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Filer:	Anwar Ali
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CGS2024-L-003

February 21, 2024

Dr. Anwar Ali
Compliance Project Manager
California Energy Commission
1516 Ninth Street, MS 2000
Sacramento, California 95814

Reference: Colusa Generating Station

**Subject: Colusa Generating Station (06-AFC-9)
Condition of Certification COM-7 (BIO-2; HAZ-1; Noise-8; Soil and Water 2, 7, 8, 9;
TLSN-3; VIS-1, 3; Waste-5) – Annual Operating Report**

Dear Mr. Ali:

Please find the attached, pursuant to Colusa Generating Station (CGS) Conditions of Certification COM-7. This is the Annual Compliance Report for CGS and represents the operational period of January 1, 2023 through December 31, 2023. Within this report you will find the following information.

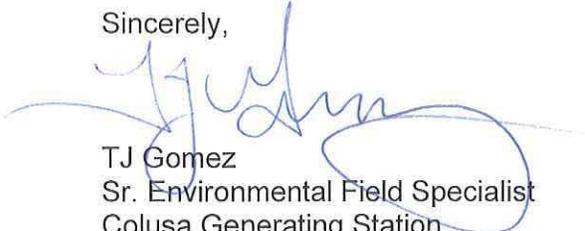
1. Attachment A: an updated compliance matrix showing the status of all Conditions of Certification (with exception to fully satisfied conditions as they do not need to be included after they have been reported as completed);
2. Attachment B: a summary of the current project operating status with explanations of any significant changes to facility operations during the reporting year;
3. Attachment C: documents required by specific conditions to be submitted along with the Annual Compliance Report.
4. Attachment D: a cumulative listing of all post-certification changes approved by the California Energy Commission or cleared by the CPM;
5. Attachment E: an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;
6. Attachment F: a listing of filings submitted to, or permits issued by, other governmental agencies during the year;
7. Attachment G: a projection of project compliance activities scheduled during the next year;

Public

8. Attachment H: a listing of the year's additions to the on-site compliance files;
9. Attachment I: an evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to update;
10. Attachment J: a listing of complaints, notices of violations, official warnings, and citations received during the year, a description of the resolution of any resolved matters, and the status of any unresolved matters.
11. Attachment K: verification of funding to the Maxwell Fire Department

Should you have any questions or comments please do not hesitate to contact me.

Sincerely,



TJ Gomez
Sr. Environmental Field Specialist
Colusa Generating Station

Enclosure

cc: Josh Harris, PG&E (electronic)
Sam Garcia, PG&E (electronic)

Attachment A
Compliance Matrix

COLUSA GENERATING STATION COMPLIANCE MATRIX BASED ON CEC FINAL DECISION

Color code key:	Construction Item	Commissioning Item	Operations Item	Submitted to CEC or Agency	Approved by CEC/No Longer Applicable
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Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
AQ-01	COMM	All facility operating staff shall be advised of and familiar with these permit conditions.	Provide CPM and APCO with signed records of facility operating staff indicating review of permit conditions and maintain training and records documenting this training at the site.	30 days prior to first fire	PG&E	On file in Environmental Managers Office		Ongoing with New Hires	
AQ-02	CONS	Right of entry shall be provided at all times.	Project Owner shall make site available to reps of the District, ARB and CEC for inspection, etc.	As required	PG&E			Ongoing	
AQ-03	OPS	In the case of shutdown or restart of air pollution control equipment for necessary scheduled maintenance, notify CPM and APCO of such shutdown 24 hours prior.	Notify the CPM and APCO 24 hours in advance of planned shutdowns for maintenance.	As required	PG&E			Ongoing	
AQ-04	OPS	If any upset or breakdown occurs with permitted equipment that causes excess emissions of air contaminants, the APCO shall be notified with 24 hours or by 9:00am by the following work day.	In addition to phone call, also submit a written statement of full disclosure to the APCO within 72 hours, including date, time, duration, estimated emissions, cause and remedy.	As required	PG&E			Ongoing	
AQ-05	OPS	Fugitive emissions, including dust and odors, shall be controlled at all times such that a nuisance is not created at any point beyond the facility's property lines.	Project Owner shall document any complaints received from the public in the Quarterly Operation Reports (QORs) required by AQ-22 and make site available to APCO, ARB, and CEC representatives.	Quarterly after COD	PG&E			Ongoing	
AQ-07.2	COMM	A source test protocol will be submitted to the APCD for approval.	Submit source test protocol to the APCD for approval by the APCO.	45 days prior to conducting annual source tests	PG&E			Annual Requirement	
AQ-07.3	COMM	Notify the CPM and District 10 days prior to actual source test.	Notify the CPM and APCD prior to any compliance source test.	10 days prior to conducting any compliance source test	PG&E			Annual Requirement	
AQ-08	COMM	CONDITION MODIFIED BY CEC ORDER 7-15-09: Stack gas testing shall be required on an annual basis for NOx, VOC, and CO on the HRSG stacks. The HRSG stacks shall also be tested for SOx and PM10 emissions during the first year and in subsequent years if requested by APCO. The natural gas water bath heater shall be tested for NOx, SOx, VOC, CO, and PM10 during the first year and thereafter only as requested by APCO.	The results and field data collected during source tests shall be submitted to the CPM and the District within 60 days of testing.	Within 60 days of testing	PG&E			Annual Requirement	
AQ-09	COMM	Annual testing of the HRSG stacks shall include quantification of formaldehyde and NH3 emissions for compliance with permit limits. Verify by continuous recording the ammonia injection rate to the system. The ammonia source test shall be conducted over the expected operating rate of the turbine as set forth in the Condition.	Provide results and field data collected during source tests to CPM and APCD. Submit proposed ammonia injection/emission rate correlation to the APCD and CPM for approval with the ammonia source test report.	Within 60 days of testing	PG&E			Annual Requirement	
AQ-10	OPS	CONDITION MODIFIED BY CEC ORDER 7-15-09: The gas turbines, duct burners, and natural gas water heater shall be fired exclusively on pipeline quality natural gas.	Submit information on the quality and type of fuel used for the gas turbines, duct burners, and natural gas water bath heater to the CPM/APCO in the QORs.	Quarterly after COD	PG&E			Ongoing	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
AQ-11	OPS	The average annual sulfur content in the natural gas shall be less than or equal to 0.3 grains per 100 SCF. Conduct monthly testing at the site using approved methods to determine sulfur content. Natural gas testing info from Burney will also be reviewed and provided to the APCD.	Compile the required data on the sulfur content of the natural gas and submit to the CPM and APCO in the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-13a	OPS	All applicable federal standards and test procedures of Subpart KKKK shall be met.	Provide copies of all correspondence with EPA regarding compliance with Subpart KKKK to the APCD and CEC.	Quarterly after COD	PG&E			Ongoing	
AQ-14	OPS	CTGs shall meet a VOC limit of 2.0 ppmvd w/ duct burner firing and 1.38 ppmvd w/o duct firing at 15% O2 averaged over 1 hour. Maximum hourly steady state VOC emission limits for each CTG are 7.2 pounds with duct firing and 3.4 pounds w/o duct firing	Submit to the CPM and APCO CTG source test emissions data demonstrating compliance with this condition as required by condition AQ-8 and provide operating data that establishes ongoing compliance as part of AQ-22.	Within 60 days of testing	PG&E			Ongoing	
AQ-15	OPS	The CTGs shall meet a NOx limit of 2.0 ppmvd @15% O2 averaged over one hour <u>except during commissioning</u> . Maximum hourly steady state NOx emission limits for each CTG are 20.7 pounds with duct firing and 15.3 pounds without duct firing.	Submit to the CPM and APCO CTG continuous emissions data demonstrating compliance with this condition as part of the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-16	OPS	The CTGs shall meet a CO limit of 3.0 ppmvd @15% O2 over a three-hour rolling average <u>except during commissioning</u> . Maximum hourly steady state CO emission limits for each CTG are 18.9 pounds with duct firing and 14.0 pounds without duct firing.	Submit to the CPM and APCO CTG continuous emissions data demonstrating compliance with this condition as part of the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-18	OPS	Ammonia slip shall be limited to 5.0 pmvd @15% O2 over one hour. Formaldehyde emissions will be limited to 0.917 lbs per MMscf of natural gas. Maximum hourly steady state NH3 emission limits for each CTG are 19.2 pounds with duct firing and 14.2 pounds without duct firing.	Submit to the CPM and APCO CTG source test emissions data demonstrating compliance with this condition a part of the QOR. Provide to the CPM and APCO for approval a calculation method to determine the ammonia slip emissions, using source test data, based on the NOx concentration and the ammonia injection rate; this calculation shall be revised for approval as necessary after each source test performed under AQ-9.	Within 60 days of testing	PG&E			Annual Requirement	
AQ-19a	OPS	CEMS shall be installed to sample, analyze, and record NOx, CO, and O2 concentration in the exhaust gas of both HRSG stacks.	Make the site available for inspection by the APCD, ARB, and CEC to verify CEMS is properly installed and operational.	As required	PG&E			Ongoing	
AQ-19b	OPS	CEMS will generate reports of emissions data in accordance with permit requirements and will send alarm signals to the plant DCS control room when emissions levels approach or exceed pre-selected limits.	Submit emissions data generated by the CEMS to the CPM and APCO as part of the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-19c	OPS	RATA tests will be conducted annually to verify performance of the CEMS.	Provide RATA test results along with annual source test report as required under AQ-8.	Annually	PG&E			Ongoing	
AQ-22	OPS	Quarterly reports of CEMS and process data, <u>including startup info</u> , shall be submitted to the District within 30 days after the end of each quarter.	Provide information as part of QORs. (Format will be determined by the District and may include both electronic spreadsheet and hard copy files.)	Quarterly after COD	PG&E			Ongoing	
AQ-25	OPS	CONDITION MODIFIED BY CEC ORDER 7-15-09: The total emissions from the CTGs and HRSGs shall not exceed those established in the Condition for hourly and daily operations (see emission limits set forth in table in <u>condition</u>).	Submit CTG and HRSG emissions data to CEC CPM and APCO demonstrating compliance with the condition as part of QORs.	Quarterly after COD	PG&E			Ongoing	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
AQ-26	OPS	CONDITION MODIFIED BY CEC ORDER 7-15-09: The total emissions from the Colusa Power Plant shall not exceed the quarterly and annual combustion emission limits established in the Condition [all numbers have been revised from original Final Decision]	Submit to the CPM and APCO the plant emissions data demonstrating compliance with this condition.	Quarterly after COD	PG&E			Ongoing	
AQ-29	OPS	Total facility emissions of Hazardous Air Pollutants shall not exceed 10 tons/year for any single pollutant except ammonia, formaldehyde, and propylene.		Annually	PG&E			Ongoing	
AQ-SC6	OPS	Submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. Project Owner shall submit to the CPM any modification to any permit proposed by the District of EPA and any revised permit issued by the District of EPA.	Submit any proposed air permit modification to the CPM.	Within 5 working days of its submittal	PG&E			Ongoing	
AQ-SC9	OPS	Submit to the CPM Quarterly Operation Reports following the end of each calendar quarter and containing the info required by Condition AQ-19.	Submit QORs to the CPM and APCO no later than 30 days following the end of each calendar quarter.	Quarterly after COD	PG&E			Ongoing	
AQ-SC11	OPS	NEW CONDITION PER CEC ORDER 7-15-09: The wet surface air cooler spray water shall be tested for total dissolved solids and that data shall be used to determine and report the particulate matter emissions from the wet surface air cooler. The wet surface air cooler spray water shall be tested at least once annually during the anticipated summer operation peak period (July through September).	The project owner shall provide the water quality test results and the wet surface air cooler particulate (PM10/PM2.5) emissions estimates to the CPM as part of the fourth quarter's quarterly operational report (AQ-SC9).	At least once annually during summer peak period				Ongoing	
BIO-07	OPS	Incorporate biological mitigation measures into the BRMIMP and permanent or unexpected permanent closure plans.	Address all biological resource related issues associated with facility closure and provide final measures in a biological resources element of the final closure plan.	12 months prior to start of closure activities	PG&E			Ongoing	
COM-01	OPS	Unrestricted Access		Ongoing	PG&E			Ongoing access provided during construction	
COM-02	OPS	Compliance Record--The files are to contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents.		Ongoing	PG&E			Ongoing	
COM-05	OPS	Compliance Matrix	Submit a compliance matrix with each MCR and also in ACR	Include in MCR and in ACR	PG&E			Ongoing	
COM-07	OPS	Annual Compliance Report	Submit to CPM on an annual basis	Annually	PG&E			Ongoing	
COM-09	OPS	Annual Energy Facility Compliance Fee	Submit annual compliance fee to CEC	During life of project	PG&E			Ongoing	
COM-10	OPS	Reporting of Complaints, Notices and Citations	Report to the CPM all notices, complaints, and citations within 10 days of receipt.	As required	PG&E			Ongoing	
COM-11	OPS	Planned Facility Closure	Submit a closure plan to the CPM at least 12 months prior to commencement of a planned closure	12 months prior to start of closure activities	PG&E				
COM-13	OPS	Unplanned Permanent Facility Closure	The on-site contingency plan required for unplanned temporary closure shall also cover unplanned permanent facility closure. All of the requirements specified for unplanned temporary closure shall also apply to unplanned permanent closure.	Within 90 days of permanent closure	PG&E	9/29/2010	CGS10-L-0111	Approved via email 10/15/10	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
COM-14	CONS	Post-Certification Changes to the Decision		As required	PG&E			Amendments are discussed in MCR	
CUL-04	CONS	Prepare the Cultural Resources Report (CRR) in ARMR format. Include all information specified in Condition.	Submit CRR within 90 days after completion of ground disturbance (including landscaping).	Within 90 days after completion of landscaping	PG&E	7/28/2011	CGS11-L-0026	Approved 4/9/13	
GEN-01c	OPS	Once the certificate of occupancy has been issued, inform the CPM of any construction, addition, alterations, moving, demolition, repair, or maintenance to be performed on any portions of the completed facility for the purpose of complying with the above stated codes.	Submit required info to the CPM.	At least 30 days prior to such work	PG&E				
GEN-08	CONS	Obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The Project Owner shall request the CBO to inspect the completed structure and review the submitted documents. The Project Owner shall retain one set of approved engineering plans, specifications, and calculations at the project site or other accessible location during the operation of the project.	Submit to the CBO a written notice that the completed work is ready for inspection and a signed statement that the work conforms to the final approved plans.	Within 15 days of completion of any work	PG&E/CBO				
HAZ-01	OPS	Do not use any hazardous material in any quantity or strength not listed in Appendix C unless approved in advance by the CEC CPM.	Report to the CPM a list of hazardous materials and storage quantities contained at the facility	Include in Annual Compliance Report	PG&E			Ongoing	
NOISE-02	OPS	Throughout the construction and operation of the project, document, investigate, evaluate, and attempt to resolve all project-related noise complaints. Noise Complaint Resolution process will be used.	File a Noise Complaint Resolution Form with the City and the CPM documenting resolution of the complaint.	Within 5 days of receiving a noise complaint	PG&E				
NOISE-08	OPS	In the event legitimate noise complaints are made by owners or occupants at the two residences locate at ML1, ML2, or RC1 during operation of the CGS, the Project Owner shall offer to pay for the following noise attenuating upgrades (<u>see list in Condition</u>).	Upgrades shall be installed (unless impossible due to circumstances beyond Project Owner's control) within six months of the receipt of the compliance. Provide documentation certifying the items listed in the Condition.	As required	PG&E			Ongoing	
PAL-06	OPS	Through the designated PRS, shall ensure that all components of the PRMMP are adequately performed including collection of fossil materials, preparation of fossil materials for analysis, analysis of fossils, identification and inventory of fossils, the preparation of fossils for curation, and the delivery for curation of all significant paleontological resource materials encountered and collected during project construction .	Maintain in compliance file copies of signed contracts or agreements with the designated PRS and other qualified research specialists. Maintain these files for a period of three years after completion and approval of the CPM-approved Paleontological Resources Report.	As required					
SOIL & WATER-04b	OPS	Notify the CEC of any violations of the agreement requirements, limits or amounts.	Provide copies of any NOV's from the GCID. Fully explain corrective actions in next MCR.	Within 10 days of NOV	PG&E			Ongoing	
SOIL & WATER-07b	OPS	Submit any required monitoring information to the CPM in the annual compliance report.	Submit requested information.	Include in ACR	PG&E			Ongoing	
SOIL & WATER-07c	OPS	Submit copies of an NOV's to the CPM.	Submit requested info to CPM.	Within 10 days of receipt of NOV; explain correction actions in ACR	PG&E			Ongoing	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
SOIL & WATER-08b	OPS	Prepare an annual water use summary which includes the monthly range and monthly average of daily raw water usage in gpd and total water used by the project on a monthly and annual basis in acre-feet. Potable water use on the site shall be recorded on a monthly basis. (See additional details for annual water use summary in Condition)	Submit requested info to CPM.	Annually	PG&E			Ongoing	
SOIL & WATER-09c	OPS	Monitor the waste water system following the general standards adopted in the SWRCB's onsite wastewater treatment system regs or the procedures outlined in the CPM-approved O&M manual. Provide testing results.	Provide requested info to CPM.	Include in ACR	PG&E			Ongoing	
TLSN-03	OPS	Take reasonable steps to resolve any complaints of interference with radio or TV signals from operation of the proposed lines.	Provide reports of line-related complaints along with related mitigation measures in the annual report for the first five year.	Include in ACR	PG&E			Ongoing	
VIS-01b	OPS	Notify the CPM that the surface treatment of all listed structures and buildings has been completed and is ready for inspection and submit electronic color photographs taken from the same KOPs	Set up an inspection appointment.	Within 90 days of start of commercial ops	PG&E	3/24/2011	CGS11-L-0014	4/11/2011	
VIS-02b	COMM	Notify the CPM that the lighting has been completed and is ready for inspection.	Set up an inspection appointment.	Prior to start of commercial operation	Gemma	9/19/2011	CGS11-L-0036	Approved 9/29/2011	
VIS-02c	OPS	Notify the CPM of any complaints re: lighting.	Submit a complaint resolution form to the CPM record each lighting complaint and document resolution of that complaint.	Within 48 hours after receiving a complaint	PG&E			Ongoing	
VIS-03	CONS	Provide landscaping that reduces the visibility of the power plant structures and complies with local policies and ordinances. Trees shall be strategically placed along the southern, eastern, and northern facility boundaries as appropriate and of sufficient density and height to screen the plant structures to the greatest feasible extent within the shortest feasible time.	Prepare and submit a landscaping plan (see Condition for details on info to include in plan) to the CPM for review and approval and to the County for review and comment. Notify the CPM and County within 7 days after completing installation of landscaping. Report on landscape maintenance activities in ACR.	At least 90 days prior to installation of landscaping -	PG&E			Submitted 8/25/2010 Approved 9/14/2010 Ongoing for Annual Report	
WASTE-04	CONS	Upon becoming aware of any impending waste management-related enforcement action by any local, state, or federal authority, the Project Owner shall notify the CPM of any such action taken or proposed to be taken against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.	Notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the manner in which project-related wastes are managed.	As required	PG&E			Ongoing	
WASTE-05b	OPS	Prepare an Operations Waste Management Plan for all wastes generated during construction of the facility.	Submit plan to the CPM for review and approval. See Final Decision WASTE-5 for plan requirements.	Provide training sign-in sheets in first MCR Report in Annual Report	PG&E	9/23/2010	CGS10-L-0109	Approved on 10/18/10	

