

January 13, 2014

Ms. Anne Holden, P.G.
Ms. Lauri Kemper, P.E.
California Regional Water Quality Control Board, Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

RE: IRP Manager's Comments Regarding Lahontan Regional Water Quality Control Board's Waste Tentative Waste Discharge Requires (WDRs) for Pacific Gas and Electric (PG&E) Agricultural Treatment Units¹

Dear Anne and Lauri:

The Independent Review Panel (IRP) Manager is submitting comments to the Lahontan Regional Water Quality Control Board (Water Board) regarding the Waste Discharge Requirements (WDRs) for Pacific Gas and Electric Company's Agricultural Treatment Units (ATUs) issued by the Water Board on December 13, 2013. The CAC and the IRP Manager appreciate the opportunity offered by the Water Board to receive comments. The IRP Manager is noting that the Tentative WDRs are that it is a well scoped and codified in a document that addresses many of the concerns we have previously heard from the Hinkley Community regarding operations of the ATUs. The IRP Manager plans to extensively further and discuss the WDRs with the CAC and Community during the next few weeks. An overview will be presented at the next CAC Community monthly meeting, scheduled for January 23, 2014. If additional comments regarding the Tentative WDRs are expressed by the CAC or Community members, then the IRP Manager will submit these (informally, since outwith the formal comment period) to the Water Board. Key topics in the IRP Manager's comments regards the WDRs are illustrated on **Figure 1**.

The formal comments that the IRP Manager is submitting to the Water Board are as follows:

Increased in Acreage of ATUs

On page 23, the Tentative WDRs allows for the increase of acreage of the ATUs to 500 acres, which includes 236 acres of existing ATU acreage as of March 2014. The location of the proposed ATUs' are not provided in the WDRs. We

¹ Lahontan Regional Water Quality Control Board issued the *Tentative Waste Discharge Requirements and Notice of Public Information Meeting For Pacific Gas and Electric Company's Hinkley Groundwater Remediation Project – Agricultural Treatment Units, San Bernardino County* on December 13, 2013

would suggest that the proposed ATUs location be included in Attachment B. Further clarification should be presented describing if all new ATUs will be built on PG&E owned property or other rented/leased property. Additional questions we have, leading to potential clarifications include:

1. Will all future ATUs be constructed on OU1 and OU2 acreage?
2. Will the Farm Swap Proposal Concept presented by PG&E on January 8, 2014 during the Water Board Meeting in Barstow affect the Tentative WDRs?

Allocation of Water Rights

During several CAC monthly meeting Community members have expressed concerns that PG&E would not have enough water rights to increase the amount of groundwater planned for remediation by the ATUs. The CAC will be pleased to learn that the Tentative WDRs will ensure and require PG&E to document that it has obtained the adequate water rights to increase the acreage of the ATUs.

Water Quality

During the Replacement Water Supply Feasibility Study² detections of uranium were reported at well G-5R for 8 groundwater samples ranging between 23.5 to 26.3 pCi/L³. The CAC has a concern that the amount uranium will increase as a result of increased groundwater pumping to supply water for additional ATUs. Mitigation Measure WTR-2e addresses this issue of possible increases in uranium, total dissolved solids (TDS) and other radionuclides due to an increase in ATUs' operations.

Mitigation measures WTR-MM-2, WTR-MM-4 and WTR-MM-5 outlined the procedures to mitigate increased TDS, uranium and other radionuclides. The IRP Manager acknowledges the Water Board's efforts to ensure that increases in TDS, nitrates, uranium and radionuclides, as outlined in the Environmental Impact Report⁴ (EIR) mitigation measures, are addressed during the implementation of the final WDRs. However, the CAC and the IRP Manager would like further clarification on how the baseline conditions will be determined for "Actual Affected Domestic Wells⁵", "Potentially Affected Domestic Wells", "Actually Affected Agricultural Wells⁶" and "Potentially Affected Agricultural Wells".

² Arcadis. *Replacement Water Supply Feasibility Study Report, Hinkley Compressor Station, Hinkley, California.* June 6, 2012

³ Maximum Contaminant Level (MCL) in drinking water for Uranium is 20 pCi/L

⁴ ICF International. *Final Environmental Impact Report: Comprehensive Groundwater Strategy for Historical Chromium Discharges from PG&E's Compressor Station, San Bernardino County.* May 2013.

