



Lahontan Regional Water Quality Control Board

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Conditional Acceptance of Interim Revised Draft Off-Site Remedial Action Plan, Regional PCE Contamination, August 2026, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, Site Cleanup Program Case #T6S043, Geotracker Global ID SL0601754315

Thank you for your August 19, 2026 email containing the *Draft Off-Site RAP, Regional PCE Contamination, South Lake Tahoe, California*, in support of issuance of Stipulated Cleanup and Abatement Order R6T-2022-PROPOSED (Stipulated CAO)¹. The Off-Site RAP (OSRAP) is intended to fulfill Stipulated CAO Order 5 *Develop, Submit, and Implement Off-Site Remedial Action Plan* requirements. Technical Staff conditionally accept the OSRAP for inclusion in the Stipulated CAO subject to the following limitations and cautions:

- a) Nothing in this communication constitutes approval or endorsement of the summary of previous investigations and their conclusions about data gaps, sources, or appropriate next steps set forth by the OSRAP. Rather than reiterate our challenges to the inclusion or exclusion of facts, or inferences to be drawn from them, we refer you to the Memorandum dated August 17, 2023 (*Proposed Revisions to Cleanup and Abatement Order No. R6T-2022-Proposed*) and the associated *Attachment A Staff Report of Cleanup and Abatement Order R6T-2022-Proposed for the Lake Tahoe Laundry Works*² for our responses to the proffered summary and illustrations contained in the OSRAP.
- b) Technical Staff's review and acceptance is subject to the matter being resolved by Stipulated CAO. In the event the Stipulated CAO is not finalized, and an order pursuant to Water Code section 13304 is issued, this conditional acceptance of the OSRAP will be disregarded.

¹ This is the first version of the OSRAP that the Lahontan Water Board has received that was signed and stamped, in accordance with professional standards (Business and Professions Code sections 6735, 7835, and 7835.1. However, it did not include all attachments, including the settlement agreements by and between Lukins Brothers Water Company and Tahoe Keys Property Owners Association with the Performing Parties (Fox and Seven Springs). Also, the Lahontan Water Board received some clarifying statements about Tahoe Keys' infrastructure on August 28, 2026, which are not reflected in the reviewed draft; we have incorporated those requests in this letter.

² Technical staff expect to supplement this Memorandum in response to comments received by parties on August 3, 2026.

- c) The OSRAP states that it is prepared pursuant to the Lahontan Water Board's authority, including the Water Code and Basin Plan. As such, it does not require compliance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), California Health and Safety Code section 25356.1(c), and Comprehensive Environmental Response Compensation and Liability Act (CERCLA) guidance documents. Technical staff do not manage their cleanup and abatement cases associated with the regional PCE plume in compliance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and/or CERCLA processes and do not require that any documents associated with the regional PCE plume, including this OSRAP, be prepared in compliance with NCP and CERCLA. Accordingly, Technical Staff offer no opinion as to whether this OSRAP complies with the NCP and CERCLA. The SCAO reflects a negotiated agreement, but the public was invited to participate prior to any consideration of the SCAO by the Lahontan Board, which is consistent with principles underlying the NCP.
- d) The Lahontan Water Board does not allocate responsibility among dischargers but has no objection to the stated intent of preserving the rights of Fox and/or Seven Springs to seek cost recovery or contribution from other responsible parties that may bear some financial responsibility for their remedial efforts.

Plain language hypothetical scenarios are also provided in the Enclosure to this letter to illustrate the Stipulated CAO requirements.

1) Accepted Components of OSRAP

Technical staff are conditionally accepting the remedial alternative selection as set forth in the OSRAP as an alternative to the 2026 Proposed CAO. The OSRAP is a piece of the Stipulated CAO negotiated solution. It does not include ongoing financial assurances and groundwater modeling. Both assurances and modeling are typically used to support remedial alternative selection for complex water quality contamination like the Regional PCE Plume.

The Stipulated CAO is intended to provide the following:

- municipal supply well protection over a negotiated 59-year remedy timeframe
- non-municipal water supply well protection
- evaluation and mitigation of potential threats posed via the vapor intrusion pathway
- immediate financial relief to affected water purveyors
- avoidance of future rounds of costly litigation which will require significant staff resources and delay financial relief to affected water purveyors.

