



California Regional Water Quality Control Board Lahontan Region



Linda S. Adams
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Environmental Protection

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Arnold Schwarzenegger
Governor

JUL 08 2009

TO ALL CONCERNED PERSONS AND AGENCIES:

DRAFT NOTICE OF APPLICABILITY UNDER GENERAL WASTE DISCHARGE REQUIREMENTS, FOR THE PACIFIC GAS AND ELECTRIC COMPANY (PG&E), HINKLEY, SAN BERNARDINO COUNTY

Enclosed is a draft Notice of Applicability (NOA) to PG&E for allowing discharges to groundwater for remediation activities for hexavalent chromium in groundwater at PG&E's Hinkley Compressor Station. These discharges would be in compliance with the PG&E's General Waste Discharge Requirements for the General Site-Wide Groundwater Remediation Project, Board Order No. R6V-2008-0014. Discharges include increasing ethanol volume in place of other permitted carbon substrates. The draft NOA describes the project in detail, the project life, a monitoring and reporting program, and potential mitigation measures.

Water Board staff requests that you review the enclosed document and provide us with your written comments no later than **August 10, 2009**. Following consideration of comments on the draft NOA, the Water Board Executive Officer may issue the draft NOA, a revised NOA, or may decide the project does not fall under the requirements of the General Waste Discharge Requirements.

If you have any questions or wish to discuss the draft NOA, you may contact Lisa Dernbach at (530) 542-5424 or me at (530) 542-5460.

Chuck Curtis, Manager
Cleanup and Enforcement Division

cc: PG&E Hinkley, Public Mailing List

Enclosure: Draft Notice of Applicability

LSD/clhT: PG&E Hinkley Draft NOA cover letter 709
[File Under: WDID 6B369107001]

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NOTICE OF APPLICABILITY OF GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE GENERAL SITE-WIDE GROUNDWATER REMEDIATION PROJECT AT THE PG&E COMPRESSOR STATION, HINKLEY, SAN BERNARDINO COUNTY (WDID NO. 6B369107001, BOARD ORDER NO. R6V-2008-0014)

We received information that completes the Notice of Intent for the above-referenced project. The submitted documents include PG&E's May 21, 2009 letters requesting to increase the volume of ethanol discharge at the Source Area In-Situ Remediation Project (Enclosure 1) and to modify the groundwater monitoring frequency (Enclosure 2)

Based on the information provided, it is our determination that this project meets the required conditions to be approved under our General Waste Discharge Requirements for the General Site-wide Groundwater Remediation Project (General Permit). All requirements contained in the General Permit will be applicable to your project.

PROJECT DESCRIPTION

The project proposes to increase the volume of ethanol discharges to continue remediation activities of hexavalent chromium in groundwater at the site. By August 2009, about 15,000 gallons of ethanol and 10,428 gallons of lactate will have been discharged at the site.

Board Order No. R6V-2006-0054 allows the total discharge of 15,000 gallons of ethanol. The Board Order also allows up to a combined discharge volume of 420,000 gallons of sodium lactate, liquid whey, and emulsified vegetable oil.

In-situ remediation results over the past year show that ethanol is the better carbon source for promoting in-situ remediation over other carbon sources. Yet, the volume or organic mass of ethanol needed is higher than the permitted amount. PG&E plans to use about 42 percent of the remaining permitted volume of carbon substrate allowed in the Board Order, up to 173,000 gallons or 254,000 kg of organic carbon, as ethanol. The

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additional ethanol discharges will be in lieu of other carbon substrate discharges. Ethanol discharges will continue over the remainder of the five year operating period from when Board Order No. R6V-2006-0054 was issued in November 2006.

Ethanol discharges in the project area have the potential to locally increase concentrations of total organic carbon (TOC) and reduction byproducts, such as arsenic, manganese, and iron in receiving waters. Carbon increases are expected to be consumed by microorganisms and eventually reduce in concentration to background levels. Reduction byproduct increases will return to normal concentrations when constituents reach oxygenated groundwater outside of the remediation area. All potential impacts to water quality will be monitored at the site.

Since the total volume of additional ethanol discharges is less than the total carbon source volume listed in Board Order No. R6V-2006-0054, groundwater levels are not expected to change in the aquifer beyond those previously identified in the environmental document adopted by the Water Board.

