



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

17 April 2018

Jim McKay
Senior Land Planner
Pacific Gas and Electric Company
350 Salem Street, Chico, CA 95928

CERTIFIED MAIL
7017 3040 0001 0265 0989

NOTICE OF APPLICABILITY (NOA); GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0076-034 FOR LIMITED THREAT DISCHARGES TO SURFACE WATER; PACIFIC GAS AND ELECTRIC, ROCK CREEK – CRESTA DRUM GATE SEDIMENT REMOVAL PROJECT, PLUMAS COUNTY

Our office received a Notice of Intent on 06 February 2018 from Pacific Gas and Electric (hereinafter Discharger), for discharge of treated water to surface water after sediment is removed from dredged material at two separate dams (Project). The Discharger was previously authorized to discharge treated water for a similar project under the terms and conditions of *General Order R5-2013-0074, NPDES No. CAG995001, Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Water*. A Notice of Applicability (NOA) was issued for General Order No. R5-2013-0074-134 and enrollment started on 16 August 2013 and terminated 24 November 2014. Based on the application packet and subsequent information submitted by the Discharger, staff has determined that the Project meets the required conditions for approval under the General Order for Limited Threat Discharges to Surface Water (Limited Threat General Order), Tier 2. This Project is hereby assigned Limited Threat General Order R5-2016-0076-034 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995002. Please reference your Limited Threat General Order number, **R5-2016-0076-034** in your correspondence and submitted documents.

The Project activities shall be operated in accordance with the requirements contained in the Limited Threat General Order and as specified in this NOA. You are urged to familiarize yourself with the entire contents of the Limited Threat General Order. To conserve resources, the Limited Threat General Order may be viewed at the following web address: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf. A copy of the Limited Threat General Order can also be obtained by contacting or visiting the Central Valley Water Board's office weekdays between 8:00 AM and 5:00 PM.

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 California*, 2005, also known as the State Implementation Policy (SIP). Screening levels for CTR constituents and other constituents of concern are found in Attachment I of the Limited Threat General Order. Comparison between water quality data collected during the previous project

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley



completed at the site and a pilot study treatment with the screening values showed no reasonable potential for the treated discharge to cause or contribute to an exceedance of water quality objectives in the North Fork Feather River, which is a water of the United States.

PROJECT DESCRIPTION

The Rock Creek-Cresta hydroelectric project is comprised of the Rock Creek and Cresta Developments, situated on the North Fork Feather River in western Plumas County. The Rock Creek development consists of the Rock Creek Reservoir, Rock Creek Dam and Intake, a tunnel, two penstocks, and the Rock Creek Powerhouse. The Cresta development, which is immediately downstream of the Rock Creek development, is comprised of the Cresta Reservoir, Cresta Dam and Intake, a tunnel, two penstocks, and the Cresta Powerhouse.

Due to heavy winter storms in 2017, the Rock Creek Dam and Cresta Dam were inspected and it was found that sediment has accumulated at the upstream side of both dams, potentially damaging the normal operation of the drum gates, which regulate the reservoir levels. In order to facilitate future maintenance and repairs at the drum gates, the Project consists of removing sediment that has accumulated in and around the drum gates of the Rock Creek and Cresta Dams.

At each dam, divers will use a vacuum dredge pump staged on barges to remove sediment and debris from near the drum gate and pump to a treatment system at the river bank. Sediment will be separated from the dredged material via two 18,000 gallon settling tanks with added flocculant, sand filters, and bag filters. After sediment has been removed, the treated water will be discharged back into the reservoir at the reservoir bottom near the settling tank staging area in a manner that will not create turbidity. All sediment will be transported off site to a separate Pacific Gas and Electric facility.

The proposed sediment removal process and water discharge is nearly identical to the project that was completed in 2013 for both dams under the terms and conditions of *General Order R5-2013-0074, NPDES No. CAG995001, Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Water*. Monitoring data obtained for this discharge did not result in any exceedances of effluent limitations under the past order. The previous project provides a basis for the treatment rate and proposed discharge as shown below:

- Rock Creek Dam: Approximately 642 CY of sediment to be removed, resulting in an average daily discharge of 0.3 MGD for a duration of 9 weeks and a total discharge of 15 million gallons of effluent.
- Cresta Dam: Approximately 688 CY of sediment to be removed, resulting in an average daily discharge of 0.32 MGD for a duration of 8 weeks and a total discharge of 17 million gallons of water.