Attachment B
Project Operating Status Summary

Per Com-7 Item 2 we are to provide; “A Summary of the current project operating status and an explanation of any significant changes to the facility operations during the year”

There were no significant changes to the facility and the plant is operating normally.

Attachment C Accompanying Documents

CEC 2017 Annual Compliance Report		
Reporting Conditions, per COM-7, Item 3		
Condition of Certification	Reporting	Comments
BIO-2	Designated Biologist Record Summaries	See attached documentation, Appendix 1
HAZ-1	List of chemicals onsite	See attached documentation, Appendix 2
Noise-8	Noise Complaints	See attached documentation, Appendix 3
SOIL & WATER-2	SWPPP Monitoring and Maintenance Activities	See attached documentation, Appendix 4
SOIL & WATER-7	GCID Monitoring Requirements / Violations	See attached documentation, Appendix 5
SOIL & WATER-8	Annual Water Use Summary	See attached documentation, Appendix 6
SOIL & WATER-9	Septic Tank	See attached documentation, Appendix 7
TLSN-3	Electro Magnetic Interference Complaints	See attached documentation, Appendix 8
VIS-1	Surface Treatment Report	See attached documentation, Appendix 9
VIS-3	Landscape Report	See attached documentation, Appendix 10
WASTE-5	Waste Management Plan	See attached documentation, Appendix 11

Appendix 1, BIO-2

Colusa Generating Station (06-AFC-09C), California Energy Commission Annual Compliance Report Biology Section 2023 Draft

Date: February 14, 2024
Project Name: Colusa Generating Station 2023 Environmental On-call Support Project
Project No: D31321DW
Attention: TJ Gomez, Compliance Manager (PG&E)
Company: Pacific Gas and Electric (PG&E)
Prepared By: Scott Lindemann/CGS Designated Biologist, Sean O'Neil/Biologist, and Danny Rivas/Biologist
Document No: 1.0
Copies To: Dean Linville and Joshua Harris (PG&E), Jerry Salamy (Jacobs)

1. Introduction

The California Energy Commission's (CEC) Condition of Certification (COC) for the Colusa Generating Station (CGS) 2023 Environmental On-call Support Project (the Project) requires Pacific Gas and Electric Company (PG&E) to designate a biologist to supervise compliance with mitigation measures outlined in the CEC-approved Biological Resources Mitigation, Implementation, and Monitoring Plan (BRMIMP) during CGS's operations phase. This report fulfills CEC COC BIO-2, Subsection 8 (BRMIMP 2010). PG&E has complied with the CEC's COC by directing the Designated Biologist (DB) to perform pre-disturbance surveys, perform wildlife relocation when dangerous animals (e.g., rattlesnakes) are encountered on site, and coordinate with CGS staff to avoid or minimize impacts to the environment. This report covers the reporting period from January 1, 2023, to December 31, 2023 (the Reporting Period).

1.1 Project Location

The CGS is located approximately four miles west of Interstate 5, 7.1 miles northwest of the city of Maxwell, in Colusa County, California. The power plant is immediately west of PG&E's Delevan Natural Gas Compressor Station on Dirks Road. The power plant is in the eastern half of Section 35, Township 18 North, Range 4 West, and is in the Sites United States Geological Survey 7.5-minute quadrangle.

1.2 Background

The CGS was designed to avoid biological resources to the greatest extent through the development of mitigation and protection measures in consultation with the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Central Valley Regional Water Quality Control Board (CVRWQCB), and the CEC. PG&E complied with all applicable COCs during construction and continues to implement applicable COCs during CGS operations, including routine maintenance and outage events.

2. Methods

The CEC-approved DB or Biological Monitor (BM) performed pre-disturbance surveys; captured and relocated wildlife encountered on site, in harm's way, or potentially harmful to facility employees; and coordinated with CGS staff to avoid or minimize impacts to the environment. The DB remained on call throughout the Reporting Period.

All new CGS employees and contract workers received the CEC-approved Worker Environmental Awareness Program (WEAP) training via video, an illustrated pamphlet, as well as lecture and daily tailgate trainings with the DB or the PG&E CGS Compliance Manager.

During the active season for rattlesnakes (defined for this document as approximately March to October), the DB or BM conducted surveys of the CGS approximately weekly to detect and relocate rattlesnakes before they entered the plant and posed a danger to operations staff. CGS management has requested the DB/BM and CGS Compliance Manager maintain staff safety by humanely reducing the population of rattlesnakes in the following areas: the erosional areas along the switchyard perimeter, the detention pond slopes, and a backup water supply pump at the Glenn-Colusa Canal (GCC) (which is owned and maintained by PG&E in case the water in the Tehama-Colusa Canal is not available or usable). These areas are surveyed because they are part of the power plant infrastructure and, historically, have been a location of high rattlesnake activity. All rattlesnakes captured in 2023 were released unharmed off-site.

The DB or BM also conducted surveys to count the number of bat carcasses observed beneath the air-cooled condenser (ACC) throughout the bat migration and breeding season (defined for this document as approximately May through October).

3. Results

The CGS complied with all biological mitigation and protection measures covered in the BRMIMP applicable to this operating facility during the Reporting Period. Monitoring and compliance for the Reporting Period are documented in chronological order in Appendix A. Site photographs are presented in Appendix B.

3.1 Rattlesnakes

Northern Pacific rattlesnakes (*Crotalus oreganus oreganus*) continued to be an issue during the Reporting Period. A total of 23 rattlesnakes were observed, which was 21.7 percent lower than the number detected in the 2022 Reporting Period, when 28 rattlesnakes were detected (five inside the facility and 23 outside). Five live rattlesnakes were detected inside the CGS, the same number found inside the facility during the 2022 Reporting Period. The remaining 18 rattlesnakes in the Reporting Period were detected outside of but adjacent to the CGS (**Table 1 and Appendix C**). All rattlesnake observations during the Reporting Period occurred within the PG&E CGS parcel (approximately 100 acres in size).

Table 1. Rattlesnakes Detected in 2023

	Outside Plant	Inside Plant	Total
Rattlesnakes	18	5	23

3.2 Bats

Bat fatalities are a concern of PG&E, CGS management, the CEC, and CDFW. In 2019, CGS staff installed screening to cover an 11-inch gap between the ACC grating and the bottom of the fan plenum, which eliminated raptors and passerines from entering the ACC. However, it did not preclude bats from entering the ACC. In the Fall of 2020, CGS staff installed new light-emitting diode (LED) lighting inside and outside of the ACC. During 2021, CGS operated the lighting inside the ACC and on the walkway 24 hours per day, which may have contributed to lower bat mortality in and under the ACC in 2021. CDFW has installed a year-round bat acoustic detector in a field outside of but immediately adjacent to the CGS to help understand the level of bat activity in the area. The DB regularly sends the acoustic data to CDFW for analysis. The CGS management is currently determining the impact of installing netting to the underside of the ACC. If CGS management determines the netting is feasible without jeopardizing plant availability, safety, and performance, CGS management will move forward with the installation of netting to the ACC. The DB and BM will continue to monitor and report on-site bat fatalities during the 2024 Reporting Period.

A total of 146 bat carcasses were detected on the CGS site in the Reporting Period (Table 2 and Table D-1 in Appendix D). Bat species detected include myotis species [little brown bat (*Myotis lucifugus*) or Yuma myotis (*M. yumanensis*)] and Mexican free-tailed bat (*Tadarida brasiliensis*). In comparison, during the 2022 Reporting Period 241 bat carcasses were detected, including non-special-status bats (a majority of which were myotis species and Mexican free-tailed bats, along with six big brown bats (*Eptesicus fuscus*), five Western red bats (*Lasiurus blossevillii*, a CDFW Species of Special Concern (SSC)), and one pallid bat (*Antrozous pallidus* a CDFW Species of Special Concern (SSC)). No live bats were encountered during the 2023 Reporting Period.

Table 2. Bat Carcasses by Species and Location

Bat Species Observed	Under ACC	Outside ACC	Totals
Myotis (little brown bat or Yuma myotis)	129	8	137
Mexican free-tailed bat	5	0	5
Western red bat	0	0	0
Big brown bat	0	0	0
Hoary bat	0	0	0
Unidentified	3	1	4
Totals:	137	9	146

In the Reporting Period, bat fatalities were mainly observed under the air-cooled condenser (ACC) structure. Nine bat carcasses outside the ACC were also detected near the western fence of CGS near the ACC. In total, 146 bat carcasses were detected and collected throughout the 2023 Reporting Period under the ACC

3.3 Other Special-status Species Encountered in or Near the CGS

One giant garter snake (*Thamnophis gigas*) was encountered on May 11, 2023, in the rock slope protection (RSP) at the GCC bridge approximately 0.7 mile east of the CGS (Appendix B, Photo 14). Giant garter snake was also detected at this location in the

2022 Reporting Period. A CNDDDB occurrence was submitted for that occurrence in May of 2022.

On February 10 and 13, 2023, one burrowing owl (*Athene cunicularia*, a CDFW SSC) was spotted near a culvert northwest of the CGS during herbicide application. A single burrowing owl was also observed on October 19, 2022, at the same culvert. Burrowing owls have been observed in the vicinity of the CGS in the past, so burrow inspection for burrowing owl sign prior to mowing, erosion repair, or other surface disturbance is a standard survey protocol.

3.4 Rock Pigeon Abatement

Rock pigeon (*Columba livia*), a non-native bird that was introduced from Europe in the 1600s, has become established at the CGS, with dozens of birds nesting and perching among the plant infrastructure. Because this species is not native to North America it is not protected by the Migratory Bird Treaty Act (MBTA) nor other state-level laws such as California Fish and Game Code (FGC) Sections 3503 or 3513. Rock pigeon abatement work was determined to be required in early 2023 because pigeon droppings potentially pose a human health hazard (through the transmission of disease as well as creating a slipping hazard) and were also causing the corrosion of metal surfaces at the plant, decreasing the plants operational readiness.

The use of commercial falconry and trapping for pest control and abatement was approved by the CEC in email on March 10, 2023. CGS contracted Hawk Force during the spring season of the Reporting Period to perform nuisance bird (rock pigeon) abatement via commercial falconry and trapping at the facility.

On October 25th, a meeting was held to discuss the use of commercial falconry at CGS, with attendance by CGS plant staff (Maintenance Supervisor Dean Linville and Environmental Compliance Manager TJ Gomez), other PG&E staff (including PG&E Senior Biologist Amy Krisch and Environmental Compliance Manager Sam Garcia), Jacobs DB Scott Lindemann and BM Danny Rivas, and Hawk Force owner Chris Starr. During the meeting, it was confirmed that licenses and permits held by Hawk Force permitted the commercial use of falconry for nuisance bird abatement, with sections allowing for the accidental incidental take (under MBTA and FGC Section 3513) of non-target species of birds by falconry. It was also confirmed that the traps employed by Hawk Force could not feasibly capture other species of birds besides rock pigeon due to the design of the trap. Capture of native species would similarly be categorized as “take” under the MBTA and FGC Section 3513.

A total of 149 rock pigeons and 11 Eurasian collared doves (*Streptopelia decaocto*) were removed during the Reporting Period through falconry and trapping. The use of Hawk Force is expected to continue in 2024.

Table 3. Rock Pigeon and Eurasian Collared Dove Abatement Monthly Totals

Month	Total
January	0
February	0
March	0
April	0
June	0

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July	11
August	14
September	34
October	21
November	12
December	68
Total:	160

Appendix A

Biological Monitoring Site Visit Logs

Memorandum

Table A-1. Biological Monitoring Site Visit Log

Date	Biologist	Description
2/9/2023	BM Danny Rivas	BM was on site to monitor the application of herbicide in the grassland areas surrounding CGS. The herbicide crew worked in the grassland areas east and southeast of CGS. No nests, rattlesnakes, or sensitive species were encountered during the herbicide application.
2/10/2023	BM Danny Rivas	BM was on site to monitor the application of herbicide in the grassland areas surrounding CGS. The herbicide crew worked in the grassland areas south of the warehouse, west of the detention pond, and along Noel Evan Road. A burrowing owl (<i>Athene cunicularia</i> , CDFW SSC) was observed near a culvert east of CGS. No nests, rattlesnakes, or sensitive species were encountered during the herbicide application.
2/13/2023	BM Danny Rivas	BM was on site to monitor the application of herbicide in the grassland areas surrounding CGS. The herbicide crew worked in the grassland areas northwest and west of CGS. A burrowing owl (CDFW SSC) was observed at the same culvert on 2/10/2023 east of CGS. No nests, rattlesnakes, or sensitive species were encountered during the herbicide application.
3/24/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or bird nests were observed during the survey. One myotis species carcass was found inside the warehouse (Appendix B, Photo 1). The area underneath the ACC was not surveyed due to overhead work.
3/27/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes, bat carcasses, or bird nests were observed during the survey. The CGS Compliance Manager and BM placed the wooden boards back over ground depressions surrounding the perimeter fence and reopened the pit traps at both gates. Gaps in the fine mesh layer of the fence were filled in with dirt and gravel during the outer perimeter survey.
3/30/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or bird nests were observed during the survey. One myotis species carcass was observed under the ACC (Appendix B, Photo 2). The outer perimeter survey was limited to GCC bridge and checking the wooden boards due to recent rain.
4/3/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or bird nests were observed during the survey. One Mexican free-tailed bat carcass was found under the ACC (Appendix B, Photo 3). During the inside survey, three rock pigeon carcasses were found and disposed of in a trash bin. No outer perimeter survey was performed.
4/5/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or bird nests were observed during the survey. Two myotis species carcasses were identified. One was found under the ACC, and the other myotis carcass was found next to the fence line west of the ACC (Appendix B, Photo 4). The bioacoustics monitoring status was checked and reported to CDFW.
4/10/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No bird nests or bat carcasses were observed during the survey. During the outer perimeter survey, a total of five adult rattlesnakes were contained. Rattlesnakes #1-4 were found within a patch of tall grass next to the GCC bridge and rattlesnake #5 was found within a rock pile north of the switchyard (Appendix B, Photos 5 and 6). A Valley garter snake (<i>Thamnophis sirtalis fitchi</i>) was also observed scurrying into the RSP at the GCC bridge.