Components of the Stipulated CAO acceptably described in the OSRAP include:

- a) Providing lump sum payments (\$2.6 million and \$1.5 million, respectively) to Tahoe Keys Water Company (TKWC) and Lukins Brothers Water Company (LBWC) to fund wellhead treatment at municipal water supply wells that have been or may be

impacted by the Regional PCE Plume over a negotiated 59-year remedy timeframe. The municipal water supply protection strategy consists of:

- i. A \$2.6 million lump sum payment to LBWC to fund granular activated carbon (GAC) treatment at LBWC#5 for the next 59 years (or longer period if dictated by operational performance criteria shortfalls at LBWC#5), such that GAC treatment is funded for any portion of the 59-year remedy timeframe in which concentrations of PCE or its anaerobic degradation products are at or exceed applicable Maximum Contaminant Levels (MCLs) at LBWC#5 and DDW requires wellhead treatment at the well. If the \$2.6 million lump sum payment is exhausted within the 59-year timeframe, LBWC is responsible for the costs to continue the GAC treatment as required by DDW.
- ii. Implementing contingency measures at LBWC#5 if extended outage or permanent shutdown of that well occur during the 59-year remedy timeframe (or longer period if dictated by operational performance criteria shortfalls at LBWC#5). Contingency measure costs obligations are not included in the \$2.6 million lump sum payment and are provided through a Performing Parties direct obligation.
- iii. A \$1.5 million lump sum payment to TKWC to provide partial funding of TKWC#4 and any possible future treatment during the 59-year remedy timeframe. TKWC#4 is a new municipal supply well currently located outside the Regional PCE Plume.
- iv. Implementing contingency wellhead treatment at TKWC#1 and TKWC#4 in the event of future impact(s) during the 59-year remedy timeframe (or longer period if dictated by operational performance criteria shortfalls at LBWC#5). If the \$1.5 million lump sum payment is exhausted within the 59-year remedy timeframe, TKWC is responsible for the costs to construct and operate any GAC treatment as required by DDW. Any costs for wellhead treatment needed beyond the 59-year remedy timeframe will be the responsibility of TKWC.

b) Conducting semi-annual monitoring and quarterly reporting

- i. sentry well and private and small community water supply well monitoring results
- ii. status updates of wellhead treatment systems and remediation systems, if any, in operation
- iii. municipal well monitoring results as provided by TKWC and LBWC under their DDW permit monitoring program
- iv. Water level data and sentry well vertical concentration gradient evaluation, with particular attention to the TKWC1-SW-1/SW-2 contrast as the primary vertical isolation indicator for TKWC No. 1 and the TKWC No. 4 upper screen depth
- v. field monitoring well sampling sheets and well maintenance logs completed for each well

- vi. TKWC No. 1 wellhead PCE running annual average and the updated trend projection of the potential MCL-exceedance date
 - vii. LBWC No. 5 treated volume, runtime, influent and effluent PCE, and cumulative PCE mass removed, reported against the treated-volume performance criterion; cumulative mass removed is reported as a verification parameter only;
 - viii. Concise data evaluations and tabular data summaries for all data reported; transmittal of analytical results, water-level data, or treatment-system performance data with supporting evaluation and discussion;
 - ix. Discussion and evaluation of performance monitoring and compliance including a description of any annual adjustment of the 59-year Remedy Implementation Period;
 - x. Discussion of any emergency response actions taken during the reporting period.
- c) Implementing the Well Investigation and Closure Plan (WICP) within the Regional PCE Plume, and all related and future tasks per Lahontan Water Board staff's acceptance, to evaluate and mitigate threats to private and small community water system wells posed by the Regional PCE Plume.
- d) Implementing the Vapor Intrusion Investigation Work Plan within the Regional PCE Plume, and all related and future tasks per Lahontan Water Board staff's acceptance, to evaluate and mitigate potential threats via the vapor intrusion pathway posed by the Regional PCE Plume.

2) General Conditional OSRAP Acceptance Comments

The general comments summarized below are being provided to identify sections of the OSRAP where areas of dispute remain, but no further modifications are required. Each section is being conditionally accepted in consideration of the acknowledgements below to allow for the Stipulated CAO to be considered as an alternative to the 2026 Proposed CAO.

Comment No. 1

Section 2 Regional PCE Contamination Description is incomplete. The section presents a minimal description of the regional PCE plume. As such, the section does not conform with available guidance for a description of the extent of contamination consistent with the complexity of the regional PCE plume.

Comment No. 2

Section 3 Conceptual Site Model is incomplete. The section does not present a narrative description of the CSM and instead references available documents which contain interpretations and conclusions about data gaps, sources, or appropriate next steps which Lahontan Water Board staff have consistently disputed.

