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## Central Valley Regional Water Quality Control Board

5 August 2016

Mr. Scott Magrini  
Pacific Gas & Electric Company  
3600 Meadowview Drive  
Redding, CA 96002

***CLEAN WATER ACT TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION;  
PACIFIC GAS & ELECTRIC COMPANY, PIT 3 TAILRACE CONCRETE REPAIR PROJECT  
(WDID#5A45CR00500), BURNEY, SHASTA COUNTY***

This Order responds to the 23 June 2016 application submitted by Pacific Gas & Electric Company (Applicant) for the Water Quality Certification of a Utilities project permanently impacting 0.01 acre of waters of the United States.

This Order serves as certification of the United States Army Corps of Engineers' Nationwide Permit # 3, Maintenance under Section 401 of the Clean Water Act, and a Waste Discharge Requirement under the Porter-Cologne Water Quality Control Act.

### **WATER QUALITY CERTIFICATION STANDARD CONDITIONS:**

1. This Order serves as a Water Quality Certification (Certification) action that is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code and Section 3867 of the California Code of Regulations (CCR).
2. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR Section 3855(b) of the California Code of Regulations, and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity of any non-denial certification action shall be conditioned upon total payment of the full fee required Section 3833 of the California Code of Regulations.
4. This Certification is no longer valid if the project (as described) is modified, or coverage under Section 404 of the Clean Water Act has expired.

5. All reports, notices, or other documents required by this Certification or requested by the Central Valley Water Board shall be signed by a person described below or by a duly authorized representative of that person.
  - a. For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if *authority* to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official.
6. Any person signing a document under Standard Condition No. 5 shall make the following certification, whether written or implied:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### **TECHNICALLY CERTIFICATION CONDITIONS:**

In addition to the above standard conditions, the Applicant shall satisfy the following:

1. The Applicant shall notify the Central Valley Regional Water Quality Control Board (Central Valley Water Board) in writing at least **seven (7) days** in advance of the start of any work within waters of the United States. The notification shall include the name of the project and the WDID number, and shall be sent to the Central Valley Water Board Contact indicated in this Certification.
2. Except for activities permitted by the U.S. Army Corps under Section 404 of the Clean Water Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.
3. The Applicant shall maintain a copy of this Certification and supporting documentation (Project Information Sheet) at the Project site during construction for review by site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed Project shall be adequately informed and trained regarding the conditions of this Certification.

4. The Applicant shall perform surface water sampling:
- a) when performing any in-water work;
  - b) in the event that project activities result in any materials reaching surface waters; or
  - c) when any activities result in the creation of a visible plume in surface waters.

The monitoring requirements in Table 1 shall be conducted by taking a sample of the ambient conditions before work begins in the work area, and sampling during work in the work area. The sampling frequency may be modified for certain projects with written approval from Central Valley Water Board staff.

**Table 1:**

Parameter	Unit	Type of Sample	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab <sup>(1)</sup>	Every 4 hours during in-water work	(2,4)
Settleable Material	mL/L	Grab <sup>(1)</sup>	Every 4 hours during in-water work	(2)
Visible construction related pollutants <sup>(3)</sup>	Observations	Visual Inspections	Continuous throughout the construction period	—
Temperature	°F (or as °C)	Grab <sup>(1)</sup>	Every 4 hours during in-water work	(2,4)
pH	Standard Units	Grab <sup>(1)</sup>	Every 4 hours during in-water work	(2,4)
Dissolved Oxygen	mg/L & % saturation	Grab <sup>(1)</sup>	Every 4 hours during in-water work	(2,4)

<sup>(1)</sup> Grab samples shall be taken at mid-depth and be collected at the same time each day to get a complete representation of variations in the receiving water.

<sup>(2)</sup> Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff.

<sup>(3)</sup> Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.

<sup>(4)</sup> A hand-held field meter may be used, provided that the meter utilizes a USEPA-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 Certification shall be maintained at the Project site.

As appropriate, surface water monitoring shall occur at mid-depth. A surface water monitoring report shall be submitted to the Central Valley Water Board Contact indicated in this Certification within two weeks of initiation of sampling and every two weeks thereafter. In reporting the monitoring data, the Applicant shall arrange the data in tabular form so that the sampling locations, date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the Project complies

with Certification requirements. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase in the receiving water applicable to the natural turbidity conditions specified in the turbidity criteria below.

If no monitoring is conducted, the Applicant shall submit a written statement to the Central Valley Water Board Contact indicated in the Certification stating, "No monitoring was required." with the Notice of Completion.