Memorandum

Date	Biologist	Description
4/11/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes, bat carcasses, or bird nests were observed during the survey. A pair of house finch (<i>Haemorhous mexicanus</i>) carcasses were observed near gas canisters staged between the maintenance and water treatment buildings. The bird carcasses were collected and disposed of in a trash bin.
4/13/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or bat carcasses were observed during the inside survey. One bird nest with two eggs was observed northeast of the ACC near the main duct (Appendix B, Photo 7). No construction activity is planned to occur near the nest. This nest location has been used in the past and will likely continue to be used in the future. A fresh male house finch carcass was found under the ACC and was disposed of in a trash bin.
4/17/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes were observed inside or outside CGS. A gopher snake (<i>Pituophis catenifer</i>) was found under a wooden board west of the ACC during the fence line survey. The gopher snake was relocated to the grassland west of the ACC. One desiccated unidentified bat carcass was found by CGS staff east of the ACC (Appendix B, Photo 8). The state of the carcass made it difficult to determine the species. No additional bat carcasses were observed during the survey. One recently constructed mourning dove nest with no eggs was found on a high-pressure gas pipe south of the switchyard (Appendix B, Photo 9). The empty nest was removed from the gas pipe.
4/19/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes, bat carcasses, or bird nests were observed during the survey. One grounded house finch was observed near the warehouse entrance ramp disoriented and struggling to fly. The finch was initially found by a worker inside the warehouse tangled in webs and placed outside. The BM returned to check the status of the finch, and the finch was unresponsive. The finch carcass was later disposed of in a trash bin.
4/21/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes, bat carcasses, or bird nests were observed inside the facility. No outer perimeter survey was performed for this site visit. One desiccated myotis species bat carcass was found under the ACC (Appendix B, Photo 10).
4/24/2023	BM Danny Rivas	BM was on site to monitor mowing and disking operations in the grassland areas surrounding CGS for any potential nests or rattlesnakes. No rattlesnakes or bird nests were observed during the vegetation clearing. The vegetation crew began mowing and disking the grassland area east of CGS and continued north of the switchyard. A path was cleared with a mower for the disc plow to clear the grassland areas west, east, and south of CGS.
4/25/2023	BM Danny Rivas	BM was on site to monitor mowing and disking operations on the grassland areas surrounding CGS for any potential nests or rattlesnakes. No rattlesnakes or bird nests were observed during the vegetation clearing. The vegetation crew continued plowing and mowing the grassland areas west and south of CGS. Mowing and disking would continue along the berm surrounding the switchyard, along the length of the back road west of CGS, and the area surrounding the detention pond.
4/26/2023	BM Danny Rivas	BM was on site to monitor mowing and disking operations on the grassland areas surrounding CGS for any potential nests or rattlesnakes. Rattlesnake #6 was observed moving through a culvert at the back road before being contained (Appendix B, Photo 11). An additional rattlesnake was observed heading north past the barbed wire fence towards the grasslands used for cattle grazing. Multiple valley garter snakes were observed in the RSP at the GCC bridge. No bird nests were observed during vegetation clearing.

Memorandum

Date	Biologist	Description
4/27/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No bat carcasses or bird nests were observed during the survey. One rattlesnake was observed under a traffic barrier near the GCC bridge, burrowing deeper in the barrier and ultimately avoiding containment. No additional rattlesnakes were observed inside or outside of CGS.
5/9/2023	BM Danny Rivas	On 5/1/2023, rattlesnake #7 was found by CGS staff deceased next to the fence west of the ACC (Appendix B, Photo 12). The juvenile rattlesnake likely died from exposure. The BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No bat carcasses or nests were observed during the survey. Rattlesnake #8, a pregnant female, was found near the GCC bridge in a patch of tall grass and relocated off site (Appendix B, Photo 13).
5/11/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No bat carcasses or nests were observed during the survey. One rattlesnake was observed near the riprap at GCC bridge but avoid capture. A giant garter snake was also observed in the RSP at GCC bridge (Appendix E, Photo 14). Some of the farmland near the bridge were converted into rice fields for the growing season.
5/17/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. Three rattlesnakes were observed during the outer perimeter survey. Rattlesnake #9 and #10, both juveniles, were found north and west of the switchyard near and under the wooden boards (Appendix B, Photos 15 and 16). Rattlesnake #11, an adult male, was found under the detention pond outlet pipe (Appendix B, Photo 17). Two desiccated myotis species bat carcasses were found under the ACC (Appendix B, Photo 18). No bird nests were observed during the survey. Three European starling (<i>Sturnus vulgaris</i>) carcasses were found near the heat recovery steam generator 1 (HRGS1) and disposed of in a trash bin. A raccoon was observed yesterday by CGS staff west of the water treatment building before being chased outside the fence. Dog-sized scat from a raccoon was observed under the ACC (Appendix B, Photo 19).
5/24/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes, bat carcasses, or bird nests were observed during the survey. The BM observed four Brewer's blackbird (<i>Euphagus cyanocephalus</i>) fledglings under the building between switchyards CT#1 and CT#2. No raccoon sightings have been made since last Tuesday 5/16/2023. The BM left a live trap for relocation with fruit bait for raccoons under the ACC near where the scat was found on 5/17/2024 (Appendix B, Photo 20).
5/31/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. Rattlesnake #12, a juvenile, was found and contained by CGS staff east of the warehouse near the loading entrance (Appendix B, Photo 21). Rattlesnake #13, also a juvenile, was found inside the site between the fence and south side of the warehouse during the inside survey of the site (Appendix B, Photo 22). Rattlesnake #14, an adult male, was found outside the fence north of the substation near an outlet pipe (Appendix B, Photo 23). No bat carcasses or nests were observed during the survey. In addition, no raccoons have been observed inside the site since the last observation two weeks ago. The BM replaced the bait in the live trap for relocation and filled in gaps between the fine mesh barrier south of the warehouse to try and limit potential openings for rattlesnakes to enter.

Memorandum

Date	Biologist	Description
6/7/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or bat carcasses were observed during the inside survey. A Eurasian collared dove nest was found on the ground near a gas pipe northeast of the site with cracked eggs (Appendix B, Photo 25). No doves or pigeons were seen near the nest and was likely abandoned. The nest was placed in a trash bin on site. On 06/05/2023, a dead adult gopher snake was found by CGS staff south of the warehouse next to the fence (Appendix B, Photo 24). The snake climbed up the mesh lining and went down the gap between the fence to get inside. The BM observed two gaps in the mesh lining south of CGS large enough to have been used by the juvenile rattlesnakes from last week to get inside and filled them in with gravel before leaving the site.
6/14/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. One adult rattlesnake was observed under a concrete k-rail barrier near the GCC bridge but eluded containment. Three desiccated myotis species carcasses and one desiccated Mexican free-tailed bat carcass were found under the ACC (Appendix B, Photo 26). The ACC fans were turned on for a brief period for testing purposes. No active bird nests were observed during the site survey.
6/21/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or bird nests were observed during the survey of the CGS. Two desiccated myotis species carcasses were found under the ACC and stored inside the warehouse freezer (Appendix B, Photo 27). Additional racoon scat was found west of the warehouse near the fence.
6/26/2023	BM Danny Rivas	BM was on site to conduct a rattlesnakes and bat carcasses survey at CGS. No bat carcasses were observed at the facility. Rattlesnake #15, an adult male, was found in a culvert northwest of the detention pond (Appendix B, Photo 28). One additional adult rattlesnake was observed under the k-rails near the GCC bridge but avoided capture (Appendix B, Photo 29). A fresh house finch chick carcass was found inside the warehouse below the house finch nest (Appendix B, Photo 30). The carcass was disposed into a trash bin on site. No activity was observed inside the nest due to its high location, but there were house finches inside the warehouse. (Appendix B, Photo 31).
7/3/2023	BM Danny Rivas	BM was on site to survey for rattlesnakes and bat carcasses at CGS. No bat carcasses, rattlesnakes, or active nests were observed inside the facility. Two house finch carcasses were found inside the warehouse, and two rock pigeon carcasses were found near and under HRSG2. Raccoon scat was found west of the warehouse near the fence. The BM noticed a section in the barbed wire that had a noticeable gap between the wires, where a raccoon could enter through (Appendix B, Photo 32). The BM placed the live trap for relocation without bait near the west exit door of the water treatment building.
7/12/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or active nests were observed during the survey. The BM found two desiccated and one fresh myotis species carcasses under the ACC (Appendix B, Photo 33). The carcasses were collected and stored inside the warehouse freezer. Raccoons were observed inside CGS at night last weekend foraging under the ACC. The night crew moved the live container and set bait where the raccoons were last observed. A portion of the southwest fence showed signs of erosion and left gaps large enough for rattlesnakes to enter (Appendix B, Photo 34). CGS Compliance Manager and BM filled in the gaps in the fine mesh barrier during the outer perimeter survey to prevent wildlife from entering the site.

Memorandum

Date	Biologist	Description
7/19/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes were observed during the inside or outer perimeter survey. Six myotis species carcasses were found and identified under the ACC (Appendix B, Photo 35). One of the carcasses was still fresh and the other five carcasses were desiccated. The BM collected the carcasses and stored them inside the warehouse freezer. A pigeon nest with two damaged eggs was found near a vapor compressor east of the ACC (Appendix B, Photo 36). No pigeons were observed at or near the nest location. The nest was later removed and disposed of in a trash bin. One fresh rock pigeon carcass was found south of the air cooler fans and disposed of in a trash bin. The CGS Compliance Manager noted raccoons were coming in and out of the site during the night, likely climbing over the barbed wire fence and foraging west of the warehouse and under the ACC. The SD card in the bioacoustics monitoring station was changed and sent to Amelia Tauber at CDFW.
7/26/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. No rattlesnakes or active bird nests were observed during the site survey. Fifteen myotis species carcasses and one unidentified carcass were found under the ACC (Appendix B, Photo 37). Four of the carcasses were still fresh, and the remaining carcasses were dried out and desiccated. The BM collected the carcasses and stored them inside the warehouse freezer. The live container for the raccoons was relocated west of the water treatment building next to the exit door and set bait. This was the last known location where the raccoons were observed foraging.
8/2/2023	BM Danny Rivas	BM was on site to survey for rattlesnakes, bat carcasses, and bird nests at CGS. No rattlesnakes or active bird nests were observed during the survey. Seven myotis species carcasses and one unidentified bat carcass were found under the ACC (Appendix B, Photo 38). Three of the carcasses were fresh, and the remaining carcasses were desiccated. The BM collected the carcasses and stored them inside the warehouse freezer. The BM also found a yellow jacket (<i>Vespula pensylvanica</i>) nest northwest of the ACC on the fence during the bat carcass survey under the ACC.
8/23/2023	BM Danny Rivas	BM was on site to survey for rattlesnakes, bat carcasses, and bird nests at CGS. No outer perimeter survey was performed for this site visit. The inside survey was negative for rattlesnakes and active bird nests. Fourteen myotis species carcasses and one Yuma myotis carcass were found under the ACC (Appendix B, Photo 40). The BM collected the carcasses and stored them inside the warehouse freezer. The mesh lining on the fence at the Delevan Substation entrance showed signs of wear (Appendix B, Photo 40). The BM also found a desiccated western kingbird (<i>Tyrannus verticalis</i>) carcass near HRSG1 that was disposed in a trash bin (Appendix B, Photo 41).
8/30/2023	BM Danny Rivas	BM was on site to survey CGS for rattlesnakes, bat carcasses, and bird nests at CGS. During the perimeter search, Rattlesnake #16, a deceased adult, was found outside the fence south of the warehouse (Appendix B, Photo 42). The rattlesnake was later removed from the area during the outer perimeter survey. No additional rattlesnakes or active bird nests were observed during the site visit. Thirteen desiccated myotis species carcasses and one fresh Mexican free-tailed bat carcass were found under the ACC. Two additional desiccated myotis species carcasses were found next to the fence west of the ACC (Appendix B, Photo 43). The BM collected the carcasses and stored them inside the warehouse freezer.
9/6/2023	BM Danny Rivas	BM was on site to survey CGS for rattlesnakes, bat carcasses, and bird nests at CGS. No rattlesnakes or bird nests were observed during the survey. Thirteen desiccated myotis species carcasses, two fresh myotis species carcasses, one fresh Mexican free-tailed bat carcass, and one desiccated Yuma myotis carcass were found under the ACC (Appendix B, Photo 44). One additional desiccated myotis species carcass was found next to the fence west of the ACC. The BM collected the carcasses and stored them inside the warehouse freezer.

Memorandum

Date	Biologist	Description
9/13/2023	BM Danny Rivas	BM was on site to survey CGS for rattlesnakes, bat carcasses, and bird nests at CGS. Rattlesnake #17 was found deceased outside the CGS fence south of the warehouse on Monday 9/11 by CGS staff (Appendix B, Photo 45). No rattlesnakes or bird nests were found inside or outside during the site visit. The BM found two desiccated myotis species carcasses, one fresh myotis species carcass, and one desiccated Yuma myotis carcass under the ACC (Appendix B, Photo 46). The BM collected the carcasses and stored them inside the warehouse freezer. One rock pigeon carcass found near HRSG1 was disposed of in a trash bin.
9/19/2023	DB Scott Lindemann	Rattlesnake #18, a juvenile, was found by CGS night staff inside the site. DB Scott Lindemann arrived on site to relocate the rattlesnake away from CGS.
9/27/2023	BM Danny Rivas	BM was on site to survey CGS for rattlesnakes, bat carcasses, and bird nests at CGS. No rattlesnakes were observed during the site survey. Six desiccated myotis species bat carcasses, one fresh myotis species carcass, and one desiccated unidentified partial bat carcass were found under the ACC (Appendix B, Photo 47). One additional myotis species carcass was found next to the gate west of the ACC. The BM collected the carcasses and stored them inside the warehouse freezer. One desiccated rock pigeon carcass found near HRSG2 was disposed of in a trash bin.
10/3/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. On the morning of 10/02/2023, a juvenile rattlesnake was found next to the doors of the main administration building by CGS staff and was contained on site (Appendix B, Photo 48). During the outer perimeter survey, rattlesnake #20, an adult female, was found north of the Delevan Substation atop of riprap next to the access road (Appendix B, Photo 49). Both rattlesnakes #19 and #20 were relocated off the site after the outside portion of the survey was completed. No additional rattlesnakes were observed while surveying inside of CGS. The BM found one desiccated myotis species carcass under the ACC and stored it inside the warehouse freezer (Appendix B, Photo 50). Due to the noise generated from the nearby turbine, ACC streets #1 and #2 were not surveyed.
10/5/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. Rattlesnake #21, a small juvenile, was found inside the site five feet east of boiler feed pump motor 2B by CGS staff on 10/4/2023 (Appendix B, Photo 51). During the perimeter portion of the inside survey, rattlesnake #22, a juvenile was found outside the fence under a traffic cone on the east side of CGS (Appendix B, Photo 52). Both rattlesnakes #21 and #22 were relocated off site. No additional rattlesnakes were observed inside of CGS, and no bat carcasses were observed under the ACC. One desiccated myotis species bat carcass was found west of the ACC near the fence and was stored inside the warehouse freezer (Appendix B, Photo 53).
10/11/2023	BM Danny Rivas	BM was on site to conduct a rattlesnake and bat carcass survey at CGS. The outside portion of the survey was not conducted for this survey. The inside survey was negative for rattlesnakes. Five desiccated and one fresh myotis species carcasses were found under the ACC (Appendix B, Photo 54). The BM collected the bat carcasses and stored them inside the warehouse freezer.

Memorandum

Date	Biologist	Description
10/18/2023	BM Danny Rivas	BM was on site to survey the inside and outside of CGS for rattlesnakes and bat carcasses. The inside survey was negative for rattlesnakes. During the outer perimeter survey, rattlesnake #23, a small juvenile, was found next to a wooden board east of the Delevan switchyard (Appendix B, 55). The rattlesnake was contained and later relocated outside of CGS after completing the outer perimeter survey. The BM found two desiccated and three fresh myotis species carcasses under the ACC (Appendix B, 56). The carcasses were collected and stored inside the warehouse freezer. The BM noticed two openings large enough for a juvenile rattlesnake to enter the site at the corners of main gate (Appendix B, Photo 57).
10/25/2023	BM Danny Rivas	BM was on site to survey the inside of CGS for rattlesnakes and bat carcasses. No outer perimeter survey was performed due to offroad conditions from recent rain. A portion of the wooden boards placed over pits near the fence line was removed, and pit traps were closed. The inside survey was negative for rattlesnakes. The BM found nine desiccated myotis species carcasses and one desiccated Mexican free-tailed bat carcass under the ACC (Appendix B, Photo 58). The carcasses were collected and stored inside the warehouse freezer.

Appendix B

Site Photos

Memorandum



Photo 1. A desiccated myotis species carcass found inside the CGS warehouse on March 24th, 2023.



Photo 2. A desiccated myotis carcass found under the ACC on March 30th, 2023.

Memorandum



Photo 3. A desiccated Mexican free-tailed bat carcass found under the ACC on April 3rd, 2023.



Photo 4. One Myotis carcass found south of the western back gate next to the ACC and one under the ACC on April 5th, 2023.

