CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT AND WATER CODE SECTION 13267 INVESTIGATIVE ORDER NO. R5-2023-0506

FOR

PACIFIC GAS AND ELECTRIC COMPANY

UTILITY POST-FIRE RECOVERY AND CONSTRUCTION ACTIVITIES WITHIN THE 2021 DIXIE FIRE PERIMETER

BUTTE, PLUMAS, TEHAMA, LASSEN & SHASTA COUNTIES

This Order is issued to Pacific Gas and Electric Company (PG&E) (hereafter referred to as "Discharger") based on provisions of California Water Code section 13304, which authorizes the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to issue an order requiring the cleanup and abatement of wastes, and Water Code section 13267, which authorizes the Central Valley Water Board to require the preparation and submittal of technical and monitoring reports.

The Executive Officer finds, with respect to the Discharger's acts, or failures to act, the following:

Purpose of the Order

1. This Order requires the Discharger to clean up wastes generated from ground disturbing activities caused by overhead electric utility infrastructure repair and related construction activities within the 2021 Dixie Fire burn area, leading to unauthorized discharges and threatened discharges of waste to the North Fork of the Feather River (NF Feather River) and its tributaries. These activities have caused the discharge of wastes and threaten future discharges of waste to waters of the State of California (state) and waters of the United States (U.S.) in violation of the Porter-Cologne Water Quality Control Act (Water Code) and the federal Clean Water Act. This Order requires investigation and cleanup in compliance with the Water Code, the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fifth Edition, February 2019 (Basin Plan), State Water Resources Control Board (State Water Board) Resolution No. 92-49¹, and other applicable state and Central Valley Water Board plans, policies, and regulations.

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¹ Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code section 13304 (Resolution 92-49)

Site Location and Description

- 2. PG&E owns and manages roughly 111 miles of overhead energy transmission lines within the 963,309 acres burned in the 2021 Dixie Fire. Post-fire utility infrastructure recovery activities have occurred throughout the 2021 Dixie Fire burn area since mid-2021, spanning Butte, Plumas, Tehama, Shasta, and Lassen counties. Significant construction activities associated with repair and recovery activities have negatively impacted and are continuing to negatively impact tributaries and mainstem watercourses within the NF Feather River watershed. The NF Feather River ultimately flows into Lake Oroville. The NF Feather River is a water of the state and a water of the U.S.
- 3. To date staff have inspected the following specific areas of PG&E activities within the Dixie Fire burn area:
 - a. Caribou and Caribou Plumas Junction 60kV Emergency Rebuild Project (Caribou Project). The Caribou Project extends from the town of Twain to the PG&E Caribou Powerhouse.
 - b. Caribou Westwood Line. The Caribou Westwood Line extends from the Caribou Powerhouse to Canyondam.
 - c. An area directly south of Twain.
 - d. Butterfly Valley, which is located approximately six miles east southeast of Twain.

Responsible Parties

- 4. This Order finds that PG&E is a responsible party based on the following:
 - a. PG&E is the current owner and operator of the majority of utility infrastructure located within the 2021 Dixie Fire burn area. PG&E operates hydroelectric generation facilities, transmission lines, and distribution lines within the areas inspected. According to the California Public Utilities Commission (CPUC), PG&E is the sole owner and operator of the utility infrastructure within the NF Feather River watershed.
 - b. PG&E owns and operates utility infrastructure on private lands. As the current owner and operator of the utility infrastructure, it retains responsibility for operations under its control.
 - c. PG&E holds land use agreements with the United States Forest Service (USFS) for easements across USFS lands within the 2021 Dixie Fire burn area. PG&E has conducted significant utility related construction activities across USFS lands since mid-2021. Under the USFS agreements, PG&E retains authority to

- maintain its infrastructure within its Right of Way (ROW) in accordance with standards for roads and ground disturbance set by the USFS.
- d. As the owner and operator of the utility infrastructure at the time of the construction activities PG&E had, or should have had, knowledge of the activities that resulted in the unauthorized discharges and threatened discharges of waste to receiving waters and had the ability and legal responsibility to prevent the discharges from occurring. PG&E also has the ability to remediate conditions at the locations of their construction and ground-disturbing activities and to prevent additional threatened discharges to waters of the state and U.S.
- 5. The Central Valley Water Board reserves the right to amend this Order to add additional responsible parties if/when those parties are identified.
- 6. The Central Valley Water Board, by adopting this Order, is not making any determination as to apportionment of liability among or between responsible parties and nothing in this Order is intended to limit, or shall be interpreted as limiting, a responsible party's ability to seek reimbursement or indemnity from any and all other responsible parties.

