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## Lahontan Regional Water Quality Control Board

### Status of Actions April 2020 PG&E Hinkley Chromium Contamination

#### Chromium Plume Boundary

The Fourth Quarter 2019 chromium plume maps can be viewed on GeoTracker at: [https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo\\_report/6574211835/SL0607111288.PDF](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/6574211835/SL0607111288.PDF), and are Figures 5-1 through 5-6 of this report. In general, the Fourth Quarter 2019 maximum composite chromium plume contour lines compared to those of Third Quarter 2019 show slight decreases in some areas and slight increases in other areas. These changes are generally interpreted to reflect natural fluctuations of groundwater concentrations as remediation progresses, and not necessarily an indication that plume migration is occurring.

Previous quarters chromium plume maps are posted on the Water Board's Hinkley website at: [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 First Quarter 2020 plume map is due on May 10, 2020, consistent with the reporting due dates contained in Cleanup and Abatement Order No. R6V-2015-0068 (CAO).

#### 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 real-time as remediation progresses. PG&E is also requesting streamline reporting in the NOA, specifically a change from quarterly to semi-annual reporting, though quarterly monitoring will continue, and notifications of adverse conditions will remain unchanged. Water Board staff hope to release a draft NOA for public comment second quarter 2020.

### **Request for Plan to Define Chromium Plume Boundary**

In November 2018, Water Board staff required PG&E to address increasing chromium concentrations in groundwater along the southern and southeastern portion of the plume and to better define the chromium plume boundary in this area. PG&E submitted technical justification in February 2019 to continue to collect quarterly monitoring data from two extraction wells on the Compressor Station to evaluate the extent of hydraulic capture in those monitoring wells that are exhibiting increasing chromium concentrations.

Water Board staff accepted the technical justification for the continued use of existing wells to define the chromium plume boundary in a letter dated December 18, 2019. Based on preliminary review of Second and Third Quarter 2019 monitoring data, PG&E determined that there was no need to install additional monitoring wells; therefore, no work plan was prepared. PG&E documented the results of this evaluation and provided the rationale for why additional monitoring wells are not warranted in Section 5.5 of the “Fourth Quarter 2019 Groundwater Monitoring Report and Domestic Well Results Site-Wide Groundwater Monitoring Program” report, submitted to the Water Board on February 10, 2020. This report is available on GeoTracker at: [https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo\\_report/6574211835/SL0607111288.PDF](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/6574211835/SL0607111288.PDF).

### **Other Remedial Actions**

PG&E submitted a “Request for Approval to Perform Pilot Test of Modified Groundwater Extraction for Lower Aquifer Remediation” on January 9, 2020. PG&E is requesting Water Board approval to perform a pilot test to evaluate if operation of the groundwater extraction wells EX-29, EX-30 and EX-37 should be changed to enhance chromium concentration reductions. This action is part of PG&E’s adaptive management for plume remediation. The proposed pilot test would be performed over an 18-month period that will involve turning off extraction wells EX-29, EX-30 and EX-37 in an attempt to enhance chromium concentration reductions at wells MW-92C and MW-100C where groundwater flow appears to be stagnating. Once enough information has been obtained, the findings will be summarized and recommendations for future Lower Aquifer remedial operations will be developed.

In a letter dated February 6, 2020, Water Board staff requested additional information and clarification regarding the current disposition of groundwater extraction wells EX-29 and EX-30 and data to support that progress of treatment at monitoring wells MW-92C and MW-100C, where stagnating groundwater is alleged. Water Board staff also solicited comments from the IRP Manager on the pilot study. In a letter dated March 28, 2020, the IRP Manager requested clarification on the criteria that will be used to turn groundwater extraction wells EX-29, EX-30 and EX-37 back on should chromium concentrations indicate an increasing trend and clarification on the “alternatives” being considered as part of the pilot study. PG&E has provided a response to both the Water Board and IRP Manager comments; those responses are being reviewed by Water Board staff.

## **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 United States Geological Survey's (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 reviews of the preliminary draft document are complete, and our comments were submitted to the USGS's lead author, Dr. Izbicki, on April 1, 2020. It is Water Board staff opinion 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.

In 2019, the schedule for the 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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[https://cawaterboards.sharepoint.com/RB6/Land Disposal VVL/PG&E/Status of Actions/PGE Status of Action\\_April 2020.docx](https://cawaterboards.sharepoint.com/RB6/Land Disposal VVL/PG&E/Status of Actions/PGE Status of Action_April 2020.docx)