

From: [Peter Gorman](#)
To: [Lahontan](#)
Cc: [Kyle Flory](#); [Manukyan, Erik](#); [WTarantino@mofo.com](#); [Reisch, Scott H.](#); [Andy Safford](#); [Paul HOFFEY](#)
Subject: Big O Tires proposed CAO Comments - PES/EKI on behalf of SSLP/Fox
Date: Monday, September 19, 2022 3:54:49 PM
Attachments: [102100101L019.pdf](#)

EXTERNAL:

Dear Ms. Fleshman,

Attached please find technical comments on the proposed Cleanup and Abatement for the Big O Tires site located at 1961 Lake Tahoe Boulevard, South Lake Tahoe, CA (GeoTracker Global Id No. SI0601729739). These comments were prepared by PES Environmental, Inc., an NV5 Company (PES), and EKI Environment & Water, Inc. (EKI) on behalf of Seven Springs Limited Partnership (SSLP) and Fox Capital Management Corporation (Fox).

Best regards,

Peter D. Gorman, C.HG. | Associate Hydrogeologist | [PES Environmental, an NV5 Company](#)
7665 Redwood Boulevard, Suite 200 | Novato, CA 94945 | Office: 415.899.1600 | Direct: 415.798.3029

September 19, 2022

1021.001.01.008

California Regional Water Quality Control Board
Lahontan Region
Attention: Katrina Fleshman
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

**Re: Comments on Cleanup and Abatement Order No. R6T-2022-Proposed
Former Big O Tires Site
1961 Lake Tahoe Boulevard
South Lake Tahoe, California**

Dear Ms. Fleshman:

On behalf of Seven Springs Limited Partnership (SSLP) and Fox Capital Management Corporation (Fox), PES Environmental, Inc., an NV5 Company (PES) and EKI Environment & Water, Inc. (EKI) submit this letter to the California Regional Water Quality Control Board, Lahontan Region Regional Board), regarding the former Big O Tires site at 1961 Lake Tahoe Boulevard, South Lake Tahoe, California (Big O Tires Site or Site). This letter provides comments on the Regional Board's proposed Cleanup and Abatement Order No. R6T-2022-Proposed (Proposed Order) for the Site (Big O Tires Site Proposed Order).¹

Our primary comment is the Big O Proposed Order is not equivalent to the proposed Cleanup and Abatement Order (CAO) drafted for the Lake Tahoe Laundry Works (LTLW) tenant space at 1024 Lake Tahoe Boulevard in South Lake Tahoe, California. Although the Regional Board concludes that PCE contamination in groundwater is migrating from the former Big O Tires facility,² the Regional Board does not hold the parties associated with the Big O Tires Site responsible to the same extent as the LTLW parties for investigating and remediating the regional tetrachloroethene (PCE) contamination.

¹ Regional Board. 16 June 2022. *Cleanup and Abatement Order No. R6T-2022-Proposed (Proposed Order) Big O Tires, APN 023-523-008-000, 1961 Lake Tahoe Boulevard, South Lake Tahoe, CA, Site Cleanup Program No. T6S034, GeoTracker Global Id No. SI0601729739* (Big O Tire Site Proposed Order).

² Proposed Order at 4 ¶ 10.

Katrina Fleshman
September 19, 2022
Page 2

The Regional Board should amend both the Big O Tires Site Proposed Order and the proposed CAO for LTLW to clarify that each responsible party is only liable for contamination originating from its site. Barring these amendments, tasks in the LTLW proposed CAO related to PCE-impacted groundwater and vapor intrusion throughout the Tahoe Valley South Subbasin should be incorporated into the Big O Tires Site Proposed Order. These tasks include but are not limited to: (1) implementing a monitoring well network to assess trends in regional PCE contamination, (2) conducting on-Site and off-Site soil gas sampling, (3) instituting emergency and permanent water replacement plans, and (4) performing interim remedial actions such as evaluating and destroying vertical conduits within the regional PCE contamination.

This letter provides a brief summary of pertinent background details³ for the former Big O Tires Site, and SSLP/Fox comments on Proposed Order.

³ Our comments are based in part on the information set forth on the Geotracker site for the former Big O Tire Site. See Regional Board, GeoTracker, Former Big O Tires Site (Site No. SL0601729739), available at https://geotracker.waterboards.ca.gov/profile_report?global_id=SL0601729739. An index of the documents listed on the GeoTracker site is included in Exhibit 24 (see attached List of Exhibits). Documents referenced in this letter are available for download at: <https://pesenvironmental.filegenius.com/downloadPublic/ey57s3drooy7tnl/h8hl84p33qv9f9j>.