Comment No. 3

Section 6 Feasibility Study is based upon an incomplete CSM which Lahontan Water Board staff has consistently disputed.

Comment No. 4

Section 6.4, Recommended Remedy contains an outdated estimate of costs. The estimated present value of the projected remedy is based, in part, on an outdated engineer's cost estimate for TKWC No. 4 construction and is not reflective of the actual total cost.

3) Specific Conditional OSRAP Acceptance Requirements

The Off-Site RAP is deemed revised as follows to reflect the following clarifications and corrections, which allow for the Stipulated CAO to be considered as an alternative to the 2026 Proposed CAO.

Condition No. 1

Section 1 Introduction

Section 1.1 Background, third bullet

Section 1.1 is deemed revised to indicate Tahoe Keys Water Company has no current plans to cease operation of TKWC No. 2. This global edit is deemed made throughout the document.

Condition No. 2

Sections 1.2 Off-Site RAP Scope and 1.4 Remedy Implementation Period and Settlement Framework

These sections are deemed modified to make clear that if MCLs are exceeded at LBWC#5 after DDW has approved of terminating GAC treatment, and then concentrations of PCE or its anaerobic degradation products are detected at or above MCLs at LBWC#5 at a later date within the 59-year remedy timeframe after adoption of the SCAO, then the obligations of Seven Springs and Fox under the Off-Site RAP (i.e., GAC treatment and contingency measure implementation) resume for the remainder of the 59-year timeframe. The 59-year remedy implementation period would only be extended by failure to meet performance criteria during the period that LBWC #5 is operating and detections of PCE or its anaerobic degradation products at LBWC #5 equal or exceed MCLs. The 59-year remedy timeframe cannot be shortened unless accepted by the Executive Officer.

Condition No. 3

Section 2.3.2, fourth bullet

Section 2.3.2 shall be revised to indicate, "*TKWC No. 4 was drilled in May 2026 and completed in June 2026 to a total depth of 212 feet bgs with screened intervals between 149-155, 183-190, and 198-207 feet bgs. Water quality sampling verified that this well was*

installed outside of the Regional PCE Plume. Due to its location, anticipated pumping rate, and depths of screened intervals, TKWC # 4 remains threatened by the Regional PCE Plume.”

Condition No. 4

Section 5.3.1.1 Remedy Timeframe

The first paragraph of this section is deemed modified to make clear that if MCLs are exceeded at LBWC#5 after DDW has approved of terminating GAC treatment, and then concentrations of PCE or its anaerobic degradation products are detected at or above MCLs at LBWC #5 a later date within the 59-year timeframe after adoption of the SCAO, then the obligations of Seven Springs and Fox under the Off-Site RAP (i.e., for implementing contingency measures) resume for the remainder of the 59-year timeframe. The 59-year remedy implementation period would be extended only by failure to meet performance criteria during the period that LBWC#5 is operating and detections of PCE or its anaerobic degradations products at LBWC#5 equal or exceed MCLs. The 59-year remedy timeframe cannot be shortened unless accepted by the Executive Officer.

The second paragraph of this section is deemed modified to make clear that if MCLs are exceeded at TKWC #1 or #4 after DDW has approved of terminating GAC treatment, and then concentrations of PCE or its anaerobic degradation products are detected at or above MCLs at one of those wells a later date within the 59-year timeframe after adoption of the SCAO, then the obligations of Seven Springs and Fox under the Off-Site RAP (i.e., for implementing contingency measures) resume for the remainder of the 59-year timeframe. The 59-year remedy implementation period would be extended only by failure to meet performance criteria during the period that LBWC#5 is operating and detections of PCE or its anaerobic degradations products at LBWC#5 equal or exceed MCLs. The 59-year remedy timeframe cannot be shortened unless accepted by the Executive Officer.

Condition No. 5

Section 5.4.1, third sentence

Section 5.4.1 is deemed revised to indicate that TKPOA has no current plans to decommission TKWC No. 2.

Condition No. 6

Section 6.2.2.1

Section 6.2.2.1 is deemed revised to delete statements which indicate TKWC No. 4 will replace TKWC No. 2 as the primary TKWC water source. This comment also applies to Sections 7.1.5.3 and 7.3.3.1.

