
Lahontan Regional Water Quality Control Board

Status of Actions July 2020 PG&E Hinkley Chromium Contamination

Chromium Plume Boundary

In general, the First Quarter 2020 groundwater data indicate that plume migration is not occurring but does reflect natural fluctuations of groundwater concentrations as remediation progresses. The First Quarter 2020 chromium plume maps can be viewed on GeoTracker at: [First Quarter 2020 Groundwater Monitoring Report and Domestic Well Sampling Results](https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4265691936/SL0607111288.PDF)

(https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4265691936/SL0607111288.PDF), and are Figures 5-1 through 5-6 of this report.

Previous quarters chromium plume maps are posted on the Water Board's Hinkley website at: [Water Board's Hinkley website](http://www.waterboards.ca.gov/lahontan/water_issues/projects/pge/index.shtml) (http://www.waterboards.ca.gov/lahontan/water_issues/projects/pge/index.shtml), at the bottom of the page under the section titled "Other Documents and Information." The Second Quarter 2020 plume map is due on August 10, 2020, consistent with the reporting due dates contained in Cleanup and Abatement Order No. R6V-2015-0068 (CAO).

Annual Status Update to Regional Water Board

Water Board staff, with staff from Pacific Gas and Electric (PG&E) and the Independent Review Panel (IRP) Manager, presented the annual update on the status of activities related to PG&E's chromium cleanup in the Hinkley Valley at the regularly scheduled meeting of the Lahontan Water Board. The meeting was held on June 10, 2020, via webcast. The update included a summary of major activities and milestones for the 2019 calendar year, a presentation on the first *Four-Year Comprehensive Cleanup Status and Effectiveness Report for years 2016 through 2019*, an update from the IRP Manager, and an update from Water Board staff regarding the United States Geological Survey (USGS) chromium background study. Regional Board members, Water Board staff, and members of the public were in attendance. The minutes and full recorded audio of the meeting will be available on our website at [June 2020 Board Meeting Audio and Meeting Minutes](https://www.waterboards.ca.gov/lahontan/board_info/agenda/2020_schedule.html) (https://www.waterboards.ca.gov/lahontan/board_info/agenda/2020_schedule.html).

Hinkley resident, Daron Banks, addressed Board members and urged them to stay committed to use the results of the chromium background study as guidance for setting cleanup requirements. He stated that he appreciated all the work that PG&E and Water Board staff have done over the years, and expressed that he does not want to see momentum lost on the project with consideration of the chromium background study and its use for new or revised cleanup values.

Request to Expand In-Situ Remediation Zone Permitted Area

PG&E requested a revision to the In-Situ Remediation Zone (IRZ) permitted area under the existing Notice of Applicability (NOA) of General Waste Discharge Requirements, Board Order No. R6V-2008-0014. PG&E proposes to expand the IRZ areas as follows: 600 feet to the west for the Central Area; and 140 feet to the west and 650 feet to the north for the South-Central ReInjection Area. The proposal also includes changes to the sentry well monitoring network used to monitor for byproducts impacts from IRZ operations. These increased IRZ areas are conservative but would allow for future remedial expansion.

Expanding the permitted IRZ areas will require reissuance of the NOA. Water Board staff are also identifying areas where flexibility can be incorporated into the new NOA that would allow PG&E to implement adaptive management as remediation progresses. PG&E is also requesting streamlined reporting, specifically a change from quarterly to semi-annual reporting, while continuing to collect monitoring data on a quarterly frequency. The process by which notifications of adverse conditions are reported will remain unchanged. Water Board staff are working with the IRP Manager to identify ways to allow for public participation by community members prior to release of a draft NOA for public comment, which we anticipate will be released late summer 2020.

Pilot Test of Modified Groundwater Extraction for Lower Aquifer Remediation

PG&E has observed stagnating chromium concentrations in the area of a clay transition zone along the western edge of the plume. Because of upper and lower aquifer communication, some hexavalent chromium has entered the lower aquifer in this area. This pilot study will determine whether modified pumping at extraction wells EX-29, EX-30, and EX-37, will promote remediation of the chromium in the lower aquifer. Water Board staff accepted PG&E's proposal to perform the pilot test on May 12, 2020.

PGE-06 Freshwater Injection Pilot Test

Water Board staff received the submittal of *PGE-06 Freshwater Injection Pilot Test Results* on May 29, 2020. This report summarizes the results of PG&E's pilot test for freshwater injection into existing former PG&E supply well PGE-06. The pilot test was used to evaluate whether long-term freshwater injection in the area of well PGE-06 could serve as an additional remedial alternative for future enhancement of hydraulic containment and reduce chromium concentrations along the southeastern plume boundary. The pilot test hydraulic data was also used to gather insight on the potential hydraulic influence of the Lockhart Fault system that was defined during the USGS chromium background study. These data are important for optimization of current and future remedial activities. Water Board staff have reviewed the report and generally concur with the results. A formal response will be provided. This document can be found on GeoTracker at [PGE-06 Freshwater Injection Pilot Test Results](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/7540385365/SL0607111288.PDF) (https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/7540385365/SL0607111288.PDF).