Factual Basis of the Order

- 7. On 8 September 2021, while conducting routine post-fire inspections, Central Valley Water Board staff (staff) documented large-scale ground-disturbing activities being conducted within utility corridors in the NF Feather River watershed near the Caribou Powerhouse. During the inspection, staff documented threatened waste discharges from active grading operations occurring on steep slopes above Lower Butt Creek and the NF Feather River.
- 8. On 28 September 2021, staff conducted an aerial survey of the Dixie Fire burn area to assess general post-fire conditions and to further evaluate the ground-disturbing activities previously observed in the Canyondam, Caribou, Rush Creek Hill and Twain localities.
- Throughout 2021 and 2022, staff conducted numerous inspections of operations conducted by the Discharger throughout the Dixie Fire burn area, including the Caribou Project. Inspections were conducted on 28 October 2021, 23 November 2021, 31 January 2022, 22 March 2022, 26 May 2022 and 27 July 2022.

Water Quality Concerns

10. During the inspections conducted by Central Valley Water Board staff, numerous water quality concerns resulting from the Discharger's ground-disturbing activities were documented, including unauthorized discharges of waste and threatened discharges of waste to waters of the state and waters of the U.S. Staff continually

identified the absence of effective erosion and sediment controls, drainage measures and other best management practices (BMPs). The Discharger's failure to implement effective BMPs, has led to unauthorized discharges of waste to waters of the state and U.S., and continued threats of waste discharge. Water quality concerns noted during site inspections are associated with the following:

- a. Active hazard-tree removal and large-scale grading activities associated with road and transmission tower support pad construction.
- b. Road building, grading and earth-moving equipment on steep slopes comprised of erodible soils above both Johnson Ravine and Rush Creek, both Class I² watercourses and tributaries to the NF Feather River.
- c. Large fill slopes constructed for access roads and transmission tower support pads in the Johnson Ravine and Rush Creek area that discharged sediment to Rush Creek and surrounding drainages.
- d. Access road construction on steep-slopes on both sides of lower Butt Creek and the NF Feather River, and in close proximity to Clear and Ohio Creeks, which are Class I tributaries to the NF Fork Feather River.
- e. Unauthorized discharges of sediment laden runoff and sediment to Class I, II and III watercourses.
- f. Continued threat of discharges due to the lack of appropriate design and installation of drainage features and BMPs on access roads and disturbed areas.
- g. Unauthorized discharge of earthen fill directly to Class I watercourses, including the NF Feather River.
- h. Unstable fill slopes associated with construction and re-construction of access roads and utility infrastructure pads.
- i. Disturbance of the bed and bank of the NF Feather River from an unimproved equipment crossing.
- j. Storage and unauthorized discharge of petroleum products within the floodplain of the NF Feather River.
- k. Unauthorized discharges and threatened discharges of sediment resulting from grading activities.

² Fish-bearing.

 Deficient BMPs within the Caribou Project Area leading to a critical slope/sheet flow length combination and deficient BMPs related to run-on and run-off controls, constituting violations under the Storm Water Construction General Permit (CGP).

Staff Response to Date

- 11. As a result of observations made during inspections and concerns regarding the extent of construction activities occurring across the Dixie Fire burn area and associated potential water quality impacts, Central Valley Water Board staff made several information requests to the Discharger, as described below.
- 12. On 29 September 2021, staff issued a letter requesting the Discharger prioritize water quality concerns and describe plans for stabilization and remediation of ground-disturbing activities associated with utility infrastructure repair throughout the Dixie Fire burn area. Due to the nature and scope of the request, the Discharger replied to the information request in three separate submittals related to the Dixie Fire burn area:
 - a. On 19 November 2021, the Discharger submitted initial information regarding post-fire repair and restoration activities within the Dixie Fire burn area. This submittal included a description of a geographic information system (GIS) prioritization model and plans for future data and information submittals.
 - On 17 December 2021, the Discharger submitted additional GIS data sets that provided information and attributes on infrastructure locations, inspections, and status of project activities.
 - c. On 18 January 2022, the Discharger submitted a Risk Prioritization Model and a BMP Implementation Plan that provided additional narrative and details of work planning, methods of prioritization, and an overview of BMP implementation and maintenance.
- 13. On 13 October 2021, the Discharger applied for coverage under the State Water Resources Control Board's National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order 2009-0009-DWQ (CGP, WDID No. 5R32C395392) for the Caribou Project.
- 14. On 30 December 2021, Central Valley Water Board staff issued a second information request for technical reports associated with road and utility infrastructure construction activities specific to the Caribou Project.
 - a. On 4 February 2022, the Discharger responded by providing results of a more detailed prioritization model that identified areas of potential threats to water quality and associated priority for further assessment. Due to the need to gather