Condition No. 7

Section 6.2.2.1.2

Section 6.2.2.1.2 shall be revised to clarify “TKWC plans to use new well TKWC No. 4 to supplement the production capacity of TKWC No. 2. The TKWC Settlement Agreement provides for partial funding from the Performing Parties for TKWC No. 4 construction. TKWC has no plans at this time to cease operation of TKWC No. 2. TKWC No. 2 will continue to be operated, with GAC treatment in place, based on water system needs in accordance with TKWC’s DDW permit. However, there are no obligations imposed upon TKWC under this Off-Site Remedial Action Plan to operate, decommission, or take any other action related to TKWC No. 2.”

Condition No. 8

Section 6.2.2.1.3

Section 6.2.2.1.3 shall be revised to clarify “New water supply well TKWC No. 4 was drilled in May 2026 outside of the Regional PCE Plume and completed in June 2026. TKWC No. 4 was installed to supplement production capacity at TKWC No. 2, as described in Section 2.3.2, above. Water production from TKWC No. 2 may continue at TKWC’s discretion, consistent with its DDW permit. However, there are no obligations imposed upon TKWC under this Off-Site Remedial Action Plan to operate, decommission, or take any other action related to TKWC No. 2.

TKWC No. 4 was completed with screened intervals of 149-155, 183-190, and 198-207 feet bgs. Eight-hour well capacity testing performed consistent with DDW requirements estimated a pumping capacity of 2,000 gpm, as documented on Department of Water Resources Well Completion Report WCR2026-006778. The upper screen interval of 149-155 feet bgs is approximately 30 to 35 feet below the TKWC1-SW1 sampling depth, where PCE concentrations of 130-150 ug/L were recorded in April 2023. Pre-construction groundwater sampling at the TKWC No. 4 location did not detect PCE above analytical reporting limits (GSI, 2025).” This information was provided by TKWC after the OSRAP was submitted and not independently verified by Water Board staff.

Condition No. 9

Section 7.1.5.3 Installation of TKWC No. 4

The second sentence, first paragraph, is deemed deleted. Section 7.1.5.3 is deemed revised to be consistent with Section 6.2.2.1 above.

Condition No. 10

Section 7.1.6 Summary of Financial Obligations

Section 7.1.6., last sentence is deemed deleted. The table is deemed revised to indicate GAC treatment contingency measures at TKWC#1 and TKWC#4 will be funded by the \$1.5 million lump sum payment to TKWC.

Condition No. 11

Section 7.4 Monitoring and Reporting

- A. Section 7.4 is deemed revised to include a Final Off-Site Remedial Action Completion Report and indicate the report shall be submitted in accordance with Stipulated CAO, Attachment A, Time Schedule.
- B. Section 7.4 is deemed revised to indicate any requests to modify the monitoring and reporting program shall be provided in writing 60 days in advance of any proposed changes and shall not be implemented until receiving agreement from the Executive Officer.

Condition No. 12

Section 7.4.1 Sentry Well Monitoring

This section refers to a draft plan which was never accepted (i.e., *Sentry Well Groundwater Sampling and Analysis Plan* [EKI,2025]) by Lahontan Water Board staff. Section 7.4.1 is deemed revised to indicate the “draft” status of the plan.

Condition No. 13

Section 7.5.1 Purpose and Regulatory Basis

Figure 7.1 was inadvertently omitted from the OSRAP. The figure is included as Enclosure 1 to this letter and is deemed revised to indicate the periodic compliance review cycles needed to evaluate Section 7.5.2 performance criterion and calculate extension to the 59-year timeframe if the Section 7.5.2 performance criterion is not met.

Condition No. 14

Appendix A Lukins Brother Water Company Settlement Agreement

The settlement agreement is incomplete and not signed. Appendix A is deemed revised to include a final signed settlement agreement.

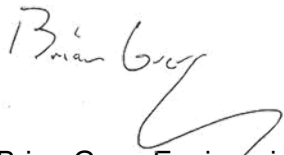
Condition No. 15

Appendix B Tahoe Keys Water Company Settlement Agreement

The settlement agreement is not provided. Appendix B is deemed revised to include a final signed settlement agreement.

Subject to Confidentiality Agreement
10 15 2026

Technical staff are available to discuss the OSRAP conditional acceptance and/or Stipulated CAO schedule, if needed. Please contact Brian Grey directly at (530) 542-5421 or brian.grey@waterboards.ca.gov with any further questions or comments.

A handwritten signature in black ink, appearing to read "Brian Grey", with a stylized flourish extending from the end.