Memorandum



Photo 5. Rattlesnakes #1-4 were found by the GCC bridge within a patch of tall grass on April 10th, 2023.



Photo 6. Rattlesnake #5 spotted in a RSP pile north of the switchyard on April 10th, 2023.



Photo 7. Reused nest with two eggs spotted northeast of the ACC near the main duct on April 13th, 2023. A positive species identification could not be made.



Photo 8. One desiccated unidentified bat carcass found by CGS staff east of the ACC on April 17th, 2023. The state of the carcass made it difficult to determine the species.

Memorandum



Photo 9. One recently constructed mourning dove nest bird nest with no eggs was found on a high-pressure gas pipe south of the Delevan switchyard on April 17th, 2023. The nest was removed from the gas pipe.



Photo 10. One desiccated *Myotis* species carcass found under the ACC on April 21st, 2023.

Memorandum



Photo 11. Rattlesnake #6, an adult male, was found and captured near a culvert at the back road west of CGS during vegetation removal operations on April 26th, 2023.



Photo 12. Rattlesnake #7, a deceased juvenile, found outside the fence west of the ACC by CGS staff on May 1st, 2023.

Memorandum



Photo 13. Rattlesnake #8, a pregnant female, found near the GCC bridge in a patch of tall grass on May 9th, 2023.



Photo 14. A giant garter snake spotted in the RSP at GCC bridge on May 11th, 2023.

Memorandum



Photo 15. Rattlesnake #9, a juvenile, found north of the Delevan switchyard on May 17th, 2023.



Photo 16. Rattlesnake #10, a juvenile, found under a wooden board west of the Delevan switchyard on May 17th, 2023.

Memorandum



Photo 17. Rattlesnake #11, an adult male, found under the detention pond outlet on May 17th, 2023.



Photo 18. Two desiccated Myotis species carcasses found under the ACC on May 17th, 2023.

Memorandum



Photo 19. Raccoon scat found under the ACC on May 17th, 2023.

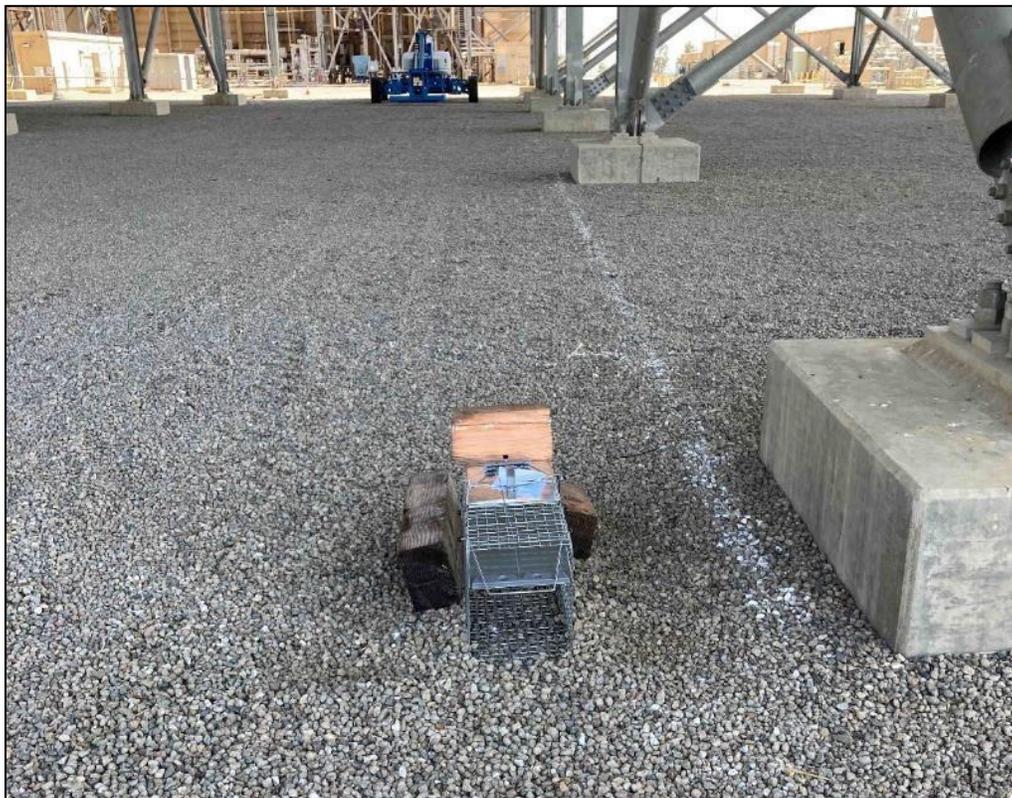


Photo 20. Raccoon live-trap for relocation set under the ACC near where the scat was found on May 24th, 2023.

Memorandum



Photo 21. Rattlesnake #12, a juvenile, found inside CGS by staff east of the warehouse near the entrance on May 30th, 2023.

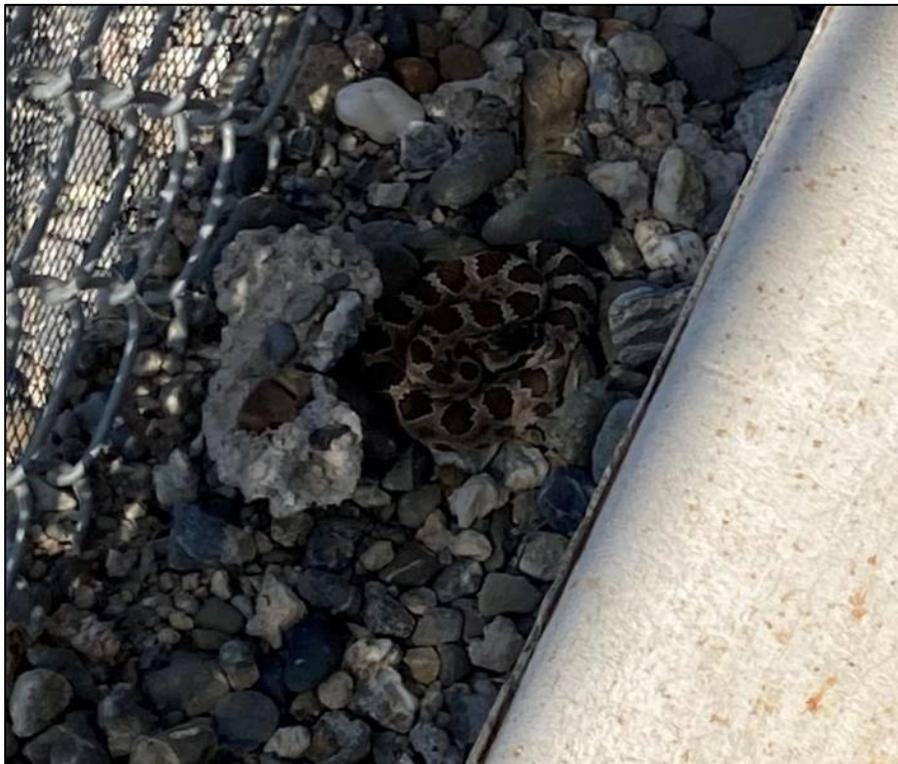


Photo 22. Rattlesnake #13, a juvenile, found inside CGS next to the fence south of the warehouse on May 31st, 2023.

Memorandum



Photo 23. Rattlesnake #14, an adult male, observed north of Delevan switchyard near an outlet pipe on May 31st, 2023.



Photo 24. A large, deceased gopher snake found by CGS staff next to the fence south of the warehouse on June 5th, 2023.

Memorandum



Photo 25. An abandoned dove nest with damaged eggs found near a gas pipe northeast of the facility on June 7th, 2023. Positive identification of the species could not be made.



Photo 26. Three desiccated Myotis species and one desiccated Mexican free-tailed bat carcasses (first from the left) found under the ACC on June 14th, 2023.

Memorandum



Photo 27. Two desiccated Myotis species carcasses found under the ACC on June 21st, 2023.



Photo 28: Rattlesnake #15, an adult male, found inside a culvert northwest of the detention pond on June 26th, 2023.

Memorandum



Photo 29. Concrete k-barrier rails near the GCC bridge, where a rattlesnake took refuge to avoid capture on June 26th, 2023.



Photo 30. A fresh house finch hatchling carcass found inside the warehouse below the nest on June 26th, 2023.

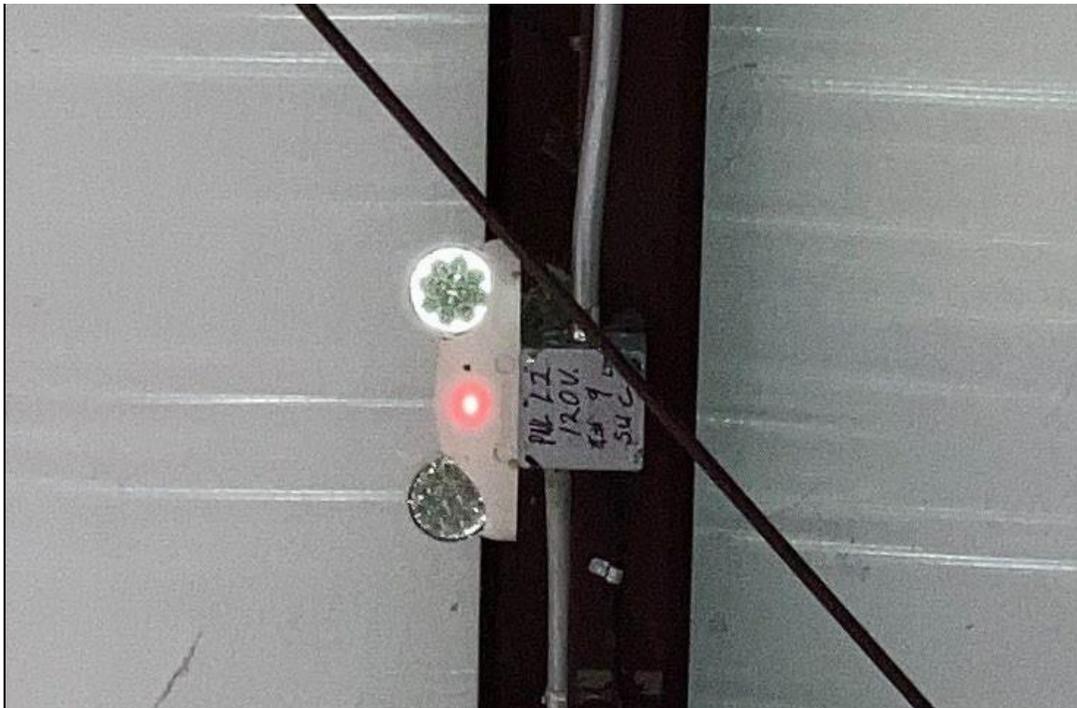


Photo 31. House finch nest found on top of a light fixture inside the warehouse on June 26th, 2023.



Photo 32. Gap between the barbed wire found southwest of CGS on July 3rd, 2023.

Memorandum



Photo 33. Three Myotis species carcasses found under the ACC on July 12th, 2023.



Photo 34. Portion of the southwest fence showing signs of erosion. Holes in the fence were filled in by CGS Compliance Manager and BM on July 12th, 2023.

Memorandum



Photo 35. Six Myotis species carcasses found under the ACC on July 19th, 2023. One of the carcasses was still fresh (first one from the left), and the other five carcasses were desiccated.



Photo 36. Abandoned pigeon nest with damaged eggs found near the vapor compressor east of the ACC on July 19th, 2023.

Memorandum



Photo 37. Fifteen myotis species carcasses and one desiccated unidentified carcass found under the ACC on July 26th, 2023.



Photo 38. Seven myotis species carcasses and one desiccated unidentified carcass found under the ACC on August 2nd, 2023. Three of the Myotis carcasses were still fresh, and the rest of the carcasses were dried out and desiccated.



Photo 39. Eleven myotis species carcasses, two fresh and nine desiccated, found under the ACC. Two additional carcasses found outside the ACC. One fresh Myotis species carcass was found on the paved road west of the ACC, and one desiccated Myotis species carcass was found next to the fence northwest of the ACC on August 9th, 2023.



Photo 40. Fifteen Myotis species carcasses (1 Yuma and 14 little brown) were found under the ACC on August 23rd, 2023. Yuma myotis carcass is third on bottom row.

Memorandum



Photo 41. A desiccated Western kingbird carcass found near HRSG1 on August 23rd, 2023.



Photo 42. Rattlesnake #16 carcass found outside the fence south of the warehouse.



Photo 43. Thirteen desiccated myotis species carcasses and one fresh Mexican free-tailed bat carcass (top left corner) found under the ACC. Two additional myotis species carcasses were found next to the fence west of the ACC on August 30th, 2023.



Photo 44. Thirteen desiccated myotis species carcasses, two fresh myotis species carcasses, 1 fresh Mexican free-tailed bat carcass (bottom left, first row), and one desiccated Yuma myotis carcass (fourth in the third row) were found under the ACC on September 6th, 2023. One desiccated myotis species carcass was found next to the fence west of the ACC.



Photo 45. Rattlesnake #17 carcass found outside the CGS fence south of the warehouse on September 11th, 2023, by CGS staff. The carcass was removed from the area on September 13th, 2023.



Photo 46. Two desiccated myotis species carcasses, one fresh myotis species carcass, and one desiccated Yuma myotis carcass (bottom right) found under the ACC on September 13th, 2023.



Photo 47. Six desiccated myotis species carcasses, one fresh myotis species carcass, and one desiccated, unidentified partial bat carcass found under the ACC on September 27th, 2023. One myotis species carcass was found next to the gate west of the ACC.

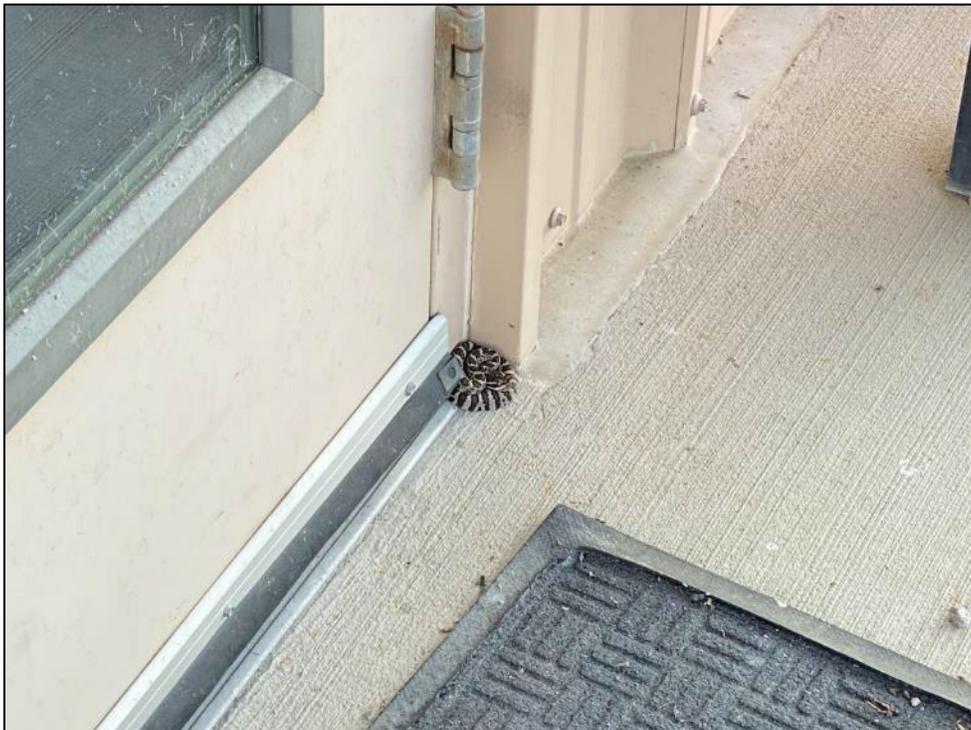


Photo 48. Rattlesnake #19, a juvenile, found next to the doors of the main administration building by CGS staff and contained on October 2nd, 2023.

Memorandum



Photo 49. Rattlesnake #20, an adult female, found north of the Delevan Substation atop of RSP on October 3rd, 2023.



Photo 50. One desiccated myotis species carcass found under the ACC on October 3rd, 2023.

Memorandum



Photo 51. Rattlesnake #21, a juvenile, found inside CGS east of the boiler feed pump motor 2B by CGS staff on October 4th, 2023.



Photo 52. Rattlesnake #22, a juvenile, found outside the fence under a traffic cone on the east side of CGS on October 5th, 2023.

Memorandum



Photo 53. One myotis species carcass found under the ACC on October 5th, 2023.



Photo 54. Five desiccated myotis species carcasses and one fresh myotis carcass found under the ACC on October 11th, 2023.



Photo 55. Rattlesnake #23, a small juvenile, found next to a wooden board east of the Delevan switchyard on October 18th, 2023.



Photo 56. Two desiccated myotis species carcasses and three fresh myotis species carcasses found under the ACC on October 18th, 2023.



