
Lahontan Regional Water Quality Control Board

Status of Actions October 2021 PG&E Hinkley Chromium Contamination

Chromium Plume Boundary

In general, the Second Quarter 2021 groundwater data indicate that plume migration is not occurring but do reflect natural fluctuations of groundwater concentrations as remediation progresses. The Second Quarter 2021 chromium plume maps can be viewed on GeoTracker at [Second Quarter 2021 Groundwater Monitoring Report and Domestic Well Sampling Results](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/8270297050/SL0607111288.PDF)

(https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/8270297050/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 Third Quarter 2021 plume map is due on November 10, 2021, consistent with the reporting due dates contained in Cleanup and Abatement Order (CAO) No. R6V-2015-0068.

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 October 7, 2021, via webcast. The update included a summary of major activities and milestones for the 2020 calendar year, an update regarding the United States Geological Survey chromium background study, a presentation on the annual Cleanup Status and Effectiveness Report for 2020, a presentation on mitigation of agricultural treatment unit byproducts, and an update from the IRP Manager. Regional Board members and Water Board staff were in attendance. Approximately 30 days after the meeting date, the minutes and full recorded audio of the meeting will be available on our website at [October 2021 Board Meeting Audio and Meeting Minutes](https://www.waterboards.ca.gov/lahontan/board_info/agenda/2021_schedule.html) (https://www.waterboards.ca.gov/lahontan/board_info/agenda/2021_schedule.html).

Issuance of the New Notice of Applicability of General Waste Discharge Requirements for In-Situ Remediation Zones and the Freshwater Injection Systems

PG&E requested a revision to the In-Situ Remediation Zone (IRZ) area permitted under a Notice of Applicability (NOA) of General Waste Discharge Requirements, Board Order No. R6V-2008-0014. On July 9, 2021, Water Board staff initiated a 30-day public review and comment period of the *Draft New Notice of Applicability of General Waste Discharge Requirements for In-Situ Remediation Zones and the Freshwater Injection Systems, Pacific Gas and Electric Company's Hinkley Compressor Station, San Bernardino County*. The comment period was extended by 15-days and comments were due August 24, 2021. The new requirements set forth authorize continued operation of the IRZ and freshwater injections systems, expand the IRZ area beyond what was previously authorized to account for potential future well installations to treat the plume core, designate a groundwater extraction area to enhance southern plume containment, designate a freshwater injection area outside the IRZ area, streamline the monitoring and reporting program for byproducts and align with current conditions and potential future IRZ expansions, and reduce the reporting frequency from quarterly to semi-annually. The updated requirements, including a monitoring and reporting program can be viewed at the [Water Board's Hinkley project webpage](http://www.waterboards.ca.gov/la_hontan/water_issues/projects/pge/index.shtml) (http://www.waterboards.ca.gov/la_hontan/water_issues/projects/pge/index.shtml).

Comment letters were received from the IRP Manager and PG&E. Responses to the comments were provided by the Water Board on October 1, 2021. The NOA was signed by the Executive Officer and issued on October 5, 2021.

Proposed Pilot Test to Assess Revised Hydraulic Capture Metrics

PG&E has submitted a request to perform an 18-month pilot test to evaluate an optimized groundwater extraction configuration to continue hydraulic containment. The extraction configuration was last optimized in 2016. Since then, the 10 microgram per liter ($\mu\text{g/L}$) and 50 $\mu\text{g/L}$ hexavalent chromium and total chromium plume boundaries north of the Barstow-Bakersfield highway have retracted. The purpose of this pilot test will be to evaluate optimized groundwater extraction to continue hydraulic containment, allow for more efficient capture, and reduce water use based on the current conditions at the site. This request is being reviewed by Water Board staff.

Continued Management of Inactive Supply Wells on Property Owned by Pacific Gas and Electric Company in Hinkley, California

On October 1, 2021, PG&E submitted a request to destroy 32 domestic or agricultural wells located on PG&E-owned property. These wells consist of 25 inactive single aquifer supply wells and seven cross-screened wells that were identified in accordance with previous approved practices to remove potential conduits between aquifers and consistent with PG&E's plan to the Water Board dated March 21, 2017. This request is being reviewed by Water Board staff.

Action Plan for Uranium Detected in Soil at the Ranch Agricultural Treatment Unit

The Waste Discharge Requirements (WDRs) for PG&E's Groundwater Remediation Project, Agricultural Treatment Units (ATUs), Board Order No. R6V-2014-0023, requires statistical analyses of soil uranium data to determine whether significant changes are occurring due to remediation. In the First and Second Quarter of 2021, a statistically significant increase for uranium was identified for the Ranch ATU. An increase in the average concentration of uranium above the 95% upper prediction limit triggers an action plan to address the exceedance under the WDRs, Section I.C.6. and Section III. The action plan recommends that the Ranch ATU continue being monitored to collect more data to understand the full distribution of uranium in soil and to determine if increases due to irrigation can be confidently identified. Current soil concentrations are an order of magnitude below the United States Environmental Protection Agency Regional Screening Level (RSL). The continued monitoring under this action plan will ensure that irrigation at the Ranch ATU will not cause uranium concentrations in soil to significantly increase or exceed the RSL, which is very unlikely based on data collected to date. This action plan is being reviewed by Water Board staff.

Routine Monitoring Reports

PG&E submitted the following monitoring reports in accordance with the respective monitoring and reporting requirements:

- 2nd Quarter 2021 Hydraulic Capture Report
- 2nd Quarter 2021 Groundwater Monitoring Report and Domestic Well Sampling Results
- 2nd Quarter 2021 Monitoring Report for the IRZs and Northwest Freshwater Injection Projects
- 2nd Quarter 2021 Agricultural Treatment Units (ATUs) Monitoring Report

Water Board staff are reviewing the routine monitoring reports.

Chromium Background Study

The final draft of the Hinkley Chromium Background Study Report continues to move through the United States Geological Survey (USGS) internal review process.

Dr. John Izbicki, the study's lead scientist, reports that progress is going smoothly and that each step within the review process adds to the quality of the final report. The report is prioritized within the USGS review process, and review staff are working hard to move the report along through the steps.

Your Water Board Staff Contacts

Water Board oversight of the PG&E Hinkley Chromium Cleanup project is provided by staff in the Water Board's Victorville office 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 those listed should you need assistance.

Amanda Lopez, Engineering Geologist
(760) 241-7373, amanda.lopez@waterboards.ca.gov

Jan Zimmerman, Senior Engineering Geologist
(760) 241-7376, jan.zimmerman@waterboards.ca.gov

Lahontan Regional Water Quality Control Board
(760) 241-6583, general number
<https://www.waterboards.ca.gov/lahontan/>

*Please note, the majority of Lahontan Water Board staff are teleworking. 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.