Northern Source Area Investigation

PG&E submitted a 14-day notification for the *Northern Source Area Investigation* on April 29, 2020. This investigation is part of PG&E's remedial efforts to address elevated chromium concentrations that may remain in the shallow zone of the northern Source Area. The potential area of elevated chromium concentrations located beneath the surface impoundment (Pond 8) was not treated by previous upgradient injections. PG&E is installing two 45-degree slant monitoring wells beneath Pond 8 to monitor the chromium plume beneath the pond and to refine the conceptual site model in this area. Water Board staff reviewed the 14-day notification and concurred with the proposed scope of work on June 1, 2020.

Documents related to this request can be found at: [Source Area Investigation: Boring Under Surface Impoundment Geotechnical](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/6834878027/SL0607111288.PDF) (https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/6834878027/SL0607111288.PDF) and at: [Water Board Concurrence - 14 Day Notification New IRZ Wells in Northern Source Area](https://documents.geotracker.waterboards.ca.gov/view_documents?global_id=SL0607111288&enforcement_id=6436932) (https://geotracker.waterboards.ca.gov/view_documents?global_id=SL0607111288&enforcement_id=6436932).

Four-Year Comprehensive Cleanup Status and Effectiveness Report (2016-2019)

PG&E submitted the first *Four-Year Comprehensive Cleanup Status and Effectiveness Report for Years 2016 through 2019* on March 30, 2020. The four-year report evaluated the progress of remedial actions to reaching cleanup timeframes. As part of the 2015 CAO (R6V-2015-0068), Attachment 8, Section II.C, a *Remedial Timeframe Assessment Action Plan* was submitted on April 29, 2020 as part of the four-year review. The timeframe assessment presented recommendations to enhance remedial activities and increase remedy effectiveness to reach the goals set out in the 2015 CAO. The IRP Manager provided their comments on the four-year report to Water Board staff on July 1, 2020. Water Board staff are reviewing these documents, including the IRP Manager's suggestions to improve the reporting in the four-year report. The next four-year report is due March 30, 2024.

The *Four-Year Comprehensive Cleanup Status and Effectiveness Report* can be found at: [Four-Year Comprehensive Cleanup Status and Effectiveness Report](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/6213955223/SL0607111288.PDF) (https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/6213955223/SL0607111288.PDF) and the *Remedial Timeframe Assessment* at: [Remedial Timeframe Assessment](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/7075251698/SL0607111288.PDF) (https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/7075251698/SL0607111288.PDF).

The IRP Manager's July 1, 2020 comments on the four-year report can be found at: [IRP Comments on the Four-Year Comprehensive Cleanup Status Report](https://geotracker.waterboards.ca.gov/view_documents?global_id=SL0607111288&document_id=6019081) (https://geotracker.waterboards.ca.gov/view_documents?global_id=SL0607111288&document_id=6019081).

Chromium Background Study

In January 2020, preliminary draft chapters of the Hinkley Background Study Report were released for review to the Technical Working Group and concurrent with review through the USGS internal process. The draft document comprises nine chapters of detailed and technical information on study methods, data collection, analysis, results, and conclusions. Water Board staff comments were submitted to the USGS's lead author, Dr. John Izbicki, on April 1, 2020. Water Board staff find that the report represents a comprehensive and exhaustive effort of data collection and analysis and is a well-researched scientific approach to developing background values for the Hinkley and Water Valleys. Staff gave a presentation on the background study during the Water Board's regular meeting on June 10, 2020.

In 2019, the schedule for release of the Final Report was extended one year to accommodate delays in the project schedule due to the 2018/2019 government shutdown, decelerated progress on updating a groundwater model, and completing data analysis. Currently, the Final Report is scheduled for completion and public release in late 2020. Water Board staff are keeping apprised on any changes to the Final Report release schedule due to the ongoing COVID-19 pandemic and will communicate any issues that arise in upcoming status reports.

Your Water Board Staff Contacts

Water Board oversight of the PG&E Hinkley Chromium Cleanup project continues to be provided by staff in the Water Board's Victorville office, which is located at 15095 Amargosa Road, Building 2, Suite 210, Victorville, CA 92394. Your Water Board staff contacts are listed below. Please feel free to contact* any of the Water Board staff listed should you need assistance.

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*Please note, the majority of Lahontan Water Board staff are teleworking due to an Executive Order from Governor Newsom. However, we are available via email and voicemail. We are responding to emails throughout the workday. Responses to voicemail may take more than one business day.