Work at the Cresta Dam is expected to begin on 7 May 2018 and work at the Rock Creek Dam is expected to start on 11 July 2018. If work at either dam does not commence prior to 20 August 2018, inform the Central Valley Water Board to determine if additional sampling is required.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. Effluent Limitations and Discharge Specifications of the Limited Threat General Order. The applicable effluent limitations are shown below:

Table 1. Effluent Limitations for Constituents and Parameters of Concern

Parameter	Units	Effluent Limitations		Section Reference
		Average Monthly	Maximum Daily	
Total Suspended Solids	mg/L	10	20	V.B.1
Settleable Solids	mL/L	-	0.1	V.B.1

1. **pH (Section V.A.1.b.ii).** 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.
2. **Whole Effluent Toxicity, Chronic (Section V.A.2.a).** There shall be no chronic toxicity in the discharge.
3. **Whole Effluent Toxicity, Acute (Section V.A.3.b).** Survival of aquatic organisms in 96-hour bioassays of undiluted waste for all limited threat discharges shall be no less than:
 - i. 70%, minimum for any one bioassay; and
 - ii. 90%, median for any three consecutive bioassays.

The North Fork Feather River is listed for Polychlorinated biphenyls (PCBs) and water temperature on the Clean Water Act 303(d) list of impaired water bodies. A Total Maximum Daily Load (TMDL) has not yet been established for the North Fork Feather River. Therefore, no additional 303(d) based effluent limitations or monitoring requirements are included in this NOA.

RECEIVING WATER LIMITATIONS

The Limited Threat General Order includes receiving surface water limitations in Section VIII.A. Based on the information provided in the NOI, only the following receiving surface water limitations are applicable to this discharge:

- Color (VIII.A.5);
- Floating material (VIII.A.7);
- Oil and grease (VIII.A.8);
- pH (VIII.A.9.a);
- Suspended sediments (VIII.A.12);
- Settleable substances (VIII.A.13);
- Suspended material (VIII.A.14);
- Taste and odors (VIII.A.15);
- Temperature (VIII.A.16);
- Toxicity (VIII.A.17); and
- Turbidity (VIII.A.18.a).

MONITORING AND REPORTING

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

In addition to the Monitoring and Reporting Program outlined below, the Discharger shall conduct the following visual monitoring program:

- A. Visually monitor suction-dredge discharge operations for the presence of turbidity or other pollutants
 - a. each day at start-up,
 - b. continuously while dredging activities are taking place, and
 - c. the end of daily operations.
- B. Visual monitoring shall be conducted at the following areas:
 - a. The length of the filtration system (pipe/lines, connections, tanks, etc.), in particular the piping/lines floating on the surface of the reservoir.
 - b. The discharge location from the filtration system to the reservoir.
- C. In conducting the visual monitoring program, a log shall be kept of the conditions observed.

Monitoring Locations – The Discharger shall monitor the effluent and receiving water at the specified locations as follows:

Table 2. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A location where a representative sample of the effluent at Rock Creek Dam can be collected prior to discharging to the North Fork Feather River.
002	EFF-002	A location where a representative sample of the effluent at Cresta Dam can be collected prior to discharging to the North Fork Feather River.
--	RSW-001	North Fork Feather River, approximately 200 feet upstream from the point of discharge at Rock Creek Dam.
--	RSW-002	North Fork Feather River, approximately 200 feet downstream from the point of discharge at Rock Creek Dam.
--	RSW-003	North Fork Feather River, approximately 200 feet upstream from the point of discharge at Cresta Dam.
--	RSW-004	North Fork Feather River, approximately 200 feet downstream from the point of discharge at Cresta Dam.

Effluent Monitoring – When discharging to surface water, the Discharger shall monitor the effluent at EFF-001 and EFF-002 in accordance with Table C-3 of the Limited Threat General Order and this NOA. The applicable monitoring requirements are as follows in Table 3:

Table 3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Discharge Flow Rate, Total	MGD	Known or calculated	Continuous	1
Electrical Conductivity @ 25 °C	µmhos/cm	Grab	2/month	1,2
pH	standard units	Grab	1/week	1,2
Turbidity	NTU	Grab	1/week	1,2
Temperature	°F	Grab	1/week	1,2
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Project Term ⁶	1,2
Acute Toxicity	% survival	Grab	1/Project Term ⁴	2
Chronic Toxicity	TUc	Grab	1/Project Term ⁴	2
Total Suspended Solids	mg/L	Grab	2/month	2
Settleable Solids	mL/L	Grab	2/month	2
Dissolved Oxygen	mg/L	Grab	2/month ⁵	1,2
Total Dissolved Solids	mg/L	Grab	1/Permit Term ⁵	1,2
Unionized Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Permit Term ⁵	2
Aluminum, Total Recoverable	µg/L	Grab	1/Permit Term ⁵	2,3
Iron, Total Recoverable	µg/L	Grab	1/Permit Term ⁵	2
Manganese, Total Recoverable	µg/L	Grab	1/Permit Term ⁵	2

¹ A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

² Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

³ Compliance with final effluent limitations for aluminum can be demonstrated using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively couple plasma/mass spectrometry) analysis methods, as supported by U.S. EPA's *Ambient Water Quality Criteria for Aluminum* document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.