Katrina Fleshman
September 19, 2022
Page 3

SITE BACKGROUND AND SUMMARY OF ENVIRONMENTAL CONDITIONS

A description of the Site history, on-Site chemical use, previous environmental investigations, and deficiencies in proposed investigations are provided in the Proposed Order and prior comments letters^{4,5,6,7,8,9,10,11,12,13,14}. Additionally, the Regional Board has stated the requirement to investigate the lateral and vertical definition of contamination in soil, soil gas, and groundwater originating from the former Big O Tires facility in a prior Order¹⁵ and four Notices of Violation^{16,17,18,19}. The following is a brief summary of key findings and conclusions for the former Big O Tires Site:

- “[D]ischarges occurred at the Site and provides additional indication of the Site as a source of petroleum and chlorinated hydrocarbons in the subsurface”²⁰, and the magnitude and extent of PCE contamination at the Site is undefined.²¹

⁴ PES. 19 October 2004. *Comments on Preliminary Workplan for Additional Investigation of Chlorinated Solvents, Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California.*

⁵ PES. 10 July 2007. *Comments on Soil and Groundwater Investigation at the Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California.*

⁶ PES. 2015 December 7. *Comments on Consideration of No Further Action Required, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California.*

⁷ SSLP and Fox. 23 August 2019. *Comment Letter Related to May 2019 13267 Order and Barnett/CAD Enterprises Petition.*

⁸ PES. 19 June 2020. *Comments on Soil Gas, Soil, and Groundwater Investigation Work Plan and CAMCO/BOT 65, Inc. Submittals, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California.*

⁹ PES. 16 September 2020. *Comments on Revised Phase I Passive Soil Gas Investigation Work Plan, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California*

¹⁰ PES. 15 December 2020. *Comments on Passive Soil Gas Investigation Report, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California.*

¹¹ PES. 6 April 2021. *Comments on Phase 2 Work Plan, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California.*

¹² PES. 8 June 2021. *Subject: BOT WHA Revised Phase 1 Work Plan.* Email transmittal.

¹³ PES. 27 August 2021. *Subject: Former Big O Tire Site - Comments on Revised Phase 2 Work Plan dated July 26, 2021.* Email transmittal.

¹⁴ PES. 19 September 2021. *Subject: Former Big O Tires Site - PES Comments on Draft Agenda.* Email transmittal.

¹⁵ Regional Board. 28 September 2020. *Order to Submit Technical Reports in Accordance with Section 13267 of the California Water Code, Big O Tire Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, SCP Case #T6S034, GeoTracker Global ID SL0601729739.* (Dated 10 May 2019, Amended 28 September 2020).

Katrina Fleshman
September 19, 2022
Page 4

- “[I]nvestigation results confirmed the Site’s stormwater conveyance system directed stormwater to Tucker Basin”²² and “soil gas investigation results indicate residual petroleum and chlorinated hydrocarbon contamination remains in place near the lift in the northwest building corner, lube pit and floor drain area, and the stormwater conveyance inlet.”²³
- “No current on-Site groundwater data are available. The 2001 groundwater investigation indicated PCE concentrations up to 4,700 [micrograms per liter ($\mu\text{g/L}$) at B-2] at the Site.”²⁴ The results of the 2001 groundwater investigation suggest that PCE as dense non-aqueous phase liquid (DNAPL) may have migrated into the saturated zone on the former Big O Tires Site because PCE at concentrations greater than one percent of its pure phase or effective solubility have been measured in sample B-2.²⁵ One percent of the pure phase solubility of PCE is approximately 2,100 $\mu\text{g/L}$.²⁶ Additionally, there are no groundwater monitoring wells installed on the Site for tracking plume concentration trends or determining groundwater flow directions.
- Groundwater sampling was conducted in 2004, 2008, and 2017 in Lake Tahoe Boulevard and upgradient of the former Big O Tires Site. All three rounds of sampling conducted in Lake Tahoe Boulevard detected lower concentrations of PCE in both shallow and middle zone groundwater than was detected on the former Big O Tires Site

¹⁶ Regional Board. 27 August 2019. *Notice of Violation, Order to Submit Technical Reports in Accordance with Section 13267 of the California Water Code, Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, SCP Case #T6S034.*