Photo 57. Gap in the mesh fence by the main front gate observed on October 18th, 2023.



Photo 58. Nine desiccated myotis species carcasses and one Mexican free-tailed bat carcass (top left) were found under the ACC on October 25th, 2023.

Appendix C Rattlesnake Table

Memorandum

Table C-1. Rattlesnakes Detected in 2023

Date	Total Daily Quantity	Inside Plant	Outside Plant	Notes
2/9/2023	0	0	0	No rattlesnakes were observed during herbicide application outside of CGS.
2/10/2023	0	0	0	No rattlesnakes were observed during herbicide application outside of CGS.
3/13/2023	0	0	0	No rattlesnakes were observed during herbicide application outside of CGS.
3/24/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS
3/27/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS
3/30/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS
4/3/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/5/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/10/2023	5	0	5	Rattlesnakes #1-4 were found by the GCC bridge within a path of tall grass. Rattlesnake #5 was found north of the switchyard in a rock pile. No rattlesnakes were observed inside the facility.
4/11/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/13/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/17/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/19/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/21/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/24/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/25/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
4/26/2023	1	0	1	Rattlesnake #6, an adult male, was found and captured near a culvert at the back road west of CGS. Another adult rattlesnake was found moving north of the back road into the grassland used for cattle grazing beyond the barbed fence.
4/27/2023	0	0	0	An adult rattlesnake spotted under a traffic barrier near the GCC bridge was able to avoid containment.
5/1/2023	1	0	1	Rattlesnake #7, a juvenile, was found deceased outside of the fence west of the ACC by CGS staff.
5/9/2023	1	0	1	Rattlesnake #8, a pregnant female, was found near the GCC bridge in a patch of tall grass. An additional rattlesnake was observed under a traffic barrier but eluded capture.
5/11/2023	0	0	0	An adult rattlesnake spotted near the GCC bridge was able to avoid containment.
5/17/2023	3	0	3	Rattlesnakes #9 and #10, both juveniles, were found near and under the wooden boards outside the fence north and east of the Delevan switchyard. Rattlesnake #11, an adult male, was found under the detention pond outlet.

Memorandum

Date	Total Daily Quantity	Inside Plant	Outside Plant	Notes
5/24/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
5/30/2023	1	1	0	Rattlesnake #12, a juvenile, was found and contained by staff inside CGS east of the warehouse near the loading entrance. Released off site on 5/31/2023
5/31/2023	2	1	1	Rattlesnake #13, a juvenile, was found inside the site between the fence on the south side of the warehouse. Rattlesnake #14, an adult male, was found outside the fence north of Delevan switchyard near an outlet pipe.
6/7/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
6/14/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
6/21/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
6/26/2023	1	0	1	Rattlesnake #15, an adult male, was found in a culvert northwest of the detention pond. An additional rattlesnake was spotted under a traffic barrier but eluded capture.
7/5/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
7/12/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
7/19/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
7/26/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
8/2/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
8/9/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
8/23/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
8/30/2023	1	0	1	Rattlesnake #16, a small adult, was found deceased outside the fence south of the warehouse.
9/6/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
9/11/2023	1	0	1	Rattlesnake #17, a small juvenile, was found deceased outside the fence south of the warehouse.
9/13/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
9/19/2023	1	1	0	Rattlesnake #18, a small juvenile, was found near the water treatment building by CGS staff at night. The rattlesnake was released off site by DB Scott Lindemann on 9/20.
9/27/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
10/2/2023	1	1	0	Rattlesnake #19, a small juvenile, was found next to the main entrance doors to the administration building by CGS staff. The rattlesnake was relocated off site on 10/3.
10/3/2023	1	0	1	Rattlesnake #20, an adult female, was found atop RSP north of the substation by the dirt road. Both rattlesnakes #19 and #20 were relocated off site.

Memorandum

Date	Total Daily Quantity	Inside Plant	Outside Plant	Notes
10/4/2023	1	1	0	Rattlesnake #21, a small juvenile, was found inside the site five feet east of boiler feed pump motor 2B by CGS staff.
10/5/2023	1	0	1	Rattlesnake #22, a small juvenile, was found outside the fence east of the site under a traffic cone.
10/11/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
10/18/2023	1	0	1	Rattlesnake #23, a small juvenile, was found outside the fence near a wooden board east of Delevan switchyard.
10/25/2023	0	0	0	No rattlesnakes were observed during the inside and outside survey of CGS.
Totals	23	5	18	--

Appendix D

Bat Table

Memorandum

Table D-1. Bat Species by Date and Condition

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
2/9/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during herbicide application.
2/10/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during herbicide application.
2/13/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during herbicide application.
3/24/2023	1	0	1	0	0	0	0	0	0	1	One desiccated myotis species carcass was found inside the warehouse; no bat carcasses were found under the ACC.
3/27/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
3/30/2023	1	0	1	0	0	0	0	0	0	1	One desiccated myotis species carcass was found under the ACC.
4/3/2023	1	0	0	1	0	0	0	0	0	1	One desiccated Mexican free-tailed bat carcass was found under the ACC.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
4/5/2023	2	0	2	0	0	0	0	0	0	2	Two desiccated myotis species bat carcasses were found, one immediately south of the back gate next to the fence and one under the ACC.
4/10/2022	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
4/11/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
4/13/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
4/17/2023	1	0	0	0	0	0	0	0	1	1	One very desiccated, unidentified bat carcass was found east of the ACC by CGS staff.
4/19/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
4/21/2023	1	0	1	0	0	0	0	0	0	1	One desiccated Myotis species carcass was observed under the ACC.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
4/24/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
4/25/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
4/26/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
4/27/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
5/9/2023	0	0	2	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
5/11/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
5/17/2023	2	0	2	0	0	0	0	0	0	2	Two desiccated Myotis species carcasses were found under the ACC.
5/24/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
5/31/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
6/7/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
6/14/2023	4	0	3	1	0	0	0	0	0	4	Three desiccated Myotis species carcasses and one Mexican free-tailed bat carcass were found under the ACC.
6/21/2023	2	0	2	0	0	0	0	0	0	2	Two desiccated Myotis species carcasses were found under the ACC.
6/26/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
7/3/2023	0	0	0	0	0	0	0	0	0	0	No bat carcasses were observed during site survey.
7/12/2023	3	0	3	0	0	0	0	0	0	3	Three Myotis species carcasses were found under the ACC. Two were desiccated and one was fresh.
7/19/2023	6	0	6	0	0	0	0	0	0	6	Five desiccated and one fresh Myotis species carcasses were found under the ACC.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
7/26/2023	16	0	15	0	0	0	0	0	1	16	Eleven desiccated and four fresh Myotis species carcasses and one desiccated unidentified bat carcass were found under the ACC.
8/2/2023	8	0	7	0	0	0	0	0	1	8	Four desiccated and three fresh Myotis species bat carcasses found under the ACC. One desiccated unidentified bat carcass was found under the ACC.
8/9/2023	13	0	13	0	0	0	0	0	0	13	Nine desiccated and two fresh Myotis species bat carcasses found under the ACC. One Myotis carcass was found near the fence northwest of the ACC, and one fresh Myotis carcass was found on the paved road west of the ACC.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
8/23/2023	15	0	15	0	0	0	0	0	0	15	Twelve desiccated and two fresh myotis species bat carcasses were found under the ACC. One desiccated Yuma myotis carcass was also found under the ACC.
8/30/2023	16	0	16	0	0	0	0	0	0	16	Thirteen desiccated Myotis species carcasses and one fresh Mexican free-tailed bat carcass were found under the ACC. Two desiccated Myotis species carcasses were found west of the ACC next to the fence.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
9/6/2023	18	0	17	1	0	0	0	0	0	18	Fifteen Myotis species bat carcasses (two fresh and thirteen desiccated), one desiccated Yuma myotis carcass, and one fresh Mexican free-tailed bat carcass were found under the ACC. One desiccated Myotis species carcass was also found west of the ACC next to the fence.
9/13/2023	4	0	4	0	0	0	0	0	0	4	Two desiccated Myotis species carcasses, one fresh Myotis species carcass, and one desiccated Yuma myotis carcass were found under the ACC.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
9/27/2023	9	0	8	0	0	0	0	0	1	9	Six desiccated Myotis species carcasses, one fresh Myotis species carcass, and one unidentified bat carcass were found under the ACC. One desiccated Myotis species carcass was also found near the gate west of the ACC.
10/3/2023	1	0	1	0	0	0	0	0	0	1	One desiccated Myotis species carcass was found under the ACC.

Memorandum

Date	Number of Bat Carcasses Observed	Live Bats Captured and Released	Myotis (little brown bat or Yuma myotis)	Mexican free-tailed bat	Western red bat	Big brown bat	Hoary bat	Pallid bat	Unidentified	Daily Total (dead and living)	Notes
10/5/2022	1	0	1	0	0	0	0	0	0	1	One desiccated Myotis species carcass was found west of the ACC near the fence.
10/11/2023	6	0	6	0	0	0	0	0	0	6	Five desiccated and one fresh Myotis species carcasses were found under the ACC.
10/18/2023	5	0	5	0	0	0	0	0	0	5	Three fresh and two desiccated Myotis species bat carcasses were found under the ACC
10/25/2023	10	0	9	1	0	0	0	0	0	10	Nine desiccated Myotis species carcasses and one desiccated Mexican free-tailed bat carcass were found under the ACC.
Totals:	146	0	137	5	0	0	0	0	4	146	

Appendix 2, HAZ-1

The project owner shall provide to the CPM, in the annual compliance report, a list of hazardous materials and storage quantities at the facility.

Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
5711	Aqueous Ammonia with Monoethanolamine (5 - 12%)	BFW pH Adjustment and Corrosion Control (Ammonia / Amine Blend)	Cycle Chemical Feed Shelter (Boiler Feedwater/Condensate) (B1)	Tote	400 gal / 3,338 lb	gallons / pounds	1	400 gal / 3,338 lb	400 gal / 3,338 lb	300 gal / 2,504 lb	365	6,320
BL-153	Ammonium Hydroxide 10-19%	BFW pH Adjustment and Corrosion Control (Ammonia / Amine Blend)	Cycle Chemical Feed Shelter (Boiler Feedwater/Condensate) (B1)	Tote	400 gal / 3,338 lb	gallons / pounds	1	400 gal / 3,338 lb	400 gal / 3,338 lb	300 gal / 2,504 lb	365	3,338 lbs on site daily
BL-152	Aqueous Ammonia with Monoethanolamine (5 - 10%)	BFW pH Adjustment and Corrosion Control (Ammonia / Amine Blend)	Cycle Chemical Feed Shelter (Boiler Feedwater/Condensate) (B1)	Tote	400 gal / 3,338 lb	gallons / pounds	1	400 gal / 3,338 lb	400 gal / 3,338 lb	300 gal / 2,504 lb	365	3,338 lbs on site daily
ELIMINOX	Carbohydrazide (5 - 10%)	Oxygen Scavenger	Cycle Chemical Feed Shelter (Boiler Feedwater/Condensate) (B1)	Drum	55 gal	gallons	1	55 gal	55	41	365	490
BT-3400	Pre-blended Phosphate/Caustic (1.0 - 5.0%)	pH and Corrosion Control (HP & IP Phosphate Feed)	Cycle Chemical Feed Shelter (HRSG A&B) (B1)	Tote	110 gal	gallons	1	110 gal	110	83	365	979
CROSSTRANS 106 and 207	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-A Excitation Transformer (E9)	Transformer	521 gal	gallons	1	521 gal	521	391	365	3,165 lb onsite daily
CROSSTRANS 106 and 206	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-A GSU Transformer (E4)	Transformer	14,950 gal	gallons	1	14,950 gal	14,950	11,213	365	90,821 lb onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-A Isolation Transformer (E10)	Transformer	977 gal	gallons	1	977 gal	977	733	365	5,935 lb onsite daily
CROSSTRANS 106 and 207	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-B Excitation Transformer (E9)	Transformer	521 gal	gallons	1	521 gal	521	391	365	3,165 lb onsite daily
CROSSTRANS 106 and 207	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-B GSU Transformer (E5)	Transformer	14,950 gal	gallons	1	14,950 gal	14,950	11,213	365	90,821 lb onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-B Isolation Transformer (E10)	Transformer	977 gal	gallons	1	977 gal	977	733	365	5,935 lb onsite daily
CROSSTRANS 106 and 209	mineral oil	mineral oil	Electrical Equipment: Station Service Transformer (E7)	Transformer	6,510 gal	gallons	1	6,510 gal	6,510	4,883	365	39,548 lb onsite daily
CROSSTRANS 106 and 210	mineral oil	mineral oil	Electrical Equipment: Station Service Transformer (E7)	Transformer	6,510 gal	gallons	1	6,510 gal	6,510	4,883	365	39,548 lb onsite daily
CROSSTRANS 106 and 209	mineral oil	mineral oil	Electrical Equipment: Steam Turbine Excitation Transformer (E11)	Transformer	747 gal	gallons	1	747 gal	747	560	365	4,538 lb onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Steam Turbine GSU Transformer (E6)	Transformer	19,015 gal	gallons	1	19,015 gal	19,015	14,261	365	115,516 lb onsite daily
	Helium	Helium, Compressed	Gas Metering Station (G5)	Cylinders	250 cu ft	cubic feet	5	1250 cu ft	1,250	938	365	

	Methane	Methane Compressed	Gas Metering Station (G5)	Cylinders	59 cu ft	cubic feet	1	59 cu ft	59	44	365	
MSDS #778986	Turbine Oil	lube oil	Hazardous Materials Storage Area (M2)	Drum	55 gal	gallons	4	220 gal	220	165	365	1,205 lb onsite daily
Product #001A0383	Shell Omala Oil HD 221	gear box/ACC oil	Hazardous Materials Storage Area (M2)	Barrels	55 gal	gallons	2	110 gal	110	83	365	606 lb onsite daily
Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
	Hydrogen	Hydrogen	Hydrogen Storage Area (G1)	Tube	44,000 cu ft	cubic feet	1	44,000 cu ft	44,000	33,000	365	53,000
AlphaCELL 195GXL- FT3	Lead Acid Battery	Lead Acid Battery	Packaged Electrical Electronic Control Center (PEECC) (M7)	Electrical Equipment : Battery	100 lb	pounds	116	11,600 lb	11,600	11,600	365	11,600
	Acetylene Gas	Acetylene Gas	Plant Maintenance Area (G3)	Cylinders	143 cu ft	cubic feet	4	572 cu ft	572	429	365	
	Argon Gas	Argon Gas	Plant Maintenance Area (G3)	Cylinders	381 cu ft	cubic feet	2	762 cu ft	762	572	365	
	Oxygen Gas	Oxygen Gas	Plant Maintenance Area (G3)	Cylinders	250 cu ft	cubic feet	6	1500 cu ft	1,500	1,125	365	
	Propane Gas	Propane Gas	Plant Maintenance Area (G3)	Cylinders	20 lb	pounds	16	319 lb	320	240	365	
	Nitrogen Gas	Nitrogen Gas	Plant Maintenance Area (G3), Compressed Cylinder Storage Area (C3)	Cylinders	250 cu ft	cubic feet	48	12,000 cu ft	12,000	12,000	365	
CDID: Stationary SPg - IB	Lead-Antimony Battery	Lead-Antimony Battery	Power Distribution Center in center of site (M6)	Electrical Equipment : Battery	110 lb	pounds	60	6,600 lb	6,600	6,600	365	6,600
CDID: Stationary SPg - IB	Lead-Antimony Battery	Lead-Antimony Battery	Power Distribution Center in Water Treatment Building (M6)	Electrical Equipment : Battery	110 lb	pounds	20	2,200 lb	2,200	2,200	365	2,200
												28,744 lb onsite daily
MSDS #778985	Turbine Oil	lube oil	Steam Turbine (E3)	Steam Turbine Lube Oil System (E3)	5,250 gal	gallons	1	5,250 gal	5,250	3,938	365	
	Hydrogen	Hydrogen / Coolant	Steam Turbine Generator (G2)	Generator	15,439 cu ft	cubic feet	1	15,439 cu ft	15,439	11,579	365	
	Sulfur Hexafluoride	SF6	Sulfur Hexafluoride Breakers (G4)	Electrical Equipment : Breaker	205 lb	pounds	7	1,432 lb	1,432	1,074	365	1,074 lb onsite daily
C & D Technologies 3DJ-200	Flooded Lead-Calcium Battery	Flooded Lead-Calcium Battery	Switchyard Control House (M7)	Electrical Equipment : Battery	100 lb	pounds	60	6,000 lb	6,000	6,000	365	6,000
7469	Anti-foam	Foam Control (ZLD)	Water Treatment Building (High Efficiency RO and ZLD) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	4,200
FO-321	Anti-foam	Foam Control (ZLD)	Water Treatment Building (High Efficiency RO and ZLD) (Site Feature #15)	Tank	360	gallons	1	360	360	270	365	3013 lbs on site daily
Nalco 8131	Coagulant (5 - 20%)	Coagulant (UF and Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (B4)	Aboveground Tank	2,500 gal / 31,295 lb	gallons / pounds	1	2,500 gal / 31,295 lb	2,500 gal / 31,295 lb	1,875 gal / 23,471 lb	365	23,471 lb onsite daily