⁴ Chronic and acute toxicity testing shall be conducted within 3 months of initiation of discharge for EFF-001 or EFF-002, whichever discharges first. For acute toxicity testing, the test species shall be fathead minnows (*Pimephales promelas*) or rainbow trout (*Oncorhynchus mykiss*). See the Monitoring and Reporting Program (Attachment C) for toxicity monitoring requirements.

⁵ Sample to be collected during first day of discharge for EFF-001 or EFF-002, whichever occurs first, and submitted to the laboratory for analysis as soon as practicable. The Discharger shall provide analytical results to the Central Valley Water Board immediately upon receipt. If analytical results exceed screening levels listed in Table I-2 of the Limited Threat General Order, this NOA will be re-issued and effluent limitations may be imposed for the corresponding pollutant. Central Valley Water Board will determine if sampling is required at second discharge location based on analytical results of first discharge location.

⁶ Sample to be collected at both EFF-001 and EFF-002.

Receiving Water Monitoring - When discharging to surface water, the Discharger shall monitor the receiving water at RSW-001, RSW-002, RSW-003, and RSW-004 in accordance with Table C-5 of the Limited Threat General Order and this NOA. The applicable monitoring requirements are as follows in Table 4:

Table 4. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Monitoring Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	1/week	1,2
Electrical Conductivity @ 25 °C	µmhos/cm	Grab	1/week	1,2
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Project Term ³	1,2
pH	standard units	Grab	1/week	1,2
Temperature	°F	Grab	1/week	1,2
Turbidity	NTU	Grab	1/week	1,2

¹ A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained by the Discharger.

² Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

³ Sample to be collected at RSW-001, RSW-002, RSW-003, and RSW-004.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001, RSW-002, RSW-003, and RSW-004. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- b. Discoloration
- c. Bottom deposits
- d. Aquatic life
- e. Visible films, sheens, or coatings
- f. Fungi, slimes, or objectionable growths
- g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the Monitoring Report.

Monitoring Report Submittals - Monitoring in accordance with the Limited Threat General Order shall begin upon initiation of discharge. Monitoring Reports shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the **Second Quarter 2018**. If monitoring samples were not obtained within 24 hours of initiation of the discharge, the Discharger must document the reasons in the corresponding Monitoring Report. If the discharge has not begun there is no need to monitor. However, a certified Monitoring Report must be submitted stating that there has been no discharge. Table 5, 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 5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Quarterly Report Due Date
1/Day, 1/Week, 1/Month, 1/Quarter	17 April 2018	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

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 invoice 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 by submitting the Request for Termination of Coverage (Attachment E). 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 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 monitoring period, the Discharger must still submit a quarterly certified Monitoring Report indicating that no discharge occurred to avoid being subject to enforcement actions.

COMMUNICATION

All documents, including Monitoring Reports, written notifications, and documents submitted to comply with this NOA and the Limited Threat General Order, should be submitted to the NPDES Compliance Unit, Attention: Michael Collins. Mr. Collins can be reached at (530) 224-4785 or michael.collins@waterboards.ca.gov.

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 include the following information in the email:** Attention: NPDES Compliance Unit; Discharger: Pacific Gas and Electric; Facility: Rock Creek-Cresta Drum Gate Sediment Removal; County: Plumas County; and the CIWQS place ID 845636 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". Please include the attached Monitoring Report Transmittal Form as the first page of each Monitoring Report.

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 p.m., 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 p.m. 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.

ORIGINAL SIGNED BY Bryan J. Smith, Supervising Water Resource Control Engineer

(for) Patrick Pulupa, Incoming Executive Officer for
Pamela C. Creedon, Executive Officer

MAN: db

Enclosures (2): Attachment A - Project Location Map
Monitoring Report Transmittal Form (Discharger only)

cc: David Smith, U.S. EPA, Region IX, San Francisco (email only)
Afrooz Farsimadan, Division of Water Quality, State Water Board, Sacramento (email only)

ATTACHMENT A – PROJECT LOCATION MAP



Figure 1: Rock Creek Dam Site Plan



Figure 2: Cresta Dam Site Plan