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Central Valley Regional Water Quality Control Board

8 April 2016

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AMENDED NOTICE OF APPLICABILITY (NOA); LIMITED THREAT GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2013-0073-01; PACIFIC GAS AND ELECTRIC COMPANY PROJECT R-604, T-1003A, AND V-214A CONSTRUCTION DEWATERING; SHASTA AND TEHAMA COUNTIES

Our office received a Report of Waste Discharge application on 1 December 2015 from Pacific Gas and Electric Company (hereinafter Discharger), for discharge of treated groundwater to surface water. Based on the application packet and subsequent information submitted by the Discharger, staff determined that the project met the required conditions for approval under the General Order for Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water (Limited Threat General Order). On 28 December 2015, a NOA was issued and the Discharger was assigned Limited Threat General Order R5-2013-0073-045 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995002.

A "Notice of Change of Scope and Request for Modification to NOA" was submitted to our office by the Discharger on 4 March 2016. This notice from the Discharger explained various additions/alterations to the original scope of the project and requested the original NOA be amended as appropriate. This NOA is hereby amended to change the project scope (as described below in the project description). Please reference your Limited Threat General Order number, **R5-2013-0073-045**, in your correspondence and submitted documents.

The enclosed Limited Threat General Order may also be viewed at the following web address:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073-01.pdf

You are urged to familiarize yourself with the contents of the entire document. The Limited Threat General Order prescribes mandatory discharge monitoring and reporting requirements. The project activities shall be operated in accordance with the requirements contained in this NOA and the Limited Threat General Order.

CALIFORNIA TOXICS RULE / STATE IMPLEMENTATION POLICY MONITORING

The Limited Threat General Order incorporates the requirements of the California Toxics Rule (CTR) and the State Water Resources Control Board's (State Water Board), *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of*

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BOEE, EXECUTIVE OFFICER

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California, 2005, also known as the State Implementation Policy (SIP). Screening levels for CTR constituents are found in Attachment B of the Limited Threat General Order. Review of effluent water quality data in comparison to the screening values, showed reasonable potential for the discharge to cause or contribute to an exceedance of water quality objectives for aluminum, iron, manganese, and zinc in the receiving water. In addition, due to the use of chlorine in the treatment process that requires dechlorination, the project is categorized as a superchlorination project and has reasonable potential to cause or contribute to an exceedance of water quality objectives for chlorine. The proposed treatment system addresses the water quality concerns by reducing constituent concentrations below water quality objectives prior to discharge; therefore, the Project qualifies for the Limited Threat General Order.

PROJECT DESCRIPTION

The overall project consists of natural gas pipeline replacement, maintenance, and testing projects on Line 402 in the cities of Anderson, Cottonwood and unincorporated Shasta County, California. The following bulleted list summarizes the changes in project scope from the previously issued NOA:

- Project R-604, included in the previously issued NOA, has been cancelled in its entirety and is therefore not covered under this NOA.
- Project T-1003A, included in the previously issued NOA, has been modified to include an additional 8.5 mile long hydrotest segment, and this combined segment is identified as Project T-1003B.
- Project T-1003C is being added; it is a 5 mile long hydrotest segment immediately north of Project T-1003B.
- In-line inspection project I-044C is being added and consists of four excavations along line 402 to perform inspections and upgrades.
- Project V-214A includes the replacement of five valves to provide remote control valve functionality, new RTU and SCADA equipment, power supply, grounding grid and other station upgrades at the Balls Ferry Road and Adobe Road Station.
- Project V-215 is being added and will construct a new valve regulator station as part of Project T-1003B.
- Project V-216 is being added and will construct a new valve regulator station as part of Project T-1003C.
- The revised construction schedule is from March 2016 through 31 October 2016.
- The number of discharge locations increased from three to nine (EFF-001 through EFF-010).

Dewatering of groundwater generated during the various trenching and excavation activities is proposed to be discharged to the Anderson-Cottonwood Irrigation District (ACID) Canal. The

Discharger is performing this project in order to improve the safety and operability of its natural gas transmission pipelines. Project T-1003B includes hydrostatically testing (hydrotesting) approximately 12 miles of 10-inch and 12-inch natural gas pipeline along Line 402. The hydrotest segment begins near 22162 Adobe Road, Cottonwood, continues northerly and terminates near the Clear Creek Wastewater Treatment Plant in Redding, California. Twenty four excavations will be made along Line 402 to perform the hydrotesting. Project V-214A consists of the replacement of five valves to provide remote control valve functionality, new RTU and SCADA equipment, power supply, grounding grid and other station upgrades. Projects V-215 and V-216 consist of constructing new valve regulator stations. Project T-1003C includes hydrotesting a 5-mile long segment of 10-inch pipeline on Line 402 along Eastside Drive in the City of Redding and terminating at Freebridge Street.