¹⁷ Regional Board. 8 January 2020. *Second Notice of Violation, Order to Submit Technical Reports in Accordance with Section 13267 of the California Water Code, Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, SCP Case #T6S034.*

¹⁸ Regional Board. 15 April 2021. *Notice of Violation, Former Big O Tire Store, 1961 Lake Tahoe Blvd., South Lake Tahoe, El Dorado County, Site Cleanup Program Case, No. T6S034, GeoTracker Global ID SL0601729739.*

¹⁹ Regional Board. 13 April 2021. *Notice of Violation, Former Big O Tire Store, 1961 Lake Tahoe Blvd., South Lake Tahoe, El Dorado County, Site Cleanup Program Case, No. T6S034, GeoTracker Global ID SL0601729739.*

²⁰ Proposed Order, at 3 ¶ 6.

²¹ Proposed Order, at 6-7 ¶ 20a and 20e.

²² Proposed Order, at 5 ¶ 15.

²³ Proposed Order, at 6 ¶ 19.

²⁴ Proposed Order, at 6 ¶ 20c.

²⁵ B. Grey (Regional Board) 25 September 2018. Email to Working Parties and Regional Board staff *Re September 21, 2018 Teleconference Follow-Up.*

²⁶ This is based upon PCE solubility limit in water of 210,000 $\mu\text{g/L}$, as reported by U.S. EPA in its Regional Screening Level (“RSL”) Chemical-specific Parameters Supporting Table, dated November 2015.

in 2001.^{27,28,29} Concentrations of PCE increased as groundwater flows south to north in the middle water-bearing zone, with the highest levels present beneath the Big O Tires Site (up to 4,700 $\mu\text{g/L}$). The results of the three rounds of sampling in Lake Tahoe Boulevard along with the results of sampling conducted on the former Big O Tires Site strongly suggest that a source of PCE is located on the former Big O Tires Site.³⁰

- Operations at the former Big O Tires Site included automotive repair, servicing, and maintenance. Storage and use of paint, new and used motor oil, lubricating oils, brake cleaners, and degreasers were conducted at the former Big O Tires Site. An above ground storage tank (AST) for waste oil was present and resulted in releases to the Site.³¹ The Site contained four in-ground hydraulic lifts and one 5.5 feet deep lube pit.^{32,33} Two floor drains are present within the building interior; one of which was reportedly present in the lube pit.³⁴ The floor drains are connected to the sanitary sewer via subgrade piping. Located between the two floor drains were two brake cleaning and parts washing sinks.³¹
- The reported PCE detections at the Site's storm drain inlet (i.e., mass of 510 nanograms at location PSG-1), indicates potential PCE transport and release to Tucker Avenue stormwater detention basin (Tucker Basin). Location PSG-1 is directly upgradient of boring B-1 where PCE was detected in middle zone groundwater at a concentration of 470 $\mu\text{g/L}$ during the 2001 investigation.
- A significant sanitary sewer defect (i.e., offset joint) was identified by a video survey at approximately 4 feet north of the former Big O Tires building. This defect provides a potential release point where discharges to the sewer could exfiltrate and enter the surrounding soil and underlying groundwater.³⁵

²⁷ PES Environmental, Inc., 2004. Supplemental Site Investigation Results, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California. October 13.

²⁸ E2C Remediation, 2008. Site Investigation Report of Findings, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe. September 22.

²⁹ EKI, 2019. Investigation Summary Report, Former Lake Tahoe Laundry Works Site, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California. April 1.

³⁰ Supra No. 11 at 5.

³¹ Harding ESE, Inc., 2001. Groundwater Investigation, Big-O Tire Center, 1961 South Lake Tahoe Blvd., South Lake Tahoe, California. October 30.

³² Welsh Hagen Associates, 2020. Phase 2 Work Plan, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California. December 15.

³³ LFR, 2006. Revised Soil and Groundwater Investigation Work Plan, Big O Tire Store, 1961 South Lake Tahoe Boulevard, South Lake Tahoe, California (Revised Work Plan). April 27.

³⁴ Harding ESE, Inc., 2001. Groundwater Investigation, Figure 1. October 30.

³⁵ Supra. No. 10 at 5 ¶ 7.