Brian Grey, Engineering Geologist
Lahontan Regional Water Quality Control Board

Enclosures:

- 1) Figure 7-1 LBWC No. 5 performance monitoring annual compliance cycle (criterion)
- 2) Select Hypothetical Scenarios to illustrate Stipulated CAO requirements

cc (via email only): Stuart Block, Allen Matkins
Scott Reisch, Hogan Lovells Cadwalader
Andrew Safford, EKI Environmental & Water, Inc.
Sharon Squire, West Environmental
TJ Middlemis-Clark, Lahontan Water Board
Jeff Brooks, Lahontan Water Board
Jim Carolan, Lahontan Water Board
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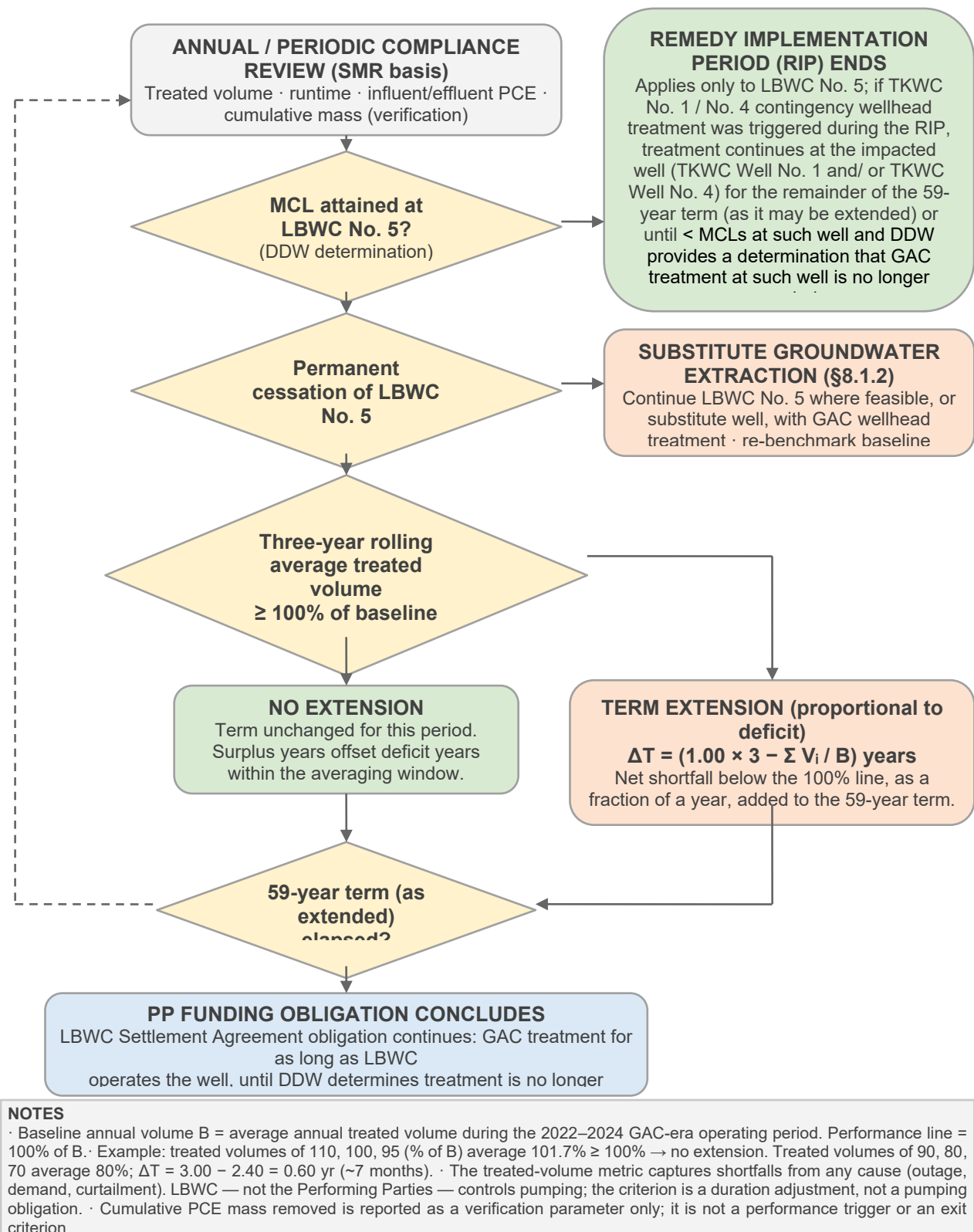


Figure 7-1. LBWC No. 5 performance monitoring annual compliance cycle (criterion).