5. The Central Valley Water Board adopted a *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Fourth Edition, revised April 2016* (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Turbidity, settleable matter, temperature, pH, and dissolved oxygen limits are based on water quality objectives contained in the Basin Plan and are part of this Certification as follows:

- a) Activities shall not cause turbidity increases in surface water to exceed:
  - i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTU;
  - ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU;
  - iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
  - iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs;
  - v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

Except that these limits will be eased during in-water working periods to allow a turbidity increase of 15 NTUs over background turbidity. In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior approval of the Central Valley Water Board staff.

- b) Activities shall not cause settleable matter to exceed 0.1 mL/L in surface waters as measured in surface waters within the work area.
- c) Activities shall not cause temperature in surface waters to increase more than 5°F above natural receiving water temperature for waters with designated COLD or WARM beneficial uses.
- d) Activities shall not cause pH to be depressed below 6.5 nor raised above 8.5 in surface water.

- e) Activities shall not cause dissolved oxygen to be reduced below 5.0 mg/L for waters designated with the WARM beneficial use, and 7.0 mg/L for waters designated with the COLD or SPWN beneficial uses, in surface water.
6. The Applicant shall notify the Central Valley Water Board immediately if the above criteria for turbidity, settleable matter, temperature, pH, dissolved oxygen or other water quality objectives are exceeded.
7. Work shall occur during periods of low water level (i.e., water level shall be below the construction area) and no precipitation.
8. Activities shall not cause visible oil, grease, or foam in the receiving water.
9. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Applicant must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.
10. The Applicant shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the Project. The Plan must detail the Project elements, construction equipment types and location, access and staging and construction sequence. The Plan must also address the potential of responding to a spill or prevention of spills occurring within the Project site.
11. Raw cement, concrete (or washing), asphalt, drilling fluids, lubricants, paints, coating material, oil, petroleum products, or any other substances which could be hazardous to fish and wildlife resulting from or disturbed by project-related activities, shall be prevented from contaminating the soil and/or entering waters of the United States.
12. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete, asphalt, paint, coating material, drilling fluids, or other construction-related potentially hazardous substances to surface water and/or soil is prohibited. In the event of a prohibited discharge, the Applicant shall notify the Central Valley Water Board Contact within 24-hours of the discharge.
13. Concrete must be completely cured before coming into contact with waters of the United States. Surface water that contacts wet concrete must be pumped out and disposed of at an appropriate off-site commercial facility, which is authorized to accept concrete wastes.

14. A method of containment must be used below the bridge(s), boardwalk(s), or temporary crossing(s) to prevent debris from falling into the water body as feasible.
15. If installation or relocation of dry and/or wet utility lines is anticipated, the Applicant shall develop and submit Dry and Wet Utility Work Plan to the Central Valley Water Board Contact indicated in this Certification prior to commencement of dry and wet utility construction. The Dry and Wet Utility Plan must cover all phases of the certified project that will impact waters of the United States, and shall be consistent with this Certification.

The Dry and Wet Utility Plan shall include the types of dry and wet utilities to be removed and installed, method and duration of activities, structure configuration, construction materials, equipment, erosion and sediment controls, and a map or drawing indicating the location(s) of dry and wet utility work, as related to any water of the United States, in the project area.

Should the methodology for dry and wet utility work include directional drilling, the Dry and Wet Utility Plan shall incorporate a Directional Drilling Plan to address potential frac-outs. The Directional Drilling Plan shall include, but not be limited to, a description of directional drilling activities, dry and wet utility routes, crossing locations and methods, and other geotechnical considerations (i.e., surficial overburden deposits, clays and shales, bedrock formations, hydrogeology), and a reporting procedure should any level of discharge from a frac-out occur, regardless of the discharge size.

The Directional Drilling Plan must be stamped by a California Registered Geologist (PG) or Professional Engineer (PE).

16. An effective combination of erosion and sediment control Best Management Practices (BMPs) shall be implemented and adequately working during all phases of construction.
17. All areas disturbed by Project activities shall be protected from washout or erosion.
18. All temporarily affected areas shall be restored to pre-construction contours and conditions upon completion of construction activities.
19. This Certification does not allow permanent water diversion of flow from the receiving water. This Certification is invalid if any water is permanently diverted as a part of the Project.
20. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable State or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order.

- a) If Pacific Gas & Electric Company or a duly authorized representative of the project fails or refuses to furnish technical or monitoring reports, as required under this Order, or falsifies any information provided in the monitoring reports, the applicant is subject to civil monetary liabilities, for each day of violation, or criminal liability.
- b) In response to a suspected violation of any condition of this certification, Central Valley Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the Central Valley Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. (Water Code, Section 1051, 13165, 13267 and 13383) In response to any violation of the conditions of this certification, the Central Valley Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.
- c) Pacific Gas & Electric Company shall allow the staff of the Central Valley Water Board, or an authorized representative(s), upon the presentation of credentials and other documents, as may be required by law, to enter the Project premises for inspection, including taking photographs and securing copies of Project-related records, for the purpose of assuring compliance with this Certification and determining the ecological success of the Project.