- additional site specific information and details, PG&E indicated they would provide more detailed information in a separate submittal.
- b. On 3 May 2022, the Discharger provided a second submittal for the Caribou Project that provided information regarding post-fire emergency repair activities and planned work in a Roads Mitigation Plan (Roads Plan). The Roads Plan addressed planned work on a section of the Caribou Project from Rush Creek to Highway 70 but did not incorporate all the access roads associated with the entire Caribou Project as requested.
- 15. On 6 May 2022, Central Valley Water Board staff responded in a comment letter to the 3 May 2022 Roads Plan submission that the Roads Plan lacked adequate detail to evaluate the proposed work. The Roads Plan lacked specifics on the BMP standards, such as road drainage spacing requirements and typical designs, that were to be applied to ensure consistent and adequate implementation across the Caribou Project area, and minimal details were provided on the location of BMPs to be applied. Staff also noted that because of the difficult terrain and placement of the access roads, significant consideration must be given to designing the drainage system and appropriate BMPs implemented to ensure protection of water quality from discharges of waste to surface waters. Staff also informed the Discharger that documents PG&E submitted for coverage under the CGP did not adequately identify the measures proposed in the Roads Plan, and that the Roads Plan did not contain sufficient details for staff evaluation.
- 16. On 12 May 2022, staff issued a Notice of Violation (NOV) to PG&E (NOV #1) that documented numerous violations stemming from PG&E's work based on observations made during multiple inspections conducted between September 2021 and February 2022. Violations generally stemmed from erosion and sediment discharges resulting from access roads, ground-disturbing operations, placement of fill, and petroleum storage in support of construction activities. NOV #1 requested the Discharger develop a comprehensive work plan to address the violations and that the work plan include site-specific information for all access roads, associated watercourse crossings, and all other disturbed areas associated with PG&E's work within the Dixie Fire burn area. NOV #1 requested the following:
 - a. Site specific plans detailing specific BMPs, including identifying the locations of proposed installation of BMPs and their installation specifications, throughout the Caribou Project along with other areas where similar work has been or will be conducted within the 2021 Dixie Fire burn area.
 - b. Provide temporary and permanent watercourse crossing design standards that are protective of water quality, including diversion potential for the following:
 - i. For culverted crossings, design standards should include design flow calculations for 100-year storm events including debris.

- ii. For rocked low water crossings, standards should include minimum and maximum rock sizes adequate to withstand 100-year storm flows.
- iii. Standards should include rock armoring specifications, including maximum and minimum sizes, for unprotected fills and stream banks at crossing locations.
- c. Upon review of the inspection report included with NOV #1, staff identified clerical errors associated with inspection dates. The corrections are as follows:
 - i. Page 1 of the inspection report omitted listing an aerial inspection that was conducted on 22 September 2021 in the inspection dates section.
 - ii. Page 4 of the inspection report, under section titled "Caribou Project Overview", the date listed as 18 September 2021 should be 22 September 2021.
 - iii. In Appendix B of the inspection report, Photos 15, 18, 22, and 53 should be dated 22 September 2021.
- 17. On 21 June 2022, staff issued a second NOV to PG&E (NOV #2) for violations within the Caribou Project area documented during an inspection conducted on 22 March 2022. NOV #2 documented an ongoing absence of effective BMPs on access roads, and evidence of erosion and sediment discharges to receiving waters resulting from ground-disturbing activities. Additionally, NOV #2 noted actual and threatened discharges of sediment that had impacted, and were expected to continue to impact without treatment, numerous watercourses that are tributary to the NF Feather River. Due to the ongoing water quality concerns and documented discharges of waste and threatened discharges of waste observed during multiple inspections, NOV #2 reiterated the request for a work plan to be prepared for all access roads, associated watercourse crossings and all other disturbed areas associated with PG&E's activities within the 2021 Dixie Fire burn area and submitted by 30 July 2022.
- 18. On 30 June 2022, Central Valley Water Board staff issued a third NOV to PG&E (NOV #3) accompanied by an inspection report that documented areas on the Caribou Westwood Line inspected on 16 March 2022 and 4 May 2022. NOV #3 documented a lack of effective BMPs on access roads and evidence of erosion and sediment discharge resulting from ground-disturbing activities. NOV #3 reiterated the need for a work plan to be submitted for the 2021 Dixie Fire burn area, as requested in NOV #1 and NOV #2.
- 19. On 25 July 2022, Central Valley Water Board staff received a work plan from PG&E that included site specific locations and descriptions of BMPs and remediation measures to be implemented for the Caribou Project (Caribou Project Workplan). In