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Enclosure 2 - Select Hypothetical Scenarios to illustrate Stipulated CAO requirements

The Stipulated CAO requires receptor protection to be provided over the 59-year remedy timeframe. Four hypothetical scenarios are provided below to illustrate Stipulated CAO requirements. In each scenario presented below, the Performing Parties' obligations to fund GAC treatment are limited to the \$2.6 and \$1.5 million lump sum payments to LBWC and TKWC, respectively. In the event these lump sum payments are exhausted prior to expiration of the 59-year period (or as dictated by performance criterion), the costs and obligations to continue GAC treatment will be borne by LBWC and TKWC until DDW determines GAC treatment is no longer necessary.

- 1) Treatment finishes at Lukins.** Wellhead treatment is conducted at LBWC#5 for 20 years at which time DDW determines wellhead treatment is no longer needed (i.e., PCE concentrations are below MCLs). No other impacts or changes are observed to trigger contingency response actions during the initial 20 years or during the following 39 years. Fox and Seven Springs are not required to perform any additional work after the initial 20 years, and the Stipulated CAO requirements would be terminated upon completion of the 59-year period.
- 2) Water supply well shuts down at Lukins and treatment starts at Tahoe Keys.** Wellhead treatment is conducted at LBWC#5 for 20 years at which time LBWC#5 is permanently shut down prior to the attainment of MCLs triggering contingency response actions (Section 8.1). PCE concentrations remain above MCLs in LBWC#5 and the contingency extraction well. At year 30, PCE concentrations above MCLs are also observed at Tahoe Keys Water Company (TKWC) #1 triggering "Action/Treatment" response actions. PCE concentrations remain above MCLs in the contingency extraction well and TKWC#1 through year 59. Fox and Seven Springs are responsible for operations at LBWC#5 in years 1 through 20, the contingency extraction well in years 20 through 59, and TKWC#1 in years 30 through 59 per the settlement agreements. The 59-year period would only be extended by failure to meet LBWC#5 performance criteria during the initial 20 years. The Stipulated CAO requirements would be terminated upon completion of the 59-year time period (or as extended by failure to meet performance criteria at LBWC#5 during years 1 through 20) despite PCE concentrations being present above MCLs being present in LBWC#5, the contingency extraction well, and TKWC#1 in year 59.
- 3) Treatment finishes at Lukins and treatment starts at Tahoe Keys.** Wellhead treatment is conducted at LBWC#5 for 20 years at which time DDW determines wellhead treatment is no longer needed (i.e., PCE concentrations are below MCLs). At year 30, PCE concentrations above MCLs are observed at Tahoe TKWC#1 triggering "Action/Treatment" response actions. PCE concentrations remain above MCLs in TKWC#1 until year 59. At year 50, PCE concentrations above MCLs are also observed at TKWC#4 triggering "Action/Treatment" response actions. PCE concentrations remain above MCLs in TKWC#4 through year 59. Fox and Seven Springs are responsible for

operations at LBWC#5 in years 1 through 20, TKWC#1 in years 30 through 59, and TKWC#4 in years 50 through 59 per the settlement agreements. The 59-year period would only be extended by failure to meet LBWC#5 performance criteria during the initial 20 years. The Stipulated CAO requirements would be terminated upon

completion of the 59-year period (or as extended by failure to meet performance criteria at LBWC#5 during years 1 through 20) despite PCE concentrations being present above MCLs in TKWC#1 and TKWC#4 in year 59.

- 4) **Treatment stops and restarts at Lukins.** Wellhead treatment is conducted at LBWC#5 for 20 years at which time DDW determines wellhead treatment is no longer needed (i.e., PCE concentrations are below MCLs). At year 40, PCE concentrations above MCLs are observed at LBWC#5 and additional wellhead treatment is required by DDW. PCE Concentrations remain above MCLs until year 59 and no other impacts are observed at TKWC#1 or TKWC#4 to trigger contingency response actions during the 59-year period. Fox and Seven Springs are responsible for operations at LBWC#5 in years 1 through 20, and years 40 through 59 per the Lukins Brother Water Company settlement agreement. The 59-year period would only be extended by failure to meet LBWC#5 performance criteria during the initial 20 years or during years 40 through 59. The Stipulated CAO requirements would be terminated upon completion of the 59-year period (or as extended by failure to meet performance criteria at LBWC#5 during years 1 through 20 and years 40 through 59) despite PCE concentrations being present above MCLs in LBWC#5 in year 59.