P-828L	Ferric Sulfate 30-60%	Coagulant (UF and Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (B4)	Aboveground Tank	2,500 gal / 31,295 lb	gallons / pounds	1	2,500 gal / 31,295 lb	2,500 gal / 31,295 lb	1,875 gal / 23,471 lb	365	23,471 lb onsite daily
Cat-Floc 8018 Plus	Flocculant (5 - 20%)	Flocculant (Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	480
7744	Flocculant (5 - 20%)	Flocculant (Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	480
P-817E	Flocculant (5 - 20%)	Flocculant (Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	480
Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
PC-7408	Sodium Bisulfite (30 - 60%)	Water Treatment Feedwater Dechlorinization (Sodium Bisulfite Feed)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	2,399
RL-124	Sodium Bisulfite (30 - 60%)	Water Treatment Feedwater Dechlorinization (Sodium Bisulfite Feed)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tank	360 gal	gallons	1	360 gal	360	270	365	3,600
	Sulfuric Acid 98% (66 degree Baume 93%)	pH Adjustment (Sulfuric Acid for pH Adjustment)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	300 gal	gallons	2	600 gal	600	450	365	9,205
8735	Sodium Hydroxide	pH Adjustment (Caustic for pH Adjustment)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	2,399
BL-1304	Sodium Hydroxide 15-40%; Potassium Hydroxide 10-30%	pH Adjustment (Caustic for pH Adjustment)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tank	360 gal	gallons	1	360 gal	360	270	365	4543 lbs on site daily
PC-191T	Antiscalant	RO Scale Inhibition (Raw Water RO Antiscalant)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	1,200
RL-9008	Antiscalant 2-Phosphono-1,2,4 - butane tricarboxylic acid 5-10%	RO Scale Inhibition (Raw Water RO Antiscalant)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tank	360 gal	gallons	1	360 gal	360	270	365	3431 lb on site daily
	Sodium Hypochlorite (10 - 12%)	Bacteria Control for UF (Sodium Hypo-chlorite Feed)	Water Treatment Building (Raw Water Pre-Treatment and RO) (B4)	Aboveground Tank	1000 gal	gallons	1	1,000 gal	1,000	750	365	6,259 lb onsite daily
PERMA-CARE® PC- 98	Sodium Hydroxide (5 - 15%)	High pH Cleaning (RO Cleaning Chemical)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	55-gal Metal or Plastic Drum .56	55 gal	gallons	4	220 gal	220	165	365	940

PERMA-CARE® PC- 40	Sodium Percarbonate (5 - 15%)	Surfactant for Cleaning (RO Cleaning Chemical)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	5-gal Pail	5 gal	gallons	2	9 gal / 100 lbs	10	8	365	42
8344	Citric Acid (5 - 15%)	Low pH Cleaning (UF Iron Cleaner)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	55-gal Plastic Drum .56	55 gal	gallons	4	220 gal	220	165	365	575
RL-2016	Citric Acid (10-30%)	Low pH Cleaning (UF Iron Cleaner)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	Drum	55 gal	gallons	4	220 gal	220	165	365	2006 lbs on site Daily
	Soda Ash	Ph control	Water Treatment Building (Site Feature #15)	Drum	500 lbs	lbs	2	1000 lbs	1,000	750	365	750
	Sodium Hypochlorite (10 - 12%)		Water Treatment Building (Site Feature #15)	Tote	300 gal	gallons	1	300 gal	300	225	365	600
RL-1500	Ethylene diamine tetraacetic acid, tetrasodium salt (10-30%)	High pH Cleaning (RO Cleaning Chemical)	Water Treatment Building (Site Feature #15)	Dum	55 gal	gallons	2	110 gal	110	83	365	
Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
CL-2156	5-chloro-2methyl-4-isothiazolin-3-one 1.11%; 2-methyl-4-isothiazolin-3-one .39%; Magnesium Nitrate 1.61%; Magnesium Chloride .96%	Evaporative Cooling Water Biocide	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Tank	150 gal	gallon	1	150 gal	150	113	365	1286 lbs onsite daily
CL-497	Sodium Chlorosulfamate 7-13% Sodium bromosulfamate 7-13% Sodium Hydroxide 1-5% Sodium Sulfamate 1-6%	Evaporative Cooling Water Biocide	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Tank	360 gal	gallon	1	360 gal	360 gallon	200	365	2180 lbs onsite daily
3DTBR06	Bioreporter (1 - 10%)	Tracing Agent (Bioreporter)	Wet Surface Air Cooled Chemical Feed Shelter (B2)	5-gal Pail	5 gal	gallons	2	10 gal	10	8	365	330
Nalco 3DT161	Inhibitor (5 - 10%)	Evaporative Cooling Scale/Corrosion Inhibitor	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Tote	110 gal	gallons	1	110 gal	110	83	365	3,359
CL-1432	Potassium phosphate, tribasic 5- 10%; 1-Hydroxyethylidene-1,1- diphosphonic acid, tetrapotassium salt .5-1.0%; Tetrapotassium pyrophosphate 1.5%; Potassium	Evaporative Cooling Scale/Corrosion Inhibitor	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Tank	150 gal	gallons	1	150 gallons	150	113	365	1674 lbs onsite daily
CT-709	Tetrapotassium pyrophosphate 40 70%	Wet SAC Passivation	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Drum	55 gal	gallons	1	55 gal	55	41	365	792 lbs onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Alternate Power Transformer (E12)	Transformer	550 gal	gallons	1	550 gal	550	550	365	550 lb onsite daily

MSDS #778984	Turbine Oil	lube oil	Combustion Turbine-A HRSG (G2)	boiler feedwater pump	141 gal	gallons	2	282 gal	282	212	365	2,045 lb onsite daily
MSDS #778984	Turbine Oil	lube oil	Combustion Turbine-B HRSG (G2)	boiler feedwater pump	141 gal	gallons	2	282 gal	282	212	365	2,045 lb onsite daily
	Sulfuric Acid 98% (66 degree Baume 93%)		Zero Liquid Discharge Area Site Feature #21)	Tote	325 gal	gallons	1	325 gal	325	244	365	4,986
	Aqueous Ammonia (19%)		Aqueous Ammonia Storage Tank (M5)	Tank	20,000 gal	gallons	1	20,000 gal	20,000	15,000	365	154,971
Shell Turbo Fluid DR 46	Trixyly Phosphate (60-100%)	Steam Turbine Hydraulic Oil	Steam Turbine (E14)	Tank	500 gal	gallons	1	500 gal	500	400	365	
DOWFROST* 30 Heat Transfer Fluid	Propylene Glycol (30%)	propylene glycol in the water bath heater	Water Bath Heater (Site Feature #85)	In water bath heater	16,662 gal	gallons	1	16,662 gal	16,662	12,497	365	
Carbon Dioxide	Carbon Dioxide, Gas (99%)		Near STG	compressed gas cylinder	436 cu ft	cu ft	72	31392 cu ft	31,392	23,544	365	
Gasoline	Gasoline	Gasoline	Hazardous Materials Storage Area (M2)	Drum	55 Gal	gallons	2	110 gallons	110	55	365	3000 gallons
Diesel	Diesel	Diesel	Hazardous Materials Storage Area (M2)	Drum	55 Gal	gallons	2	110 gallons	110	55	365	2200 gallons

Appendix 3, Noise

Per Noise-8, the following is required: “In the first annual compliance report after the receipt of a complaint, the project owner shall include documentation certifying that:

- 1) the noise-attenuating upgrades were installed on the specified residence at the project owner’s expense;**
- 2) the noise attenuating upgrades were already a feature of the residence;**
- 3) installation was offered but refused by the owner; or 4) residential use by the complainant was ceased.**

There were no Noise Complaints made by the owners or occupants of any of the existing residences located at ML1, ML2, or RC1 during operation of the CGS in 2023. There have been no noise complaints to date from anyone.

Appendix 4, SOIL & WATER-2



2022-2023
ANNUAL REPORT
FOR STORM WATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2022 through June 30, 2023

Retain a copy of the completed Annual Report for your records.

Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses, can be found at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

General Information

A. Facility Information

WDID: 5S06I022929

Business Name: Colusa Generating Station

Physical Address: 4780 Dirks Rd

City: Maxwell

Contact Person: Steve Rovall

State: CA

Phone: 530-934-9061

Zip: 95955

Email: sar8@pae.com

Standard Industrial Classification (SIC) Codes: 4911-Electric Services

B. Facility Owner Information

Business Name: Pacific Gas Electric Co

Mailing Address: PO Box 398

City: Maxwell

Contact Person: steve royall

State: CA

Phone: 530-934-9061

Zip: 95955

Email: sar8@pge.com

C. Facility Billing Information

Business Name: Pacific Gas Electric Co

Mailing Address: PO Box 398

City: Maxwell

Contact Person: Joshua Harris

State: CA

Phone: 530-934-9086

Zip: 95955

Email: ivha@pge.com

Question Information

1. Has the Discharger conducted monthly visual observations (including authorized and unauthorized Non-Storm Water Discharges and Best Management Practices) in accordance with Section XI.A.1?

Yes No

If No, see Attachment 1, Summary of Explanation.

2. Has the Discharger conducted sampling event visual observations at each discharge location where a sample was obtained in accordance with Section XI.A.2?

Yes No

If No, see Attachment 1, Summary of Explanation.

3. Did you sample the required number of Qualifying Storm Events during the reporting year for all discharge locations, in accordance with Section XI.B?

Yes No

If No, see Attachment 1, Summary of Explanation.

4. How many storm water discharge locations are at your facility?

1

5. Has the Discharger chosen to select Alternative Discharge Locations in accordance with Section XI.C.3?

Yes No

6. Has the Discharger reduced the number of sampling locations within a drainage area in accordance with the Representative Sampling Reduction in Section XI.C.4?

Yes No

6.1. Has the Discharger reduced the frequency of sampling at the facility area in accordance with the Sample Frequency Reduction in Section XI.C.7?

Yes No

7. Permitted facilities located within an impaired watershed must assess for potential pollutants that may be present in the facility's industrial storm water discharge. Using the table below, populated based on the facility's location, indicate the presence of the potential pollutant at the facility.

The facility is not located within an impaired HUC 10 watershed. You are not required to select any Industrial Pollutants. Skip Questions 8 and 9.

8. Has the Discharger included the above pollutants in the SWPPP pollutant source assessment and assessed the need for analytical monitoring for the pollutants?

Yes No

If No, what date will the parameter(s) will be added to the SWPPP and Monitoring Implementation Plan?

9. Were all samples collected in accordance with Section XI.B.5?

Yes No

If No, see Attachment 1, Summary of Explanation.

10. Has any contained storm water been discharged from the facility this reporting year?

Yes No

If Yes, see Attachment 1, Summary of Explanation.

11. Has the Discharger conducted one (1) annual evaluation during the reporting year as required in Section XV?

Yes No

If Yes, what date was the annual evaluation conducted? 06/22/2023

If No, see Attachment 1, Summary of Explanation.

12. Has the Discharger maintained records on-site for the reporting year in accordance with XXI.J.3?

Yes No

If No, see Attachment 1, Summary of Explanation.

If your facility is subject to Effluent Limitation Guidelines in Attachment F of the Industrial General Permit, include your specific requirements as an attachment to the Annual Report (attach as file type: Supporting Documentation).

ANNUAL REPORT CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Joshua Harris

Title: Plant Manager

Date: 07/11/2023

2022-2023

Annual Report for WDID 5S06I022929

Summary of Explanations

Explanation Question	Explanation Text
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Summary of Attachments

Attachment Type	Attachment Title	Description	Date Uploaded	Part Number	Attachment Hash
Supporting Documentation	Discussion of Applicability of ELG for Steam Electric Power Generating Facilities	Discussion of Applicability of ELG for Steam Electric Power Generating Facilities	07/10/2023	1/1	66f63089f39268a3950d2dad95015555ca2c71a205efea8e8f626806882e4

2022-2023

Annual Report for WDID 5S06I022929

List of Identified Pollutants within the Impaired Watershed

Parameter	Pollutant	Present at Facility?
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Exceedance Response Action Level 1 Report

PG&E Colusa Generation Station

WDID: 5S06I022929

Report Date: December 20, 2023



This report was prepared to satisfy conditions within California’s NPDES General Permit for Storm Water Discharges Associated with Industrial Activity – CAS000001, Water Quality Order: General Permit 2014:0057-DWQ, as amended, hereby referred to as ‘the IGP’. The IGP requires an Exceedance Response Action (ERA) Level 1 Evaluation and Report to be developed if there are Numeric Action Level (NAL) exceedances for any monitored constituents at an IGP covered facility. During the 2022/2023 reporting year, the PG&E Colusa Generation Station experienced an instantaneous NAL exceedance for pH. This ERA Level 1 Report includes a detailed BMP and SWPPP review, a description of needed BMP and SWPPP revisions and suggested additional BMPs to be implemented to allow the Colusa Generation Station to cease exceedances of the pH NAL and return to ‘baseline’ status, as referenced in the IGP.

1 Site information

Colusa Generating Station (hereby referred to as ‘the site’) is located at 4780 Dirks Road in Maxwell, California in an unincorporated portion of Colusa County. The facility is approximately 6 miles north of the community of Maxwell, 14 miles north of the community of Williams, and 4 miles west of Interstate 5. The operating portion of the site consists of a facility that supports a natural gas-fired, combined cycle, combustion turbine power plant. The facility includes building structures and supporting equipment, has an area of approximately 19 acres, and is located within a 100-acre parcel leased from Holthouse Ranch.

The facility is composed of approximately 27% impervious areas that are paved or roofed. The only unpaved areas within the active facility exposed to stormwater are flat gravel-capped surfaces between structures and adjacent to roadways, and there is a detention basin for stormwater on the western edge of the active facility. The detention basin has vegetated sidewalls to minimize erosion, and a weir at the outfall which is located at the basin’s southern end.

Stormwater from the site is collected in 21 internal drain inlets and conveyed via pipes to the on-site detention basin. A swale in the facility laydown area also collects and conveys stormwater to the detention basin. The detention basin had approximately 2 acre-feet of storage capacity prior to July 2016. The facility’s industrial area has one discharge location, where runoff is sampled. The discharge location, CGS-01, is the outfall of the detention basin located south of the basin outflow weir. The stormwater then flows into an adjacent field, which drains to Colusa Basin Drain, the local receiving water. An additional discharge is located along the northern boundary of the facility, but this location only receives runoff from a non-industrial area north of the access road and it is therefore not a sampling location.

Table 1. PG&E Colusa Generation Station Information

Facility Name	Colusa Generating Station
Address	4780 Dirks Road, Maxwell, California 95955
Waste Discharge Identification Number	5S06I022929
SIC Code(s)	4911 (Electric Power Generating Facility)
Designated Legally Responsible Person (LRP)	Stephen Royall (Director, Operation and Maintenance)
Duly Authorized Representative (DAR)	Joshua Harris (Senior Plant Manager)
Discharger Contact Person	TJ Gomez (Senior Environmental Field Specialist)
Phone Number	(530) 393-2926
E-mail Address	ajgu@pge.com

2 QISP Information

The IGP requires the discharger to enlist the services of a QISP to assist with the ERA Level 1 Evaluation and prepare the ERA Level 1 Report. Information related to the QISPs assisting with this evaluation and report is included below.

Table 2. Colusa Generation Station Level 1 Report QISP Information

Name	Hans Kramer	David Swartz
QISP Cert. Number	00153	1002
Affiliation	Terraphase Engineering Inc. (Terraphase)	Pacific Gas and Electric Company (PG&E)
Phone Number	(510) 645-1850	(925) 302-3034
E-mail Address	hans.kramer@terraphase.com	david.swartz@pge.com
Scope of Services Provided	Conducted ERA Level 1 Evaluation on 9/27/23. Prepared ERA Level 1 Report.	Review and oversight of ERA Level 1 Evaluation and Level 1 ERA Report.

3 Summary of Numeric Action Level Exceedances

Table 3 summarizes the summary of numeric action level (NAL) exceedance being addressed in this Level 1 ERA Evaluation and Report. During the 2022-2023 reporting year (July 2022 through June 2023), four qualifying storm events (QSEs) were sampled. Two QSEs were sampled in December 2022 and two were sampled in March 2023. On December 11, 2022, stormwater samples were collected from CGS-01, and the pH result was 8.3. On December 27, 2022, stormwater samples were collected from CGS-01 and the pH result was 7.4. On March 9, 2023, stormwater samples were collected from CGS-01 and the pH result was 9.51. On March 28, 2023, stormwater samples were collected from CGS-01 and the pH result was 9.39. The two pH results in March of 2023 were outside the instantaneous NAL range for pH (6.0-9.0), constituting an instantaneous maximum NAL exceedance.