Katrina Fleshman
September 19, 2022
Page 6

- Submittals provided by the potentially responsible parties (PRPs) for the Site indicate: (1) documented evidence that PCE was commonly used at the Site³⁶; (2) incomplete records regarding the disposal of PCE containing solvents and waste oil; (3) information suggesting the amount of hazardous materials (i.e., waste oil) stored on-Site at any given day was greater than the capacity of the AST; and (4) a Big-O Tires Operations Manual that discusses proper hazardous waste disposal, training, and record keeping practices, which do not appear to have been followed during the PRP's period of operation. In the absence of records documenting off-Site disposal, it is possible that some portion of the unaccounted PCE waste was disposed on-Site.³⁷

The information above indicates: (1) use of PCE at the Site; (2) discharges of PCE at the Site; (3) documented concentrations of PCE in shallow- and middle-zone groundwater beneath the Site since 2001 and PCE was detected in on-Site groundwater at concentrations indicative of the potential presence of free-phase PCE product; (4) undefined lateral and vertical extent of PCE in soil, soil vapor, and groundwater; (5) a separation of PCE contaminant mass between Lake Tahoe Laundry Work and the former Big O Tires Site; and (6) PCE contamination along the Site's stormwater conveyance system suggests discharges to the adjacent Tucker Basin.

Yet, the Regional Board does not impose the same requirements for addressing these suspected contributions to the regional PCE contamination as those specified in the proposed CAO for the LTLW. Foremost, as discussed in PES and EKI's comments on the proposed CAO for the LTLW, the discharge at the LTLW is not the cause of the regional PCE contamination and Seven Springs and Fox are not responsible for contamination leaving the Big O Tires Site. Notwithstanding this fact, the Regional Board has not provided any technical rationale for why the LTLW parties bear greater responsibility for groundwater contamination next to the Site where the release occurred than those parties that owned or operated on the Site. Parties associated with the Big O Tires Site have not fulfilled the Investigative Order issued by the Regional Board in 2019 that required them to "assess the Site's potential contribution to the regional PCE plume."³⁸

³⁶ Documentation was submitted to Regional Board by Mark and Gail Strong (i.e., representatives of CAMCO/BOT 65, Inc. and former lessee of the Big O Tires Site) in correspondences dated June 4, 2019, November 14, 2019, February 24, 2020, and March 24, 2020. The Chemical Storage and Use Questionnaire submitted indicates Safety-Kleen and Brakleen products were utilized at the site and the maximum quantity of SafetyKleen stored on any given day was 15 gallons. Based upon the generation of 15 gallons per month over a period of 9 years (i.e., 1985 to 1994), approximately 1,620 gallons of PCE-containing solvent was utilized on-Site.

³⁷ Supra. No. 8 at 11.

³⁸ Supra. No. 15 at 12 ¶ 3.

Katrina Fleshman
September 19, 2022
Page 7

Monitoring Wells are Needed on The Big O Tires Site

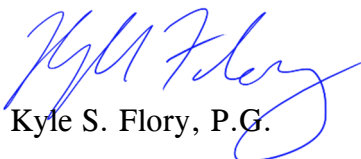
In the Proposed Order, there currently is no requirement to prepare or implement a groundwater monitoring well installation work plan (GWIWP) and the Proposed Order should be revised to require the installation and sampling of on-Site monitoring wells. Based upon the discharges that have occurred at the Site and results of previous investigations, the installation of monitoring wells at the Site to monitor shallow- and middle-zone water-bearing zones is warranted. Site characterization activities began over 20 years ago and have included the collection of 18 grab groundwater samples, 29 soil samples, and 37 soil vapor samples. Significant concentrations of PCE have been detected in groundwater samples collected on the former Big O Tires Site, and sufficient characterization data is available for development of a GWIWP, and since 2001. Groundwater monitoring wells will provide: (1) hydraulic head measurements to determine groundwater flow directions and horizontal/vertical gradients; (2) representative groundwater samples to assess groundwater quality trends; (3) subsurface lithology details; and (4) the ability to conduct aquifer tests for estimating aquifer hydraulic properties. Determination of groundwater flow directions in the shallow- and middle-zone water-bearing zones will provide a basis for on-Site and off-Site investigations required to investigate the lateral and vertical definition of contamination in soil, soil gas, and groundwater originating from the former Big O Tires facility. Additionally, a suitable groundwater monitoring well network will assist in the development and refinement of the conceptual site model (CSM).

CLOSING

We appreciate the Regional Board's consideration of our comments on the Proposed Order. If you have any questions or require additional information, please call Kyle Flory with PES at (415) 798-3028, Peter Gorman at (415) 798-3029, or Andrew Safford with EKI at (650) 292-9100.