the submittal letter for the Caribou Project Workplan, PG&E stated that a subsequent work plan submission covering access roads from the Caribou Westwood Line and additional areas within the 2021 Dixie Fire would be submitted at a later date pending Central Valley Water Board staff review and comments on the Caribou Project Workplan submission.

- 20. On 26 July 2022, PG&E submitted a time extension request for additional work plans citing the extensive scope of work involved in developing the requested work plans.
- 21. On 21 July 2022, Central Valley Water Board staff issued a fourth NOV to PG&E (NOV #4) accompanied by an inspection report that documented areas south of the town of Twain and Butterfly Valley inspected on 5 May 2022 and 14 June 2022. NOV #4 noted that the comprehensive work plan for the 2021 Dixie Fire burn area requested under the previously issued NOV's was expected to address the most recent violations documented in NOV #4.
- 22. On 1 August 2022, Central Valley Water Board staff granted an extension to the Discharger for the additional work plans, with an extended due date of 31 August 2022.
- 23. On 5 August 2022, Central Water Board staff provided a comment letter to the Discharger responding to the Caribou Project Workplan. Staff noted that the Caribou Project Workplan lacked information regarding BMP design standards and lacked details regarding implementation criteria to achieve proper placement, construction, and sizing of proposed BMPs. Staff again noted that considering the difficult terrain and layout of the access roads, significant attention must be directed to addressing the road drainage systems and proposed BMPs to adequately protect water quality and prevent additional erosion and sediment discharges to the NF Feather River.
- 24. On 31 August 2022, PG&E submitted additional work plans for the Caribou Westwood Line, South of Twain and Butterfly Valley area, and general Dixie Fire footprint. On 29 September 2022, Central Valley Water Board staff provided comments to the South of Twain and Butterfly Valley area work plan.
- 25. On 10 October 2022, PG&E submitted an updated work plan for the Caribou Project (2nd Caribou Project Workplan) that addressed comments provided by Central Valley Water Board staff on 5 August 2022.
- 26. On 31 October 2022, Central Valley Water Board staff identified deficiencies and provided comments on the 2nd Caribou Project Workplan.
- 27.PG&E has, and continues to be, responsive to Central Valley Water Board staff's requests for information and by accompanying staff on field inspections throughout the Dixie Fire burn area.

Beneficial Uses and Water Quality Objectives

- 28. The Basin Plan designates beneficial uses, establishes water quality objectives, contains implementation programs for achieving objectives, and incorporates by references, plans and policies adopted by the State Water Resources Control Board.
- 29. The NF Feather River is a water of the state, as well as water of the United States. Existing beneficial uses of the NF Feather River include: municipal and domestic supply (MUN), power generation (POW), contact recreation (REC-1), canoeing and rafting (REC-1), other noncontact recreation (REC-2), freshwater habitat cold (COLD), spawning cold (SPWN), and wildlife habitat (WILD).
- 30. The Basin Plan specifies Water Quality Objectives for inland surface waters. These objectives include, in part, limitations on increased temperature, sediment discharges, settleable and suspended material, and turbidity.
- 31. The NF Feather River below Lake Almanor to Lake Oroville is currently listed per Clean Water Act section 303(d) as an impaired water body for the following pollutants: mercury, PCBs (Polychlorinated biphenyls), temperature, and toxicity³.

Legal Basis of the Order

- 32. Water Code section 13304, subdivision (a) states, in relevant part, "any person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit, any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. Upon failure of any person to comply with the cleanup and abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.
- 33. "Waste" is defined by Water Code section 13050, subdivision (d) as, "sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing,

https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/202 0 2022 integrated report.html

³

manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for the purpose of, disposal."