#### **NOTIFICATIONS AND REPORTS:**

21. The Applicant shall notify the Central Valley Water Board within 7 days of the project completion.
22. The Applicant shall provide the Central Valley Water Board Contact indicated in this Certification a Notice of Completion (NOC) no later than 30 days after the Project completion. The NOC shall demonstrate that the project has been carried out in accordance with the project description in the Certification and in any amendments approved. The NOC shall include a map of the project location(s), including final boundaries of any on-site restoration area(s), if appropriate, and representative pre and post construction photographs. Each photograph shall include a descriptive title, date taken, photographic site, and photographic orientation
23. The Applicant shall submit all notifications, submissions, materials, data, correspondence, and reports in a searchable Portable Document Format (PDF). Documents less than 50 MB must be emailed to: [centralvalleyredding@waterboards.ca.gov](mailto:centralvalleyredding@waterboards.ca.gov). In the subject line of the email, include the Central Valley Water Board Contact, Project name, and WDID number as shown in the subject line above. Documents that are 50 MB or larger must be transferred to a disk and mailed to the Central Valley Water Board Contact.

### **STORM WATER QUALITY CONDITIONS:**

The Applicant shall also satisfy the following additional storm water quality conditions:

1. The Applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ, as amended, for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.
2. During the construction phase, the Applicant must employ strategies to minimize erosion and the introduction of pollutants into storm water runoff. These strategies must include the following:
  - a) the Storm Water Pollution Prevention Plan (SWPPP) must be prepared during the project planning and design phases and before construction;
  - b) an effective combination of erosion and sediment control Best Management Practices (BMPs) must be implemented and adequately working prior to the rainy season and during all phases of construction.
3. The Applicant must minimize the short and long-term impacts on receiving water quality from the Project by implementing the following post-construction storm water management practices:
  - a) minimize the amount of impervious surface;
  - b) reduce peak runoff flows;
  - c) provide treatment BMPs to reduce pollutants in runoff;
  - d) ensure existing waters of the State (e.g., wetlands, vernal pools, or creeks) are not used as pollutant source controls and/or treatment controls;
  - e) preserve and, where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones;
  - f) limit disturbances of natural water bodies and natural drainage systems caused by development (including development of roads, highways, and bridges);
  - g) use existing drainage master plans or studies to estimate increases in pollutant loads and flows resulting from projected future development and require incorporation of structural and non-structural BMPs to mitigate the projected pollutant load increases in surface water runoff;
  - h) identify and avoid development in areas that are particularly susceptible to erosion and sediment loss, or establish development guidance that protects areas from erosion/ sediment loss;
  - i) control post-development peak storm water run-off discharge rates and velocities to prevent or reduce downstream erosion, and to protect stream habitat.



**REGIONAL WATER QUALITY CONTROL BOARD CONTACT PERSON:**


Guy Chetelat, Engineering Geologist  
Central Valley Regional Water Quality Control Board  
364 Knollcrest Drive, Suite 205, Redding, California 96002  
Guy.Chetelat@waterboards.ca.gov  
(530) 224-4997

**WATER QUALITY CERTIFICATION:**

I hereby issue an Order certifying that any discharge from Pacific Gas & Electric Company, Pit 3 Tailrace Concrete Repair Project (WDID# 5A45CR00500) will comply with the applicable provisions of Section 301 ("Effluent Limitations"), Section 302 ("Water Quality Related Effluent Limitations"), Section 303 ("Water Quality Standards and Implementation Plans"), Section 306 ("National Standards of Performance"), and Section 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification (General WDRs)."

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in compliance with conditions of this Certification, the Pacific Gas & Electric Company's application package, and the attached Project Information Sheet, and (b) compliance with all applicable requirements of the *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Fourth Edition, revised April 2016* (Basin Plan).