Monthly monitoring over eleven months shows that reduction byproducts have been detected only in single sporadic sampling events at various sentry and contingency wells. Downgradient migration of byproducts in groundwater is being controlled by mitigation measures, such as minimizing ethanol dosing and operating extraction wells.

The treatment effectiveness of the project will continue to be evaluated during and after the operational period in the monitoring and reporting program. PG&E will be required to take all necessary actions to restore groundwater quality to pre-project conditions, with the exception of chromium, before monitoring is completed at the site.

PROJECT LOCATION

The PG&E Compressor Station is located at 35863 Fairview Road, Hinkley, in the Harper Valley Subunit of the Mojave Hydrologic Unit. Additional ethanol discharges will occur within the source area of the chromium plume on the Compressor Station property, as shown in Figure 1 (Enclosure 3). The project boundaries consist of the following: the western boundary is defined by Fairview Road, south of Community Boulevard; the southern boundary is defined by Highcrest Road; the eastern boundary is defined by Summerset Road, and; the northern boundary is defined by contingency wells (SA-MW-11 to SA-MW-15) located 300 feet north of Community Boulevard.

RECEIVING WATER LIMITATIONS

The Discharger must comply with Specification I.C. of General Permit No. R6V-2008-0014, which states that waste discharges shall not cause a violation outside the project boundaries of any applicable water quality standards for receiving water adopted by the Lahontan Water Board or the State Water Board. Additionally, the discharge of waste shall not cause a violation of water quality objectives inside the project boundaries at



locations that adversely affect a receptor, such as a drinking water well or agricultural well.

The Discharger must also comply with Specification I.D. of General Permit No. R6V-2008-0014, which states that the discharge of waste shall not cause a violation of the listed General Requirements and Prohibitions.

MONITORING AND REPORTING

Compliance with the Monitoring and Reporting Program shall be as follows:

1. Monitoring shall be in accordance with Monitoring and Reporting Program No. R6V-2006-0054A1, the General Permit, and with information submitted in PG&E's May 21, 2009 letter requesting to modify the groundwater monitoring frequency at the Source Area In-Situ Remediation Project.
2. The sampling frequency for performance monitoring wells (SA-SM series) and sentry/contingency wells (SA-MW series) shall be quarterly (every three months). Quarterly sampling must take place within 90 days of issuance of this NOA.
3. Quarterly monitoring reports are required within 45 days of when quarterly sampling was conducted. Reports must describe the volume and concentration of ethanol discharges. The manner and methodology of discharge and monitoring must be described. Reports must contain laboratory data sheets, a description of laboratory results, and a map of monitoring locations. Reports must describe whether chromium data indicates lateral migration of plume boundaries from the August 2008 baseline condition. Reports must contain a statement as to whether the receiving water limitations or criteria were exceeded for any constituent and, if so, what mitigation measure(s) to restore water quality, if any, were taken. Reports shall note all down periods of in-situ remediation and state the cause. Reports required under this NOA may be combined with reports required under Monitoring and Reporting Program R6V-2006-0054A1.

GENERAL REQUIREMENTS

1. The project shall be implemented in accordance with the requirements contained in the General Permit and in accordance with the information submitted in PG&E's May 21, 2009 letter requesting to increase the volume of ethanol discharge. Project activities must be completed within the project boundaries, as described in the Project Location, above.
2. The volume of ethanol discharged in the Source Area In-situ Remediation Project area must not exceed 173,000 gallons.
3. Notify the Water Board **within five (5) working days** of receipt of validated laboratory results indicating exceedance of receiving water limitations.



4. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this Notice of Applicability is officially revoked.
5. Failure to abide by the conditions of the General Permit and this Notice of Applicability may result in an enforcement action as authorized by provisions of the California Water Code.

You may contact Lisa Dernbach at (530) 542-5424 if you have any questions regarding the General Permit or this Notice of Applicability.

HAROLD J. SINGER
EXECUTIVE OFFICER

Enclosure: May 21, 2009 letter from PG&E to increase ethanol discharge volume
May 21, 2009 letter from PG&E to modify groundwater monitoring
Figure 1, Site Layout

LSD/clhT: PG&E Hinkley General WDR NOA 6-25-09
[File Under: VVL- WDID NO. 6B369107001]

