 it appears the source or sources of PCE detected in Lukins Wells #2, #4, and #5 were not discovered and further investigation of potential sources upgradient of those impacted wells is needed. This was discussed at the meeting held at the RWQCB offices on February 5, 2016 to discuss the findings of the investigation. As noted previously, based on the measured groundwater flow direction at the Site, the distances of the impacted production wells from the Site, and the concentrations of PCE in the downgradient on-Site wells, Seven Springs reiterates that the evidence strongly indicates that the Site is not the source of the impacts to the off-Site production wells.

III. SUGGESTION OF ALTERNATIVES

The above described evidence combined with recent information regarding the results of the air sparge confirmation pilot tests, groundwater sampling results of down-gradient on-Site wells, and results of indoor air sampling supports that the remediation system has been effective at reducing VOC concentrations in on-Site groundwater and soil gas. In light of this information demonstrating successful containment and remediation at the Site, the Order's proposals regarding extensive additional containment on-Site as well as containment off-Site are without reasonable basis. Rather, Seven Springs offers to work cooperatively with RWQCB, as it has since the beginning of remediation efforts at the Site, to implement alternatives to the extensive and unwarranted regime suggested in the Order.

Seven Springs is interested in negotiating alternative methods of improving the performance of the SVE/GASS with the RWQCB. Seven Springs would like to continue to work cooperatively with the RWQCB to achieve this. Some alternative methods that Seven Springs would be willing to entertain, to replace the Order's proposals of on-Site containment, off-Site investigation, and off-Site corrective action, include: (1) collecting grab groundwater samples at agreed upon on-Site locations to assess groundwater conditions between groundwater monitoring wells, so as to confirm that no narrow groundwater plume is escaping off-Site between monitoring wells as suggested by RWQCB; (2) conducting tracer tests to assess directional groundwater flow between on-Site wells and off-Site wells the RWQCB contends are being affected by VOCs in groundwater migrating from the Site; (3) assessing groundwater at on-Site and off-Site locations and conducting compound-specific stable isotope analysis to distinguish sources of the PCE-affected groundwater; or (4) groundwater polishing via a pilot study to assess the effectiveness of injections of potassium permanganate or equivalent at locations immediately adjacent to groundwater monitoring well LW-MW-1S.

CLOSING

In closing, Seven Springs requests that the RWQCB consider the evidence and alternatives proposed and work with Seven Springs and Fox to develop a revised plan that acknowledges the above discussion. Seven Springs stands ready to cooperate with RWQCB in forming an equitable solution to the VOC-affected groundwater at the Site.

If you have any questions or require additional information, please call PES at (415) 899-1600.

Very truly yours,

PES ENVIRONMENTAL, INC.

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Principal Geologist

Morrison & Foerster LLP

William F. Tarantino, Esq.
Partner

Attachments: RWQCB South Y PCE Contamination Map
Plate 1 – Lake Tahoe PCE Summary
Plate 2 – PCE Isoconcentration Contours of Analytical Results from Shallow Water-Bearing Zone (2001–2008)
Plate 3 – PCE Isoconcentration Contours of Analytical Results from Middle Water-Bearing Zone (2001–2008)
E2CR January 4, 2016 Air Sparge Confirmation Test Summary

cc: Mr. Christopher Blair, Commerce Bank, N.A.
Alejandro Bras, Esq., Morrison & Foerster

ATTACHMENTS