Table 3. 2015/2016 Reporting Year Annual and Instantaneous NAL Exceedances

Parameter Exceeded ¹	Analytical Results ²			
	Annual NAL Exceedance (average of all sample results in a reporting year)	Instantaneous NAL Exceedance (2 or more sample results exceed in a reporting year for the same parameter)		
		Result	Sample Date	Discharge Point
pH	N/A ³	9.51	March 9, 2023	CGS-01
pH	N/A ³	9.39	March 28, 2023	CGS-01

1. NAL exceedances summarized in this table are consistent with SMARTS.
2. Annual and instantaneous NAL values are summarized in Table 2 of the IGP.
3. Not applicable; the IGP does not prescribe an annual average NAL for pH.

4 SWPPP Review

The SWPPP review and ERA evaluation was performed by Hans Kramer (QISP #00153) to assess compliance with requirements outlined in Section X of the IGP. This review included all sections of the SWPPP, including the site map, monitoring implementation plan, potential pollutant generating activities, and BMP selection and implementation. The review did not identify deficiencies with the minimum BMPs or advanced BMPs specified in the SWPPP.

5 Evaluation/Identification of Potential Pollutant Sources

On September 27, 2023, Hans Kramer (QISP #00153) performed a pollutant source evaluation for pH, the parameter which exceeded an NAL, as summarized in Section 3.0, above. The following summarizes the potential sources of pH that contributed to the NAL exceedance:

- **Basin and discharge:** Inspection of the discharge pipe indicated subsidence of the south (effluent) end. As a result, the final segment of pipe (~10 feet) became offset at the joint. Grouting of the joint gap was performed in February 2023. The grout could be a temporary source of alkalinity, raising discharge pH.
- **Potential run-on:** During inspection of the northern site boundary it was observed that runoff from a portion of the adjacent property to the north could make its way into the on-site detention basin via the swale along the northern perimeter and drain inlet at the northwest corner of the site. If high-pH materials that may have been stored, handled, or used on the adjacent site and exposed to stormwater, it could be the driver for pH increase in the site discharge.
- **Hydrant Flushing:** During the inspection it was discussed that flush water from the site's fire hydrant flushing drains to the detention basin. Hydrant flushing is required multiple times per year. If the fire suppression system water has elevated pH, it could be the driver for pH increase in the site discharge.

Additional Investigation/Monitoring

Additional investigation is recommended to help identify the potential pollutant source(s) and is further described in Section 9 of this report.

6 Minimum BMP Evaluation

The minimum BMPs that are relevant for pH include Good Housekeeping, Preventative Maintenance, Spill and Leak Prevention and Response, Material Handling and Waste Management, Employee Training Program, and Quality Assurance and Record Keeping. These minimum BMPs (IGP Section X.H.1) are listed in Sections 6.1 and 8 of the SWPPP. Table 4 summarizes the BMPs currently implemented which are applicable to pH. Other BMPs currently implemented at the site but not applicable to the pH NAL exceedance are not included in this discussion.

The minimum BMPs applicable to pH were evaluated during the ERA Level 1 Evaluation inspection and review conducted on September 27, 2023, to determine whether they were adequately implemented and if additional minimum BMPs were needed at the site. No deficiencies were apparent in implementation of these minimum BMPs at the time of the evaluation; however, adding a component to the training program that addresses potential exposure of pollutants related to construction and

maintenance work at the site would help address the potential pH source related to the work on the outfall.

Table 4. Minimum BMP Evaluation and Review

Area	Associated Industrial Pollutant Sources	Potential Industrial Pollutants	BMPs Implemented	Frequency of BMP Implementation
Combustion turbines	Aqueous Ammonia for exhaust system	Aqueous Ammonia	Secondary containment	As needed
Water Treatment Plant	Spills during shipping and receiving	Various chemicals	Spill kits and secondary containment	As needed
Workshop	Service vehicles, industrial parts, and equipment	Lubricants, metals, various chemicals	Covered maintenance area, covered parking for service vehicles, floor drain to oil/water separator, and spill clean-up materials	As needed
All Drainage Areas	All pollutant sources	All potential pollutants	Drain inlet filters	Filters changed as needed
	All pollutant sources	All potential pollutants	Site has access control and security 24 hours a day, 7 days a week	As needed
	All pollutant sources	All potential pollutants	Stormwater Detention Basin	As needed
	All pollutant sources	All potential pollutants	Training program	Annual

7 Advanced BMP Evaluation

The advanced BMPs (IGP Section X.H.2) that are relevant for pH are Exposure Minimization BMPs, Stormwater Containment and Discharge Reduction BMPs, and Treatment Control BMPs. These advanced BMPs are discussed in Sections 6.2.1, 6.2.2, and 6.2.3 of the SWPPP and are described below:

- **Exposure Minimization BMPs:**

- The facility has installed permanent storm-resistant shelters to prevent contact of stormwater with certain materials. These areas include the hazardous materials/waste storage sheds, maintenance area, parking for service vehicles, and the Laydown area (e.g., for waste and recycling dumpsters).

- A vegetated swale around the northern and western perimeter of the facility diverts run-on away from industrial activity areas.
- All equipment part-cleanings occur in an enclosed parts washer within the roofed Plant Services building. All parts that will be cleaned are placed into the parts washer and supervised by a Power Plant Tech. This is completed within the enclosed building.
- **Stormwater Containment and Discharge Reduction BMPs:**
 - The facility includes gravel caps in areas that haven't been paved or are not roofed which may increase infiltration at the site and prevent erosion.
 - PG&E has installed a gravel swale along the perimeter of the Laydown area to divert and infiltrate all storm water within the Laydown area to the detention basin.
- **Treatment Control BMPs:** Stormwater from the site is collected in 21 internal drain inlets, each one equipped with a drain inlet filter, and conveyed via pipes to the on-site detention basin. A swale in the facility Laydown area also collects and conveys stormwater to the detention basin.

The advanced BMPs relevant to pH were evaluated to determine whether they were adequately implemented and if additional advanced BMPs were needed at the site. No deficiencies were apparent in implementation of these advanced BMPs at the time of the evaluation.

8 Additional BMP Considerations

Based on the lack of certainty achieved in the pollutant source evaluation and evaluation of existing BMPs implemented at the site, the only additional BMP recommended at this time is to add a component to the training program to address scheduling and other applicable BMPs to minimize potential exposure of pollutants related to construction and maintenance work at the site.

Additional investigation and monitoring, discussed in Section 9 of this report, is also recommended.

9 Modification to Existing Monitoring Implementation Program (MIP)

The changes or modifications made to the monitoring program in response to this evaluation are listed in the table below.

Table 5. Modifications to MIP

Additional Investigation(s)/Modification(s)	Goal/Objective
It is recommended that staff contact the adjacent facility regarding potential changes that could have affected (or could affect future) run-on pH. If run-on is observed during monitoring, it should be monitored for pH as well.	Confirm run-on influence.
Fire suppression system water pH should be measured during the next flushing event, or when otherwise convenient.	Confirm flush water influence.
If anomalously high pH is observed in the future, it is recommended that monitoring staff confirm meter measurements with pH test strip paper.	Confirm field monitoring results.
If anomalously high pH is observed in the future, and additional lines of investigation listed above do not clarify the source, additional pH measurements should be taken upstream/internally within the site drainage system to locate the source of alkalinity.	Source tracing if other lines of evidence do not yield answers.

10 Evaluation and Report Completion/Submittal Information

Table 6. Completion and Submittal Timelines

Date ERA Level 1 Evaluation Completed:	September 27, 2023
Date SWPPP Revisions Completed:	No later than January 1, 2024
Date BMP Implementation Complete:	Supplemental training message no later than January 1, 2024 Update training materials and deliver annual training no later than July 1, 2024
Date ERA Level 1 Report Certified and Submitted:	No later than January 1, 2024

January 31, 2023

Lab No. : CH 2290252

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Customer No. : 7010931

Laboratory Report

Introduction: This report package contains a total of 5 pages divided into 3 sections:

- Case Narrative (1 page) : An overview of the work performed at FGL.
- Sample Results (2 pages) : Results for each sample submitted.
- Quality Control (2 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Stormwater Discharge Point	12/11/2022	12/12/2022	CH 2290252-001	STM

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary

EPA 1664A	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 D	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Discussion of Analytical Results:

Amended Note - 01/31/2023 - Amended to correct sample date.

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: SVH

Approved By **Kelly A. Dunnahoo, B.S.**

 Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-01-31

January 31, 2023

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Description : Stormwater Discharge Point
 Project : Colusa Power Generating Station
 WDID# 5S06I022929

Lab No. : CH 2290252-001
 Customer No. : 7010931

Sampled On : December 11, 2022 at 08:30
 Sampled By : TJ Gomez
 Received On : December 12, 2022 at 11:20
 Matrix : Stormwater

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis				
							Date	Time	Who	Method	Date	Time	Who	
Metals, Total														
Iron	0.702	0.05	mg/L		1		12/22/2022	07:42	ejc	EPA 200.7	12/30/2022	12:57	rs	
Wet Chemistry														
Oil and Grease	2	3	mg/L		1	JLI	12/28/2022	15:36	amm	EPA 1664A	12/29/2022	14:39	amm	
Solids, Total Suspended (TSS)	17.2	2*	mg/L		2		12/16/2022	10:00	jba	SM 2540 D	12/21/2022	18:36	jba	

DQF Flags Definition:

- J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.
- L The preparation QC spike and/or CCV recoveries did not meet QC acceptance criteria.
- I The RPD for the laboratory duplicate exceeded laboratory criteria.

ND=Non-Detected, RL=Reporting Level * RL adusted for dilution, Dil.=Dilution



January 31, 2023

Pacific Gas & Electric-Colusa Generating
P.O. Box 398
Maxwell, CA 95955

Description : Stormwater Discharge Point
Project : Colusa Power Generating Station
WDID# 5S06I022929

Lab No. : CH 2290252-001
Customer No. : 7010931

Sampled On : December 11, 2022 at 08:30
Sampled By : TJ Gomez
Received On : December 12, 2022 at 11:20
Matrix : Stormwater

Sample Results - Field Test

Constituent	Result	RL	Units	Note	Sample Preparation	Sample Analysis
Field Test					Date	Method Date
pH (Field)	8.3		units		12/11/2022 08:30	4500HB 12/11/2022 08:30

ND=Non-Detected, RL=Reporting Level. * RL adusted for dilution

January 31, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2290252

Customer No. : 7010931

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Iron	200.7	12/22/2022:214381EJC	Blank	mg/L		1	<0.05	
			LCS	mg/L	4.000	104 %	85-115	
			MS	mg/L	4.000	105 %	75-125	
		(SP 2219828-001)	MSD	mg/L	4.000	102 %	75-125	
			MSRPD	mg/L	0.8000	2.6%	≤20	
			MS	mg/L	4.000	110 %	75-125	
		(STK2257614-001)	MSD	mg/L	4.000	102 %	75-125	
			MSRPD	mg/L	0.8000	8.2%	≤20	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

January 31, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2290252

Customer No. : 7010931

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Oil and Grease	1664A	12/28/2022:214556AMM	ND	mg/L		0.30000	3	
			LCS	mg/L	44.89	80.9%	78-114	
			BS	mg/L	44.89	56.0%	78-114	436
			BSD	mg/L	44.89	89.2%	78-114	
			BSRPD	mg/L	44.89	45.3%	≤18	410
Solids, Suspended	2540D	12/16/2022:214092JBA	Blank	mg/L		ND	<1	
			LCS	mg/L	50.04	94.9%	60-109	
			LCS	mg/L	50.04	98.9%	60-109	
		(SP 2219708-040)	Dup	mg/L		10.4%	20	
		(SP 2219708-056)	Dup	mg/L		17.3%	20	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- BS : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
- BSD : Blank Spike Duplicate of BS/BSD pair - A blank duplicate is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
- BSRPD : BS/BSD Relative Percent Difference (RPD) - The BS relative percent difference is an indication of precision for the preparation and analysis.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

- 410 : Relative Percent Difference (RPD) not within Maximum Allowable Value (MAV). Data was accepted based on the LCS or CCV recovery.
- 436 : Blank Spike (BS) not within Acceptance Range (AR). Data was accepted based on the LCS or CCV recovery.



ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

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CHAIN OF CUSTODY
AND ANALYSIS REQUEST DOCUMENT

Client: Pacific Gas and Electric - Colusa Generating Customer Number: 7-10931 Address: 4780 Dirks Rd Maxwell CA 95955 Phone: 530-934-9007 Fax: 530-934-9024 Email Address: ajgu@pge.com Contact Person: TJ Gomez Project Name: QSE #1 Purchase Order Number: Quote Number:				Lab Number: 2290252		TEST DESCRIPTION AND ANALYSES REQUESTED											
				Method of Sampling: Composite (C) Grab (G) Number of Containers Type of Containers: (G) Glass (P) Plastic (V) VOA (MT) Metal Tube Potable (P) Non-Potable (NP) Ag Water (AgW) (SW) Surface Water (MW) Monitoring Well (GW) Ground Water (TB) Travel Blank (WW) Waste Water (DW) Drinking Water (S) Soil (SLG) Sludge (SLD) Solid (O) Oil Bact. (Sye) System (SRC) Source (W) Waste Bact. (ROUT) Routine (RPT) Repeat (OTH) Other (RPL) Replace (LT) Leaf Tissue (PET) Petaliole Tissue (PRD) Produce Preservatives: (1) NaOH + ZnAs, (2) NaOH, (3) HCl (4) H2SO4, (5) HNO3, (6) Na2S2O3, (7) Other: _____ Metals - Total-Fe Wet Chemistry - Oil & Grease - 1664 Wet Chemistry - TSS Field Test pH Field pH Date													
Rush Analysis: <input checked="" type="checkbox"/> 5 Day <input type="checkbox"/> 4 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 24 hour Rush pre-approval by lab (initials): _____ Electronic Data Transfer: <input type="checkbox"/> No <input type="checkbox"/> State <input type="checkbox"/> Client Other: _____ Sampler(s): Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: _____ Time: _____																	
Samp Num	Location Description	Date Sampled	Time Sampled														
1	Stormwater Discharge Point	12/11/22	0830	G	3												
Remarks				Relinquished Date: Time: 12/12/22 1120				Relinquished Date: Time: 12/12/22 1120				Relinquished Date: Time: 12/13/22 1130					
				Received By: Date: Time: 12/12/22 1120				Received By: Date: Time: 12/12/22 1120				Received By: Date: Time: 12/13/22 1130					

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Santa Paula, CA 93060
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Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

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2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

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FAX: (805)783-2912
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Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

January 18, 2023

Lab No. : CH 2290662

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Customer No. : 7010931

Laboratory Report

Introduction: This report package contains a total of 5 pages divided into 3 sections:

- Case Narrative (1 page) : An overview of the work performed at FGL.
- Sample Results (2 pages) : Results for each sample submitted.
- Quality Control (2 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Stormwater Discharge Point	12/27/2022	12/28/2022	CH 2290662-001	STM

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary

EPA 1664A	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 D	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: MKH

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-01-18

January 18, 2023

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Description : Stormwater Discharge Point
 Project : Colusa Power Generating Station
 WDID# 5S06I022929

Lab No. : CH 2290662-001
Customer No. : 7010931

Sampled On : December 27, 2022 at 07:52
 Sampled By : Anthony Gomez
 Received On : December 28, 2022 at 12:30
 Matrix : Stormwater

Sample Results - Inorganic

Constituent	Result	RL	MDL	Units	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Metals, Total													
Iron	1.47	0.05	0.031	mg/L	1		01/05/2023	11:25	ejc	EPA 200.7	01/06/2023	06:17	rs
Wet Chemistry													
Oil and Grease	2.55	3	1.7	mg/L	1	J	01/10/2023	13:27	amm	EPA 1664A	01/11/2023	15:23	amm
Solids, Total Suspended (TSS)	26.2	3	1.8	mg/L	3	I	01/03/2023	11:12	jba	SM 2540 D	01/04/2023	16:31	jba

DQF Flags Definition:

- J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.
- I The RPD for the laboratory duplicate exceeded laboratory criteria.