- a. Sediment, when discharged to waters of the state, is considered a "waste" as defined in Water Code section 13050, subdivision (d). As a result of the land disturbing activities, sediment was unlawfully discharged or deposited where it will be, or has the potential to be, mobilized and discharged into waters of the state.
- 34. "Pollution" is defined by Water Code section 13050, subdivision (I)(1) as, "an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) the waters for beneficial uses, (B) facilities which serve these beneficial uses."
 - a. Sediment from the unauthorized land disturbing activities and other sediment and debris resulting from the Discharger's land disturbing activities has unlawfully discharged, and has the potential to continue to discharge, to numerous watercourses throughout the NF Feather River drainages, creating or threatening to create a condition of pollution by unreasonably affecting the beneficial uses of waters of the state.
 - Discharges of sediment and other debris alter the hydrologic and sediment transport regimes of surface waters by affecting the flow of water and substrate habitat for aquatic organisms. Such changes may lead to adverse conditions such as flooding, increases in suspended sediment and turbidity, accelerated erosion of the watercourse bed or banks, and localized accumulation of deleterious materials. Additionally, such discharges directly threaten wildlife habitat and aquatic species impacting the following beneficial uses: spawning cold (SPWN), freshwater habitat cold (COLD), and wildlife habitat (WILD). Increased sedimentation and turbidity can result in increased treatment and/or maintenance costs for downstream power generation and municipal users impacting the following beneficial uses: power generation (POW) and municipal and domestic supply, freshwater replenishment (MUN). Sediment laden storm water discharges to surface water and the resulting turbidity can also affect the recreational and aesthetic enjoyment of the surface waters impacting the following beneficial uses: contact water recreation (REC-1) and non-contact water recreation (REC-2).
 - c. Sediment and soils that have been impacted by land disturbing activities, including within the numerous watercourses, have the potential to alter the chemistry and water quality of surface water. Such changes may lead to increased treatment and/or maintenance costs for users of the surface waters impacting the following beneficial uses: municipal and domestic supply (MUN) and power generation (POW).

- d. The discharge of sediment and other miscellaneous debris has the potential to alter the hydrologic regimes of surface waters, threaten wildlife habitat and aquatic species, and impact sediments and soils which may affect water quality. As such, the beneficial uses impacted by the observed grading and construction activities are as follows: municipal and domestic supply (MUN), contact water recreation (REC-1), non-contact water recreation (REC-2), spawning cold (SPWN), cold freshwater habitat (COLD), and wildlife habitat (WILD).
- 35. Cleanup and abatement are necessary to ensure that any existing condition of pollution is cleaned up, that threatened unauthorized discharges to waters of the state from the Discharger's land disturbing activities are prevented, and that any impacts to beneficial uses are mitigated. The issuance of a Cleanup and Abatement Order pursuant to Water Code section 13304 is appropriate and consistent with policies of the Central Valley Water Board and State Water Board.
- 36. Resolution 92-49 sets forth the policies and procedures to be used during an investigation and cleanup of a polluted site and requires that cleanup levels be consistent with State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality Waters in California (Antidegradation Policy). Resolution 92-49 requires waste be cleaned up in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable if background levels of water quality cannot be restored. Any alternative cleanup level to background must: (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board, Resolution 92-49 directs those investigations proceed in a progressive sequence. To the extent practical, it directs the Central Valley Water Board to require and review for adequacy written work plans for each element and phase, and the written reports that describe the results of each phase of the investigation and cleanup.

Technical Reports Required

37. Water Code section 13267, subdivision (a), provides that the Central Valley Water Board may investigate the quality of any water of the state within its region in connection with any action relating to the Basin Plan. Water Code section 13267, subdivision (b), provides that the Central Valley Water Board, in conducting an investigation, may require the discharger to furnish, under penalty of perjury, technical or monitoring program reports. The burden, including costs, of these technical reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Staff estimate the total cost of technical reports as detailed in the Required Actions section of this Order, to be approximately \$37,050 - \$46,550. The costs of the technical or monitoring reports required by this

Order bear a reasonable relationship to the need for these reports and the benefit to be gained by these reports, as discussed below:

- a. The Restoration, Mitigation, and Monitoring Plan (RMMP) is a technical report that is necessary to determine the scope and extent of actual and/or potential discharges of waste that could affect the quality of the waters of the state. By requiring the Discharger to submit an RMMP, the Central Valley Water Board or its delegated officer can review and approve the proposed restoration and corrective actions to assess whether the proposed actions are adequate to address discharges of waste to receiving waters. Central Valley Water Board staff performed an initial cost analysis for preparation of the RMMP and provided this analysis to the Discharger. The Discharger responded with its estimate of anticipated costs. Based on information available to Central Valley Water Board staff, including information provided by the Discharger, the RMMP preparation is estimated to cost \$62,700 \$80,000. After consideration of these factors, staff has determined that the burden, including costs, of submitting the RMMP bears a reasonable relationship to the need for the report and the benefits to be obtained from the report.
- b. The RMMP Completion Report demonstrates to the Central Valley Water Board or its delegated officer that the restoration and corrective actions contained in the approved RMMP have been fully implemented. By requiring the Discharger to submit documentation that the corrective actions have been completed, including pre- and post- remediation photographs and relevant maps and schematic diagrams, staff can confirm the RMMP has been fully implemented and that best management practices are adequate to prevent future discharges of waste to waters of the state. Central Valley Water Board staff performed an initial cost analysis for preparation of the RMMP Completion Report and provided this analysis to the Discharger. The Discharger responded with its estimate of anticipated costs. Based on information available to Central Valley Water Board staff, including information provided by the Discharger, the RMMP completion report preparation is estimated to cost \$31,350 - \$40,000. After consideration of these factors, staff determined that the burden, including costs, of submitting the RMMP Completion Report bears a reasonable relationship to the need for the report and the benefits obtained from the report.
- c. Annual Monitoring Reports are necessary to document the long-term stability of restored areas, to demonstrate the effectiveness of erosion and sediment control measures in preventing discharges to waters of the state, to identify deficient restoration activities, and to identify any new discharges of waste occurring from PG&E operations throughout the burn area. Considering the difficult terrain and layout of the access roads and the scale of proposed work, an annual report for a period of at least three years will enable staff to confirm that the completed corrective actions continue to be effective over wet and dry seasons. Central Valley Water Board staff performed an initial cost analysis for preparation of the

RMMP and provided this analysis to the Discharger. The Discharger responded with its estimate of anticipated costs. Based on information available to Central Valley Water Board staff, including information provided by the Discharger, preparation of the Annual Monitoring Reports is estimated to cost \$68,400-\$100,000 for three years of reporting. After consideration of these factors, staff has determined that the burden, including costs, of submitting the Annual Monitoring Reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

38. The Discharger owns and/or operates, and has owned and/or operated the utility infrastructure and associated access roads within the ROW on USFS and private lands from which waste was discharged as observed during the Site inspections, and thus is appropriately named as a party responsible for providing the reports.

California Environmental Quality Act

39. Issuance of this Order is being taken for the protection of the environment and to enforce the laws and regulations administered by the Regional Water Board and, as such, is exempt from provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061, subdivision (b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger to submit plans for approval prior to implementation of cleanup, abatement, and restoration activities at the Property. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. To the extent that the Order requires earth disturbing and/or revegetation activities not to exceed five acres in size and to ensure restoration of stream habitat and prevent erosion, such actions are considered exempt from the provisions of CEQA pursuant to California Code of Regulations, title 14, section 15333. If the Central Valley Water Board determines that implementation of any plan required by this Order will have a significant effect on the environment that is not otherwise exempt from CEQA, the Central Valley Water Board will conduct the necessary and appropriate environmental review prior to implementation of the applicable plan. The Discharger will bear the costs, including the Central Valley Water Board's costs, of determining whether implementation of any plan required by this Order will have a significant effect on the environment and, if so, in preparing and handling any documents necessary for environmental review. If necessary, the Discharger and a consultant acceptable to the Central Valley Water Board shall enter into a memorandum of understanding with the Central Valley Water Board regarding such costs prior to undertaking any environmental review.