The Discharger will place sediment screens in the dewatering wells or at the bottom of the excavations to limit soil particulates in the excavation groundwater. The groundwater will be conveyed by a temporary PVC pipeline to a series of settling tanks staged along the pipeline alignment to allow for sedimentation. Settled groundwater will then be pumped through particulate filters, injected with sodium hypochlorite, processed through a manganese greensand filter, and then pumped through activated carbon filtration. The final unit process is clay filtration for trace metals removal, if required.

The Discharger will construct a temporary PVC pipeline from the filtration system(s) to aboveground concrete inlets to one or more ACID laterals. The ACID laterals supply water from the Sacramento River to private irrigation systems in the area. Excess irrigation water flows to drains, which are typically cattail wetlands, before reaching the pond, where it is combined with flood irrigation runoff and other surface drainage. Water flows in an easterly direction toward Anderson Creek, a tributary of the Sacramento River. The Discharger will be working with ACID staff closely to ensure that all discharges are confined to ACID facilities. The proposed discharge locations are ACID Lateral 35, 37, 37-1, 29, 27, 25, 21, 17, 5, and Main Canal (EFF-001 through EFF-010) and the proposed geographic coordinates are provided in the Discharger's application submittal.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. Effluent Limitations and Discharge Specifications of the Limited Threat General Order. The following effluent limitations are applicable to this discharge and are contained in Section V. A, B, and D of the Limited Threat General Order:

A. Effluent Limitations – Applicable to All Limited Threat Discharges

1. Priority Pollutants and Constituents of Concern

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Iron, Total Recoverable	µg/L	300 (Annual Average) ¹	--
Manganese, Total Recoverable	µg/L	50 (Annual Average) ¹	--

¹For the calendar year, the annual average effluent concentration shall not exceed the footnoted value.

Projects T-1003B, T-1003C, I-044C, V-214A, V-215, and V-216 Construction Dewatering

2. Acute Whole Effluent Toxicity. Survival of aquatic organisms in 96-hour bioassays of undiluted waste for all limited threat discharges shall be no less than:

- a. 70%, minimum for any one bioassay; and
- b. 90%, median for any three consecutive bioassays.

B. Effluent Limitations – Limited Threat Discharge to Specific Waterbodies

2. The discharge of pollutants shall not exceed the effluent limitations in the following table for all limited threat discharges to the Sacramento River and its tributaries above the State Highway 32 Bridge at Hamilton City. Effluent limitations for zinc are based on hardness, which was provided by the Discharger as part of the application. Hardness was measured as 67 mg/L CaCO₃ at the northern extent of the project and 88 mg/L CaCO₃ at the southern extent of the project. Therefore, an average hardness of 78 mg/L CaCO₃ was used for determining the effluent limitation for zinc.

Parameter	Units	Hardness in mg/L (H)
		70 < H < 80
		Maximum Daily
Zinc, Total Recoverable	µg/L	27

4. The pH of all limited threat discharges within the Sacramento and San Joaquin River Basins (except Goose Creek) shall at all times be within the range of 6.5 and 8.5.

D. Effluent Limitations – Limited Threat Discharges from Superchlorination Projects

1. **Total Residual Chlorine.** In addition to the effluent limitations contained in Sections V.A. and V.B. above, the discharge from a superchlorination project shall not exceed the following effluent limitations for total residual chlorine:

- a. 0.011 mg/L, as a 4-day average; and
- b. 0.019 mg/L, as a 1-hour average.

MONITORING AND REPORTING

Monitoring and reporting requirements are contained in Attachment E of the Limited Threat General Order. The Discharger is required to comply with the following specific monitoring and reporting requirements for the effluent in accordance with Attachment E of the Limited Threat General Order.

Monitoring Locations – The Discharger shall monitor the effluent at the specified location as follows:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 35
002	EFF-002	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 37
003	EFF-003	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 37-1
004	EFF-004	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 29
005	EFF-005	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 27
006	EFF-006	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 25
007	EFF-007	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 21
008	EFF-008	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 17
009	EFF-009	A location where a representative sample of the effluent can be collected prior to discharging to ACID Lateral 5
010	EFF-010	A location where a representative sample of the effluent can be collected prior to discharging to ACID Main Canal

Effluent Monitoring – When discharging to the ACID irrigation ditch, the Discharger shall monitor the effluent at EFF-001 through EFF-010 as follows:

Table E-2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Flow	MGD	Estimate	1/Day	--

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Day	1
Turbidity	NTU	Grab	1/Day	1
Total Residual Chlorine ⁴	mg/L	Grab	1/Day	1
Electrical Conductivity @ 25 °C	µmhos/cm	Grab	1/Month	1
Temperature	°F	Grab	1/Month	1
Dissolved Oxygen	mg/L	Grab	1/Month	1
Iron, Total Recoverable	µg/L	Grab	1/Month	1
Manganese, Total Recoverable	µg/L	Grab	1/Month	1
Zinc, Total Recoverable	µg/L	Grab	1/Month	1
Aluminum	µg/L	Grab	1/Month	1
Acute Toxicity	% survival	Grab	1/Project Term ²	--
Chronic Toxicity	--	Grab	1/Project Term ³	

1. Pollutants shall be analyzed using the analytical methods described in 40 CRF Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
2. Acute toxicity testing shall be conducted within 3 months of initiation of discharge and shall be analyzed using EPA-821-R-02-012, Fifth Edition. The test species shall be fathead minnows (*Pimephales promelas*).
3. Chronic toxicity testing shall be conducted within 3 months of initiation of discharge and shall be estimated using Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002.
4. Monitoring shall occur within 1 hour of commencing discharge. Additionally, if the 1-hour average effluent limitation is exceeded, then additional monitoring every 30 minutes shall take place until two consecutive monitoring events result in non-detectable levels of total residual chlorine.