Any person aggrieved by this action may petition the State Water Quality Control Board to review the action in accordance with California Water Code Section 13320 and California Code of Regulations, title 23, Section 2050 and following. The State Water Quality Control Board must receive the petition by 5:00 p.m., 30 days after the date of this action, except that if the thirtieth day following the date of this action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Quality Control 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](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

  
(for) Pamela C. Creedon  
Executive Officer

GC:wrb:sjs

Enclosure: Water Quality Order No. 2003-0017 DWQ

cc w/o Mr. Matt Kelley, U.S. Army Corp of Engineers, Redding  
enclosures: Ms. Donna Cobb, Department of Fish and Wildlife, Region 1, Redding  
U.S. Fish and Wildlife Service, Sacramento  
Mr. Bill Jennings, CALSPA, Stockton

cc w/o  
enclosures    Mr. Bill Orme, SWRCB, Certification Unit, Sacramento  
by email:      U.S. EPA, Region 9, San Francisco

## PROJECT INFORMATION

**Application Date:** 23 June 2016

**Application Deemed Complete:** 4 August 2016

**Applicant:** Mr. Scott Magrini  
Pacific Gas & Electric Company  
3600 Meadowview Drive  
Redding, CA 96002

**Project Name:** Pit 3 Tailrace Concrete Repair Project

**Application Number:** WDID No. 5A45CR00500

**Type of Project:** Utilities

**Project Location:** Section 09, Township 36 North, Range 02 East  
Latitude: 40°59'51" and Longitude: -121°44'53"

**County:** Shasta County

**Receiving Water(s) (hydrologic unit):** Pitt River. Pitt River Hydrologic Unit-Lake Britton  
Hydrologic Subarea No. 526.31

**Water Body Type:** Streambed

**Designated Beneficial Uses:** The *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Fourth Edition, revised April 2016* (Basin Plan) has designated beneficial uses for surface and ground waters within the region. Beneficial uses that could be impacted by the project include, but are not limited to: Municipal and Domestic Water Supply (MUN); Agricultural Supply (AGR); Industrial Supply (IND); Hydropower Generation (POW); Groundwater Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Cold Freshwater Habitat (COLD); Rare, Threatened, or Endangered Species (RARE); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Wildlife Habitat (WILD). A comprehensive and specific list of the beneficial uses applicable for the project area can be found at [http://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml).

**Project Description (purpose/goal):** The Pit 3 Tailrace Concrete Repair Project is located at the Pit 3 Powerhouse in Burney. The project consists of repairing the floor of the Pit 3 powerhouse tailrace at five specific locations. The work will require excavation of degraded concrete, installation of new concrete, and the removal of a small amount of sediment and debris from the draft tubes and pressure release valves. The project will permanently impact 0.01 acre of waters of the United States.

**Preliminary Water Quality Concerns:** Construction activities including soil disturbance, excavation, cutting/filling, and grading activities could result in increased erosion and

sedimentation and may impact surface waters with increased turbidity, settleable matter temperature, pH and dissolved oxygen.

**Proposed Mitigation to Address Concerns:** The Applicant will implement Best Management Practices (BMPs) to control sedimentation and erosion. All temporary affected areas will be restored to pre-construction contours and conditions upon completion of construction activities. The Applicant will conduct turbidity, settleable matter temperature, pH, and dissolved oxygen testing during in-water work, stopping work if Basin Plan criteria are exceeded or are observed.

**Fill/Excavation Area:** Approximately 0.01 acre of native soil will be excavated into 0.15 acres of waters of the United States. Approximately 23 cubic yards of concrete and gravel will be placed into 0.15 acres of waters of the United States.

**Dredge Volume:** Approximately 3 cubic yards of native soil and rock will be dredged from 0.15 acres of waters of the United States.

**California Integrated Water Quality System Impact Data:** The Project will permanently impact 0.01 acre of stream bed from fill/excavation/dredging activities.

**Table 2: Impacts from Fill and Excavation Activities**

Aquatic Resource Type	Temporary			Permanent					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	Cubic-yards	Linear-feet	Acres	Cubic-yards	Linear-feet	Acres	Cubic-yards	Linear-feet
Stream Channel	--	--	--	0.01	--	--	--	23	--

Notes  
 NA Not Applicable

**Table 3: Impacts from Dredging Activities**

Aquatic Resource Type	Temporary			Permanent					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	Cubic-yards	Linear-feet	Acres	Cubic-yards	Linear-feet	Acres	Cubic-yards	Linear-feet
Stream Channel	--	--	--	--	3	--	--	--	--

Notes  
 NA Not Applicable

**U.S. Army Corps of Engineers Permit Number:** Non-Reporting

**United States Army Corps of Engineers Permit Type:** Nationwide Permit #3, Maintenance

**Department of Fish and Wildlife Lake or Streambed Alteration Agreement:** The Applicant did not apply for a Lake or Streambed Alteration Agreement.

**Possible Listed Species:** Rough sculpin

**Status of CEQA Compliance:** The Central Valley Water Board has determined that this project meets the Statutory Exemption, under Section 15301 of the California Code of Regulations, which exempts replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.

**Compensatory Mitigation:** The Central Valley Water Board is not requesting compensatory mitigation for the Project.

**Application Fee Provided:** Not Applicable