⁵ The definition of "Actually Affected Domestic Wells" and "Potentially Affected Domestic Wells" are described on pages 25 through 27 of the Water Board's Tentative WDRs

⁶ The definition of "Actually Affected Agricultural Wells" and "Potentially Affected Agricultural Wells" are described on pages 28 through 29 of the Water Board's Tentative WDRs

Furthermore, the CAC and the IRP Manager have the following questions:

1. When will residents identified as "Actual" or "Potential" be contacted to sample and collect data from their domestic or agricultural wells?
2. When will the baseline groundwater sampling event begin for domestic or agricultural wells inside the project area?
3. Since PG&E has been operating interim remedial measures (e.g. DVD LTU, Gorman Pivots, etc.) for over a decade, to what extent will operating data from these ATUs be taken into consideration when determining the baseline(s) for domestic or agricultural wells?
4. Can groundwater quality data from the Whole House Replacement Water Feasibility Study be used to establish the baseline conditions for residents with Whole House Replacement Treatment Units?
5. When the baseline conditions are established, will quarterly letters be sent to the "Actual" or "Potential" residents showing their baseline conditions compared to their most recent conditions?

Groundwater Drawdown

Similarly, as with water quality, this is an important issue to the Hinkley Community. We have routinely heard commentary on this topic at CAC and full Community monthly meetings. The IRP Manager agrees with the Water Board's decision to require/allow PG&E to conduct groundwater modeling, and provide the results to the Water Board by January 31st of each year. The modeling of groundwater elevation data will provide an early indication of any agricultural or domestic wells which could be affected, or potentially affected, by PG&E's remediation activities. Furthermore the CAC and IRP Manager have the following questions:

1. Will the baseline information take into consideration PG&E's interim remedial measures (NWF1 and Hydraulic controls at Thompson Rd.) that have been implemented in the past few years?
2. When the baseline conditions are determined, will quarterly letters be sent to the "Actual" or "Potential" residents showing their baseline conditions compared to their most recent conditions?

Water Replacement for "Actually Affected Agricultural and Domestic Wells"

The CAC and the IRP Manager agree with the Water Board's requirement to provide alternative water supplies for well owners whose water quality (or quantity) will be adversely affected by PG&E's remedial actions. The CAC also agrees with the Water Board's Tentative WDRs that PG&E will bear all costs associated with the supply of alternative water.

Chromium Plume Bulging

The CAC and the IRP Manager are requesting further clarification regarding the language presented on page 9 of the Tentative WDRs, and on pages 23 through 24.

Page 9 states that the WDRs “*authorizes plume bulging, limited to the eastern boundary of OU1, and not more than 3,000 feet from the eastern boundary of OU1.*” However, on pages 23 through 24, the WDRs state the following; “*Any discharges of irrigation water shall not be allowed to cause bulging of the chromium plume unless specifically authorized by the Water Board. This Order does not authorize chromium plume bulging exceeding the limits contained in the CAO R6V-2008-0002A2, dated April 7, 2009, unless and until an amendment to that CAO (as amended) is adopted by the Water Board, specifically authorizing additional temporary, localized plume bulging to accommodate remediation goals.*”

These two statements are not consistent and the CAC and IRP Manager are requesting clarification.

Reporting

The CAC and the IRP Manager agree with the reporting requirements established by the Water Board that all EIR Mitigation Measures will be included in an annual report, and groundwater quality data for the ATUs will be provided in quarterly reports as outlined in Attachments D through F.

Should you have any questions or comments, please feel free to contact either of the undersigned at rsanchez@projectnavigator.com or iwebster@projectnavigator.com (714-388-1800 (PNL main number) or 714-388-1821 (RS) or 714-863-0483 (IAW mobile)).

Sincerely yours,



Raudel Sanchez, Ph.D.
Project Manager



Ian A. Webster, Sc.D.
IRP Manager

Attachments

Figure 1: Key Topics in the IRP Manager's Comments Letter on the Water Board's Tentative Waste Discharge Requirements for the Agricultural Treatment Units (ATUs)

CC:

CAC Members

Kevin Sullivan, PG&E

Devin Hassett, Keadjian and Associates

FIGURE 1

**Key Topics in the IRP Manager's Comments Letter on the
Water Board's Tentative Waste Discharge Requirements
for the Agriculture Treatment Units (ATUs)**

FIGURE 1

Key Topics in the IRP Manager's Comments Letter on the Water Board's Tentative Waste Discharge Requirements for the Agriculture Treatment Units (ATUs)