Respectively submitted,

PES ENVIRONMENTAL, INC.



Kyle S. Flory, P.G.



Peter D. Gorman, C.HG., P.G.

EKI ENVIRONMENT & WATER, INC.



Andrew N. Safford, P.E.

ATTACHMENTS

Index of Exhibits to PES & EKI Comments on Big O Tires Order No. R6T-2022-Proposed

**Index of Exhibits to PES & EKI Comments on Proposed
Big O Tires Order No. R6T-2022-Proposed**

Exhibit Number	Description
1.	PES. 19 October 2004. Comments on Preliminary Workplan for Additional Investigation of Chlorinated Solvents, Big O Tire Store Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California
2.	PES. 10 July 2007. Comments on Soil and Groundwater Investigations at the Big O Tire Store Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California
3.	PES. 7 December 2015. Comments on Consideration of No Further Action Required, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California
4.	SSLP and Fox. 23 August 2019. Comment Letter Related to May 2019 13267 Order and Barnett/CAD Enterprises Petition.
5.	PES. 19 June 2020. Comments on Soil Gas, Soil, and Groundwater Investigation Work Plan and CAMCO/BOT 65, Inc. Submittals, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California.
6.	PES. 16 September 2020. Comments on Revised Phase I Passive Soil Gas Investigation Work Plan, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California
7.	PES. 15 December 2020. Comments on Passive Soil Gas Investigation Report, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California
8.	PES. 6 April 2021. Comments on Phase 2 Work Plan, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California
9.	K Flory (PES). 8 June 2021. Email to B. Grey (Waterboards). Re BOT WHA Revised Phase 1 Work Plan. Email transmittal
10.	PES. 27 August 2021. Subject: Former Big O Tire Site - Comments on Revised Phase 2 Work Plan dated July 26, 2021. Email transmittal
11.	K. Flory (PES). 19 September 2021. Email too B. Grey (Waterboards) Re: Former Big O Tires Site - PES Comments on Draft Agenda
12.	Regional Board. 28 September 2020. Amendment to May 10, 2019 Order to Submit Technical Report in Accordance with Section 13267 of the California Water Code, Big O Tire Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, SCP Case #T6S034, GeoTracker Global ID SL0601729739
13.	Regional Board. 27 August 2019. Notice of Violation, Order to Submit Technical Reports in Accordance with Section 13267 of the California Water Code, Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, SCP Case #T6S034

**Index of Exhibits to PES & EKI Comments on Proposed
Big O Tires Order No. R6T-2022-Proposed**

Exhibit Number	Description
14.	Regional Board. 8 January 2020. Second Notice of Violation, Order to Submit Technical Reports in Accordance with Section 13267 of the California Water Code, Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, SCP Case #T6S034
15.	Regional Board. 15 April 2021. Notice of Violation, Former Big O Tire Store, 1961 Lake Tahoe Blvd., South Lake Tahoe, El Dorado County, Site Cleanup Program Case, No. T6S034, Geotracker Global ID SL0601729739
16.	Regional Board. 13 August 2021. Notice of Violation, Former Big O Tire Store, 1961 Lake Tahoe Blvd., South Lake Tahoe, El Dorado County, Site Cleanup Program Case, No. T6S034, Geotracker Global ID SL0601729739
17.	B. Grey (Regional Board). 25 September 2018. Email to Working Parties and Regional Board staff Re September 21, 2018 Teleconference Follow Up
18.	PES Environmental, Inc. 13 October 2004. Supplemental Site Investigation Results, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
19.	E2C Remediation 22 September 2008. Site Investigation Report of Findings, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe
20.	EKI. 1 April 2019. Investigation Summary Report, Former Lake Tahoe Laundry Works Site, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
21.	Harding ESE, Inc. 30 October 2001. Groundwater Investigation, Big-O Tire Center, 1961 South Lake Tahoe Blvd., South Lake Tahoe, California
22.	Welsh Hagen Associates, 15 December 2020. Phase 2 Work Plan, Former Big O Tires Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California
23.	LFR. 27 April 2006. Revised Soil and Groundwater Investigation Work Plan, Big O Tire Store, 1961 South Lake Tahoe Boulevard, South Lake Tahoe, California (Revised Work Plan)
24.	Index of GeoTracker page for the Former Big O Tires Site (Site No. SL0601729739), available at https://geotracker.waterboards.ca.gov/profile_report?global_id=SL0601729739 .