Receiving Water Monitoring – Receiving water monitoring is not required. Treated groundwater will be discharged to the ACID irrigation ditch where the project groundwater discharge will combine with irrigation runoff and surface drainage, and the combined flows are discharged to the receiving water. Receiving water monitoring would reflect the effects of the combined discharges and would not represent the effects of the discharge covered under this NOA. Therefore, compliance with receiving water limitations will be determined through effluent monitoring.

Monitoring Report Submittals - Monitoring in accordance with the Limited Threat General Order shall begin upon initiation of discharge. Pursuant to California Water Code Section 13267 monitoring reports shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the First Quarter 2016. This report shall be submitted on 1 May 2016. The monitoring reports shall contain the results of the monitoring described above. If the discharge has not begun there is no need to monitor. However, a monitoring report must be submitted stating that there has been no discharge. Table E-4, below, summarizes the monitoring report due dates required under the Limited Threat General Order. Quarterly monitoring reports must

be submitted until your coverage is formally terminated in accordance with the Limited Threat General Order, even if there is no discharge during the reporting quarter.

Table E-4. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Quarterly Report Due Date
1/Day, 1/Week, 1/Month, 1/Quarter	First day of discharge	1 May (1 Jan – 31 Mar) 1 Aug (1 Apr – 30 Jun) 1 Nov (1 Jul – 30 Sep) 1 Feb, of following year (1 Oct – 31 Dec)

GENERAL INFORMATION AND REQUIREMENTS

Based on the effluent water quality data submitted with the NOI, the Discharger has demonstrated the treatment system is capable of meeting the requirements of the Limited Threat General Order and this NOA, except for the annual average effluent limitation for total recoverable iron, total recoverable manganese, and the maximum daily effluent limitation for total recoverable zinc. In accordance with the Section X.A.2 of the Monitoring and Reporting Program in the Limited Threat General Order, prior to commencing discharge; 1) a representative sample of the effluent shall be collected and analyzed for total recoverable iron, total recoverable manganese, and total recoverable zinc and 2) the test result must demonstrate compliance with the Limited Threat General Order and this NOA.

The Discharger must notify Central Valley Water Board staff within 24 hours of having knowledge of 1) the start of each new discharge, 2) noncompliance, and 3) when the discharge ceases. The Central Valley Water Board shall be notified immediately if any effluent limit violation is observed during implementation of the project.

Discharge of material other than what is described in the application is prohibited. 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 NOA is officially terminated. You must notify this office in writing when the discharge regulated by the Limited Threat General Order is no longer necessary. If a timely written request is not received, the Discharger will be required to pay additional annual fees as determined by the State Water Resources Control Board.

ENFORCEMENT

Failure to comply with the Limited Threat General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory Minimum Penalty (MMP) of \$3,000 per violation. In addition, late monitoring or incomplete reports may be subject to MMPs or discretionary penalties of up to \$1,000 per day late. When discharges do not occur during a quarterly report monitoring period, the Discharger must still submit a quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

Projects T-1003B, T-1003C, I-044C, V-214A, V-215, and V-216 Construction Dewatering

COMMUNICATION

All monitoring report submittals, notification of the beginning and end of discharge, and questions regarding compliance, enforcement, or general aspects of the Limited Threat General Order shall be directed to Jeremy Pagan of the Central Valley Water Board's NPDES Unit. Mr. Pagan can be reached at (530) 224-4850 or jeremy.pagan@waterboards.ca.gov. All documents, including monitoring reports, response to inspections, written notifications, and documents submitted to comply with this NOA and the Limited Threat General Order, should be submitted to the NPDES Unit.

We have transitioned to a paperless office, therefore, please convert all documents to a searchable Portable Document Format (pdf) and email them to centralvalleyredding@waterboards.ca.gov

Please also include the Discharger name, facility name, county, and CIWQS Place ID# in the body of the email. Documents that are 50 megabytes or larger must be transferred to a DVD, or flash drive and mailed to our office, attention "ECM Mailroom-NPDES".

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 pm, 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 pm. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.



(for) Pamela C. Creedon
Executive Officer

JMP: reb

Enclosures: General Order R5-2013-0073-01 (Discharger only)

cc by email: David Smith, U.S. EPA, Region IX, San Francisco
Phil Isorena, Division of Water Quality, State Water Board, Sacramento