Required Actions

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13267 and 13304, the Discharger shall clean up and abate or take other necessary remedial action with respect to the discharge and threatened discharge of waste to waters of the state and submit technical and/or monitoring reports as follows:

- 1. Within 90 days of the effective date of this Order, the Discharger must submit a proposed Restoration Mitigation and Monitoring Plan (RMMP) for approval by the Central Valley Water Board or its delegated officer. The RMMP must detail proposed actions to clean up and abate unlawful discharges of waste and threatened discharges of waste to waters of the state, restore the impacted watercourse channels and riparian zones, construct and reconstruct appropriate watercourse crossings to design flow standards, implement effective BMPs for access roads, and ensure access roads and earthen fill materials are stabilized and prevent future discharges of waste to receiving waters within the 2021 Dixie Fire burn area. Work plans previously developed and approved by Central Valley Water Board staff, pending any updates needed based upon comments provided by staff, are hereby incorporated into the proposed RMMP. More specifically, the RMMP must include, at minimum, the following:
 - a. An inventory and assessment of all land disturbing activities within the burn area including roads, watercourse crossings, riparian zones, or watercourse bed, bank, or channel that were altered or impacted by the Discharger's landdisturbing activities.
 - i. Site assessment shall determine current condition of each feature (e.g., evidence of past discharge(s), currently discharging, threatened discharge) and estimated type and quantity of waste discharged or threatening to discharge waste to receiving waters.
 - ii. Each identified feature must include a unique identifier.
 - b. Proposed method of treatment. For each site included in the inventory, Discharger shall identify proposed treatments including a description of BMPs, mitigation, or restoration efforts to be implemented. At a minimum, proposed treatment methods shall include the following:
 - For roads. A description of planned construction and maintenance of sediment and erosion control measures (including temporary and permanent BMPs) along access roads, cut and fill slopes, transmission tower support pads, and any other areas where related ground disturbing activities occurred.

- ii. For watercourse crossings. Capacity of the watercourse crossing to pass 100-year flood flows and associated debris, and/or reconstruction necessary for armoring, stabilization, and/or the inclusion of a culvert sized to pass 100-year flows and debris⁴. Any proposed permanent culverted watercourse crossings must be designed to address diversion and failure potential and shall include design specifics for adequate armoring to prevent erosion of the crossing material and associated fill slopes.
- iii. For riparian areas. A description of planned construction and maintenance of erosion and sediment control measures (including temporary and permanent BMPs) within riparian areas where operations caused waste discharges or threatened discharges.
- iv. For impacts to bed, bank, or channel. A determination of whether removal and subsequent stabilization of fill material deposited in watercourse channels, drainages, or adjacent areas resulting from the Discharger's land-disturbing activities is necessary to prevent further waste discharges.
- c. Design specifications (including drawings where necessary for clarity) for areas to be regraded, watercourse crossings to be constructed/reconstructed, BMPs to be installed, dredge or fill of waters of the state.; reports of geotechnical analysis(es) to treat unstable areas.
- d. Maps accurately depicting: topography, access roads, all surface watercourses and drainages (each fish bearing watercourse must be identified as a Class I watercourse), watercourse crossings (temporary and permanent), erosion hazard⁵ rating (for areas where operations have occurred or are proposed to occur), cut and fill slopes and other areas disturbed by PG&E's activities.
- e. An implementation schedule that includes a timeline for submitting any necessary permit application(s) to all applicable local, state, and federal agencies along with detailed project milestones to fulfill the requirements of this Order.
- f. A proposed Monitoring Plan designed to assess discharges prior to treatment and ensure effectiveness of implemented measures over at least a three-year period after remediation activities have been completed. If measures are found to be ineffective or insufficient to prevent discharges or threatened discharges of waste to receiving waters during the three-year monitoring period, the Monitoring

⁴ California Department of Forestry and Fire Protection's Designing Watercourse Crossings for Passage of 100-Year Flood Flows, Wood, and Sediment (Updated 2017). California Forestry Report No. 1 (revised)

⁵ https://forest-practice-calfire-forestry.hub.arcgis.com/content/CALFIRE-Forestry::cal-fire-erosion-hazard-rating-tool/about

Plan must include provisions to mitigate such deficiencies. The Monitoring Plan, at a minimum, must include the following:

- A plan for monthly monitoring, access permitting, prior to and during implementation of Restoration and Mitigation activities focused in areas identified as having discharged waste or where threats of waste discharge exist.
- ii. Submittal of monthly status update reports. The monthly reports must summarize remediation activities completed, any BMP failures noted, plans for proposed actions to address failed or ineffective measures, and must include maps with unique site identifiers planned for treatment.
 - iii. Upon Central Valley Water Board approval of a RMMP Completion Report (detailed below) monitoring must be conducted quarterly to capture pre-, during and post-winter conditions.
- iv. If conducted or collected during the monitoring period, submit project related satellite, aerial photography including any available data from laser imaging, detection and ranging (Lidar).
- 2. **No later than 30 days** after approval of the RMMP by the Central Valley Water Board or its delegated officer, the Discharger shall begin implementation of the RMMP in accordance with the approved implementation schedule.
- 3. Submit annual reports that includes the results of the Monitoring Plan by 1 August each year.
- 4. Notify Central Valley Water Board staff, within 24 hours of identification, when failure of a measure or a discharge of waste occurs. Such notice shall include a description and schedule for proposed actions.
- 5. **By 1 November 2023**, the Discharger shall complete all restoration and mitigation measures described in the approved RMMP.
- 6. No later than 60 days after completing implementation of the approved RMMP, the Discharger shall submit an RMMP Completion Report for approval by the Central Valley Water Board or its delegated officer. The RMMP Completion Report shall include accurate depictions, documentation, and as-built designs of all completed construction, mitigation and/or restoration measures included in the approved RMMP to demonstrate the RMMP has been fully implemented.
- 7. Upon approval of the RMMP Completion Report, the Discharger shall submit Annual Monitoring Reports by August 1st each year for at least three years or until the Central Valley Water Board or its delegated officer approves a request to discontinue monitoring. Each Annual Monitoring Report shall include, at a minimum,

a summary of the Monitoring Program results, descriptions and photographs of any additional remediation and mitigation measures implemented, a description of any locations where discharges or threats of discharge have been identified and proposed treatment(s).

General Requirements and Notices

Use of Qualified Professionals

1. All technical reports required by this Order that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geological sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

Signatory Requirements

2. All technical reports submitted by the Discharger shall include a cover letter signed by a duly authorized representative of PG&E, certifying under penalty of law that the signer has examined and is familiar with the report and that to its knowledge, the report is true, complete, and accurate. The Discharger shall also state if it agrees with any recommendations/proposals provided in the technical report and whether it approves of the implementation of said proposals. Any person signing a document submitted under this Order shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Notice of Change in Ownership or Occupancy

3. The Discharger shall file a written report on any changes in the Site's ownership or occupancy. This report shall be filed with the Central Valley Water Board no later than 30 days prior to a planned change and shall reference the number of this Order.

Compliance with Other Regulatory Requirements

- 4. The Discharger shall obtain all applicable local, state, and federal permits necessary to fulfill the requirements of this Order prior to beginning work. Applicable permits may include, but are not limited to, the following:
 - a. Construction General Permit (State Water Board or Central Valley Water Board).
 - b. Clean Water Act section 404 permits (Army Corps of Engineers) and Clean Water Act section 401 water quality certifications (Central Valley Water Board).
 - c. Lake and streambed alteration agreements from the California Department of Fish and Wildlife.
 - d. County grading permits.

Cost Recovery

5. Pursuant to Water Code section 13304, the Central Valley Water Board is entitled to, and may seek reimbursement for, all reasonable costs it incurs investigating and abating the effects of the unauthorized discharges of waste and to oversee/supervise the cleanup of such waste, or other remedial action, required by this Order. If requested by the Central Valley Water Board, the Discharger shall enroll in the State Water Board's Cost Recovery Program and shall reimburse the State of California for all reasonable costs actually incurred by the Central Valley Water Board.

Submissions

6. All technical reports or notices required under this Order shall be submitted to: Griffin Perea, (530) 224-3217, griffin.perea@waterboards.ca.gov.

Delayed Compliance

7. If for any reason, the Discharger is unable to perform any activity or submit any document in compliance with the Required Actions, or in compliance with any work schedule submitted pursuant to this Order and approved by the Central Valley Water Board or its delegated officer, the Discharger may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as a delay is recognized and prior to the compliance deadline. An extension may be granted by revision of this Order or by a letter from the Central Valley Water Board or its delegated officer. The Central Valley Water Board acknowledges that local, state, and federal permits may cause a delay beyond the control of the Discharger and will take all the available relevant facts into consideration when considering whether to grant an extension request.

Modification of Order

8. Any modification to this Order shall be in writing and approved by the Central Valley Water Board or its delegated officer, including any potential extension requests.

Enforcement Authority

9. If the Discharger fails to comply with the requirements of this Order, the Central Valley Water Board or its delegated officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350, and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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 Water Code section 13320 and California Code of Regulations, title 23, sections 2050, et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, 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.

This Order is issued under authority delegated to the Executive Officer by the Central Valley Water Board pursuant to Resolution R5-2018-0057 and is effective upon signature.

Original signed by
PATRICK PULUPA
Executive Officer

23 March 2023

Date