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## Lahontan Regional Water Quality Control Board

### Status of Actions July 2021 PG&E Hinkley Chromium Contamination

#### Chromium Plume Boundary

In general, the First Quarter 2021 groundwater data indicate that plume migration is not occurring but do reflect natural fluctuations of groundwater concentrations as remediation progresses. The First Quarter 2021 chromium plume maps can be viewed on GeoTracker at [First Quarter 2021 Groundwater Monitoring Report and Domestic Well Sampling Results](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/3363116800/SL0607111288.PDF)

([https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo\\_report/3363116800/SL0607111288.PDF](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/3363116800/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](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 2021 plume map is due on August 10, 2021, consistent with the reporting due dates contained in Cleanup and Abatement Order (CAO) No. R6V-2015-0068.

#### Request to Expand In-Situ Remediation Zone Permitted Area

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 2, 2021, Water Board staff initiated a 30-day public review and comment period of the *Draft Updated Requirements for In-Situ Remediation Zone and the Freshwater Injection Systems, Pacific Gas and Electric Company (PG&E), Hinkley, San Bernardino County*. The new requirements set forth will 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 draft updated requirements, including a monitoring and reporting program can be viewed at the [Water Board's Hinkley project webpage](http://www.waterboards.ca.gov/lahontan/water_issues/projects/pge/index.shtml) ([http://www.waterboards.ca.gov/lahontan/water\\_issues/projects/pge/index.shtml](http://www.waterboards.ca.gov/lahontan/water_issues/projects/pge/index.shtml)).

Water Board staff will be available by email or phone to discuss any questions or comments during the public comment period, which ends at 5 pm on August 2, 2021. Water Board staff, with the assistance of the IRP Manager, will also hold a public

workshop to discuss the proposed updates with community members at the next Hinkley Community Meeting scheduled for July 22, 2021 at the Hinkley Community Center.

### **Replacement Water for Domestic Well 02-23**

Water Board staff provided concurrence on April 22, 2021 on the *Replacement Water Workplan for Domestic Well 02-23* submitted by PG&E. PG&E is providing replacement water to the private well owner of domestic well 02-23. Domestic well 02-23 has been identified as a “potentially affected” well due to an increase in manganese concentrations in groundwater at nearby monitoring well MW-220S during the Third and Fourth Quarters 2020; manganese is an IRZ byproduct. Monitoring well MW-220S has been identified as an “actually affected” well due to the elevated concentrations of manganese. The 2016 NOA requires either an action plan to prevent supply wells within a 0.5-mile distance downgradient or 0.25-mile cross gradient of monitoring wells “actually affected” by IRZ remediation from becoming “actually affected.” In developing the action plan, PG&E should consider actions that may include adjusting the IRZ flow rates, installing additional sentry wells, or providing replacement water, among other possible actions.

PG&E evaluated various options, and in consultation with the private well owner, chose to provide potable drinking water for the residence and the swimming pool. Replacement water will be provided for the duration of IRZ byproduct impacts to the well.

### **PG&E Northwest Freshwater Injection (NWFI) System Shut Down**

PG&E has requested to perform a pilot test to temporarily discontinue operation of the NWFI system on the western edge of the plume. PG&E will collect data over an 18-month period to evaluate the benefit of discontinuing operation of the NWFI system. Extraction within the ATU areas is helping to contain the hexavalent chromium plume and it appears that the NWFI is no longer needed for plume containment on the western edge. Western Area sentry wells will be monitored and the NWFI will resume operation if chromium concentrations trigger an action, as required by the CAO R6V-2015-0068. The NWFI system pilot test will be reported in the routine monitoring report for the In Situ Reactive Zone and Northwest Freshwater Injection Projects. Water Board staff are reviewing the request.

### **Fresh Water Injection at Wells PGE-06 and EX-66**

In October 2019, PG&E performed a 5-month freshwater injection pilot test at well PGE-06. PG&E determined that freshwater injection at well PGE-06 helped with plume containment, clean water flushing, and northerly groundwater flow gradient. PG&E is requesting to perform another freshwater injection pilot test at wells PGE-06 and EX-66 over a period of 12 months. Freshwater will be sourced from freshwater supply wells FW-03 and FW-04. This pilot test will provide information on aquifer characteristics, hydraulic gradients, and plume containment. Enhancement of the hydraulic gradients to the north will contribute to the effectiveness of the IRZ extraction wells and clean water flushing. Monitoring data will be summarized in the routine monitoring report for the In Situ Reactive Zone and Northwest Freshwater Injection Projects. Water Board staff are reviewing the work plan.

## **Routine Monitoring Reports**

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

- 1st Quarter 2021 Hydraulic Capture Report
- 1st Quarter 2021 Groundwater Monitoring Report and Domestic Well Sampling Results
- 1st Quarter 2021 Monitoring Report for the IRZs and Northwest Freshwater Injection Projects
- 1st 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.

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<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.