January 18, 2023

Pacific Gas & Electric-Colusa Generating
P.O. Box 398
Maxwell, CA 95955

Description : Stormwater Discharge Point
Project : Colusa Power Generating Station
WDID# 5S06I022929

Lab No. : CH 2290662-001
Customer No. : 7010931

Sampled On : December 27, 2022 at 07:52
Sampled By : Anthony Gomez
Received On : December 28, 2022 at 12:30
Matrix : Stormwater

Sample Results - Field Test

Constituent	Result	RL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date Time	Method	Date Time
Field Test								
pH (Field)	7.4		units			12/27/2022 07:52	4500HB	12/27/2022 07:52

ND=Non-Detected, RL=Reporting Level



January 18, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2290662

Customer No. : 7010931

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Iron	200.7	01/05/2023:200124EJC	Blank	mg/L		ND	<0.05	
			LCS	mg/L	4.000	92.0 %	85-115	
		(STK2258159-003)	MS	mg/L	4.000	102 %	75-125	
			MSD	mg/L	4.000	101 %	75-125	
			MSRPD	mg/L	0.8000	0.6%	≤20	
			MS	mg/L	4.000	99.0 %	75-125	
		(CH 2290334-002)	MSD	mg/L	4.000	102 %	75-125	
			MSRPD	mg/L	0.8000	2.7%	≤20	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

January 18, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2290662

Customer No. : 7010931

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Oil and Grease	1664A	01/10/2023:200229AMM	ND	mg/L		0.80000	3	
			LCS	mg/L	44.89	84.2%	78-114	
			BS	mg/L	44.89	84.6%	78-114	
			BSD	mg/L	44.89	85.1%	78-114	
			BSRPD	mg/L	44.89	0.6%	≤18	
Solids, Suspended	2540D	01/03/2023:200022JBA	Blank	mg/L		ND	<1	
			LCS	mg/L	50.04	94.9%	60-109	
			LCS	mg/L	50.04	95.9%	60-109	
		(VI 2260047-002)	Dup	mg/L		3.23%	20	
		(CC 2284810-001)	Dup	mg/L		35.7%	20	440

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- BS : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
- BSD : Blank Spike Duplicate of BS/BSD pair - A blank duplicate is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
- BSRPD : BS/BSD Relative Percent Difference (RPD) - The BS relative percent difference is an indication of precision for the preparation and analysis.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

- 440 : Sample nonhomogeneity may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC **CH** VI

- Number of ice chests/packages received: _____ Shipping tracking # _____
- Were samples received in a chilled condition? Temps: ____ / ____ / ____ / ____ / ____
Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.
- Do the number of bottles received agree with the COC? Yes No N/A
- Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
- VOAs checked for Headspace? Yes No N/A
- Were sample custody seals intact? Yes No N/A
- If required, was sample split for pH analysis? Yes No N/A
- Were all analyses within holding times at time of receipt? Yes No
- Verify sample date, time and sampler name Yes No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): _____

Sample Receipt at SP:

- Were samples received in a chilled condition? Temps: 2 / ____ / ____ / ____ / ____
Acceptable is above freezing to 6E C. If many packages are received at one time check for tests/H.T.'s/rushes/
- Shipping tracking numbers: 558513551 / 541551
- Do the number of bottles received agree with the COC? Yes No N/A
- Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
- Were sample custody seals intact? Yes No N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

- Were all requested analyses understood and acceptable? Yes No
- Did bottle labels correspond with the client's ID's? Yes No
- Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]
- VOAs checked for Headspace? Yes No N/A
- Have rush or project due dates been checked and accepted? Yes No N/A
- Were all analyses within holding times at time of receipt? Yes No N/A

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): NA

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

- Person Contacted: LOUISIANA MOBILE Phone Number: email
Initiated By: LOUISIANA MOBILE Date: 11/10/25
Problem: RUSH REQUEST WAS NOT LOGGED IN CHAIN OF CUSTODY
Resolution: CUSTODY NOT STAMPED RUSH
- Person Contacted: CLIENT WOULD LIKE A 5 (7010931) DAY RUSH PER
Initiated By: _____
Problem: _____
Resolution: _____

Pacific Gas & Electric - Colusa Generating LOUISIANA

CH 2290662

cda 12/29/2022 08:31:31



CH 2290662

(Please use the back of this sheet for additional contacts)

ere



Field Measurement of Hydrogen Ion Activity (pH)

Instrument

Make/Model # HQ 400 - HACH

Serial # 120800077714

Calibration: *Ensure the instrument has been calibrated before sample analysis proceeds.*

Sample ID	Sample Date	Sample Time (hr:min)	Analysis Date	Analysis within 15 min of sample? Yes, No	Instrument Response	Temp (°C)	Sampler Initials	Comments
	12/27	0752	12/27	Yes	7.40	63°	CM	

March 30, 2023

Lab No. : CH 2371634

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Customer No. : 7010931

Laboratory Report

Introduction: This report package contains a total of 5 pages divided into 3 sections:

- Case Narrative (1 page) : An overview of the work performed at FGL.
- Sample Results (2 pages) : Results for each sample submitted.
- Quality Control (2 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Stormwater Discharge Point	03/09/2023	03/10/2023	CH 2371634-001	STM

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary

EPA 1664A	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 D	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: MKH

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-04-02

March 30, 2023

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Description : Stormwater Discharge Point
 Project : Colusa Power Generating Station
 WDID# 5S06I022929

Lab No. : CH 2371634-001
Customer No. : 7010931

Sampled On : March 9, 2023 at 16:37
 Sampled By : TJ Gomez
 Received On : March 10, 2023 at 11:05
 Matrix : Stormwater

Sample Results - Inorganic

Constituent	Result	RL	MDL	Units	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Metals, Total													
Iron	0.437	0.05	0.031	mg/L	1		03/14/2023	06:25	ejc	EPA 200.7	03/15/2023	14:38	ac
Wet Chemistry													
Oil and Grease	5.58	3	1.7	mg/L	1		03/27/2023	14:28	amm	EPA 1664A	03/28/2023	13:56	amm
Solids, Total Suspended (TSS)	141	25	14	mg/L	30	I	03/15/2023	11:06	sta	SM 2540 D	03/16/2023	09:49	sta

DQF Flags Definition:

I The RPD for the laboratory duplicate exceeded laboratory criteria.

March 30, 2023

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Description : Stormwater Discharge Point
 Project : Colusa Power Generating Station
 WDID# 5S06I022929

Lab No. : CH 2371634-001
Customer No. : 7010931

Sampled On : March 9, 2023 at 16:37
 Sampled By : TJ Gomez
 Received On : March 10, 2023 at 11:05
 Matrix : Stormwater

Sample Results - Field Test

Constituent	Result	RL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date Time	Method	Date Time
Field Test								
pH (Field)	9.51		units			03/09/2023 16:37	4500HB	03/09/2023 16:37

ND=Non-Detected, RL=Reporting Level

March 30, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2371634

Customer No. : 7010931

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Iron	200.7	03/14/2023:202783EJC	Blank	mg/L		ND	<0.05	
			LCS	mg/L	4.000	94.0 %	85-115	
			MS	mg/L	4.000	103 %	75-125	
		(STK2333020-008)	MSD	mg/L	4.000	101 %	75-125	
			MSRPD	mg/L	0.8000	2.2%	≤20	
			MS	mg/L	4.000	102 %	75-125	
		(STK2333020-004)	MSD	mg/L	4.000	108 %	75-125	
			MSRPD	mg/L	0.8000	5.8%	≤20	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

March 30, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2371634

Customer No. : 7010931

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Oil and Grease	1664A	03/27/2023:203186AMM	ND	mg/L		1.3000	3	
			LCS	mg/L	44.89	95.8%	78-114	
			BS	mg/L	44.89	94.9%	78-114	
			BSD	mg/L	44.89	92.6%	78-114	
			BSRPD	mg/L	44.89	2.3%	≤18	
Solids, Suspended	2540D	03/15/2023:202792STA	Blank	mg/L		ND	<1	
			LCS	mg/L	50.00	101%	60-109	
			LCS	mg/L	50.00	86.0%	60-109	
		(CH 2371629-001)	Dup	mg/L		58.7%	20	440
		(SP 2303461-001)	Dup	mg/L		7.77%	20	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- BS : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
- BSD : Blank Spike Duplicate of BS/BSA pair - A blank duplicate is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
- BSRPD : BS/BSA Relative Percent Difference (RPD) - The BS relative percent difference is an indication of precision for the preparation and analysis.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

- 440 : Sample nonhomogeneity may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

2371634

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC 1 **CH** VI

- Number of ice chests/packages received: 1 Shipping tracking # _____
- Were samples received in a chilled condition? Temps: 10 / _____ / _____ / _____ / _____
Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.
- Do the number of bottles received agree with the COC? Yes No N/A
- Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
- VOAs checked for Headspace? Yes No N/A
- Were sample custody seals intact? Yes No N/A
- If required, was sample split for pH analysis? Yes No N/A
- Were all analyses within holding times at time of receipt? Yes No
- Verify sample date, time and sampler name Yes No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): awm

Sample Receipt at SP:

- Were samples received in a chilled condition? Temps: 2 / _____ / _____ / _____ / _____
Acceptable is above freezing to 6E C. If many packages are received at one time check for tests/H.T.'s/rushes/
- Shipping tracking numbers: 558075639
- Do the number of bottles received agree with the COC? Yes No N/A
- Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
- Were sample custody seals intact? Yes No N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

- Were all requested analyses understood and acceptable? Yes No
- Did bottle labels correspond with the client's ID's? Yes No
- Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]
- VOAs checked for Headspace? Yes No N/A
- Have rush or project due dates been checked and accepted? Yes No N/A
- Were all analyses within holding times at time of receipt? Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): JA

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

- Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____
Problem: _____
Resolution: _____

- Person Contacted: _____
Initiated By: _____
Problem: _____
Resolution: _____

(7010931)
Pacific Gas & Electric - Colusa Generating
CH 2371634

iv 03/13/2023 08:59:27



CH 2371634

May 2, 2023

Lab No. : CH 2372012

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Customer No. : 7010931

Laboratory Report

Introduction: This report package contains a total of 5 pages divided into 3 sections:

- Case Narrative (1 page) : An overview of the work performed at FGL.
- Sample Results (2 pages) : Results for each sample submitted.
- Quality Control (2 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Stormwater Discharge Point	03/28/2023	03/29/2023	CH 2372012-001	STM

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary

EPA 1664A	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 D	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Discussion of Analytical Results:

Amended Note - 05/02/2023 - Amended to correct the sample date for CH 2372012-001/Stormwater Discharge Point.

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: SVH

Approved By **Kelly A. Dunnahoo, B.S.**

 Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-05-03

May 2, 2023

Pacific Gas & Electric-Colusa Generating
 P.O. Box 398
 Maxwell, CA 95955

Description : Stormwater Discharge Point
 Project : Colusa Power Generating Station
 WDID# 5S06I022929

Lab No. : CH 2372012-001
Customer No. : 7010931

Sampled On : March 28, 2023 at 10:35
 Sampled By : TJ Gomez
 Received On : March 29, 2023 at 13:45
 Matrix : Stormwater

Sample Results - Inorganic

Constituent	Result	RL	MDL	Units	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Metals, Total													
Iron	0.359	0.05	0.031	mg/L	1		04/05/2023	05:45	ejc	EPA 200.7	04/05/2023	15:27	ac
Wet Chemistry													
Oil and Grease	ND	3	1.7	mg/L	1	U	04/17/2023	16:30	amm	EPA 1664A	04/18/2023	14:41	amm
Solids, Total Suspended (TSS)	26.9	4	2.0	mg/L	4		04/04/2023	08:32	sta	SM 2540 D	04/07/2023	08:14	sta

DQF Flags Definition:
 U Constituent results were non-detect.



May 2, 2023

Pacific Gas & Electric-Colusa Generating
P.O. Box 398
Maxwell, CA 95955

Description : Stormwater Discharge Point
Project : Colusa Power Generating Station
WDID# 5S06I022929

Lab No. : CH 2372012-001
Customer No. : 7010931

Sampled On : March 28, 2023 at 10:35
Sampled By : TJ Gomez
Received On : March 29, 2023 at 13:45
Matrix : Stormwater

Sample Results - Field Test

Constituent	Result	RL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date Time	Method	Date Time
Field Test								
pH (Field)	9.3		units			03/28/2023 10:35	4500HB	03/28/2023 10:35

ND=Non-Detected, RL=Reporting Level

May 2, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2372012

Customer No. : 7010931

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Iron	200.7	04/05/2023:203579EJC	Blank	mg/L		ND	<0.05	
			LCS	mg/L	4.000	97.8 %	85-115	
			MS	mg/L	4.000	106 %	75-125	
		(CH 2371941-001)	MSD	mg/L	4.000	117 %	75-125	
			MSRPD	mg/L	0.8000	2.0%	≤20	
			MS	mg/L	4.000	93.3 %	75-125	
		(CC 2380907-001)	MSD	mg/L	4.000	99.9 %	75-125	
			MSRPD	mg/L	0.8000	6.5%	≤20	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

May 2, 2023

Pacific Gas & Electric-Colusa Generating

Lab No. : CH 2372012

Customer No. : 7010931

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Oil and Grease	1664A	04/17/2023:204017AMM (SP 2304854-001)	ND	mg/L		0.80000	3	
			LCS	mg/L	44.89	96.0%	78-114	
			MS	mg/L	42.98	87.4%	78-114	
			MSD	mg/L	42.98	91.6%	78-114	
			MSRPD	mg/L	42.98	4.6%	≤18	
Solids, Suspended	2540D	04/04/2023:203534STA (CC 2380904-001) (VI 2341829-001)	Blank	mg/L		ND	<1	
			LCS	mg/L	50.00	100%	60-109	
			LCS	mg/L	50.00	92.0%	60-109	
			Dup	mg/L		19.0%	20	
			Dup	mg/L		7.87%	20	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

2372012

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC **CH** VI

1. Number of ice chests/packages received: PK Shipping tracking # _____

2. Were samples received in a chilled condition? Temps: RU / ____ / ____ / ____ / ____
Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

- 3. Do the number of bottles received agree with the COC? Yes No N/A
- 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
- 5. VOAs checked for Headspace? Yes No N/A
- 6. Were sample custody seals intact? Yes No N/A
- 7. If required, was sample split for pH analysis? Yes No N/A
- 8. Were all analyses within holding times at time of receipt? Yes No
- 9. Verify sample date, time and sampler name Yes No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): LM

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 3 / ____ / ____ / ____ / ____

Acceptable is above freezing to 6E C. If many packages are received at one time check for tests/H.T.'s/rushes/

2. Shipping tracking numbers: 559098169

- 3. Do the number of bottles received agree with the COC? Yes No N/A
- 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
- 5. Were sample custody seals intact? Yes No N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

- 1. Were all requested analyses understood and acceptable? Yes No
- 2. Did bottle labels correspond with the client's ID's? Yes No
- 3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]
- 4. VOAs checked for Headspace? Yes No N/A
- 5. Have rush or project due dates been checked and accepted? Yes No N/A
- 6. Were all analyses within holding times at time of receipt? Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): SA

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____
Problem: _____
Resolution: _____

2. Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____
Problem: _____
Resolution: _____

Attach label with lab number here

(Please use the back of this sheet for additional comments or contacts)



TEST DESCRIPTION AND ANALYSES REQUESTED

Client: _____ Customer Number: _____ Address: _____ Phone: _____ Fax: _____ Email Address: _____ Contact Person: _____ Project Name: _____ Purchase Order Number: _____ Quote Number: _____ Rush Analysis: <input type="checkbox"/> 5 Day <input type="checkbox"/> 4 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 24 hour Rush pre-approval by lab (initials): _____ Electronic Data Transfer: <input type="checkbox"/> No <input type="checkbox"/> State <input type="checkbox"/> Client Other: _____ Sampler(s): _____ Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: _____ Time: _____				Lab Number: _____		Method of Sampling: Composite (C) Grab (G) Number of Containers _____ Type of Containers: (G)Glass (P)Plastic (V)VOA (MT)Metal Tube Potable (P) Non-Potable (NP) Ag Water (AgW) (SW) Surface Water (MW) Monitoring Well (GW) Ground Water (TB) Travel Blank (WW) Waste Water (DW) Drinking Water (S) Soil (SLG) Sludge (SLD) Solid (O) Oil BacT: (Sys) System (SRC) Source (W) Waste BacT: (ROUT)Routine (RPT)Repeat (OTH)Other (RPL)Replace (LT) Leaf Tissue (PET) Petiole Tissue (PRD) Produce Preservative: (1) NaOH + ZnAc, (2) NaOH, (3) HCl (4) H2SO4, (5) HNO3, (6) Na2S2O3, (7) Other _____													
Remarks _____				Relinquished Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____		Relinquished Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____		Relinquished Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____		Relinquished Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____		Relinquished Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____		Relinquished Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____		Relinquished Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____			
Corporate Offices & Laboratory 853 Corporation Street Santa Paula, CA 93060 TEL: (805)392-2000 ENV FAX: (805)525-4172 / Ag FAX: (805)392-2063 CA ELAP Certification No. 1573				Office & Laboratory 2500 Stagecoach Road Stockton, CA 95215 TEL: (209)942-0182 FAX: (209)942-0423 CA ELAP Certification No. 1563				Office & Laboratory 563 E. Lindo Avenue Chico, CA 95926 TEL: (530)343-5818 FAX: (530)343-3807 CA ELAP Certification No. 2670				Office & Laboratory 3442 Empressa Drive, Suite D San Luis Obispo, CA 93401 TEL: (805)783-2940 FAX: (805)783-2912 CA ELAP Certification No. 2775				Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 TEL: (559)734-9473 FAX: (559)734-9435 CA ELAP Certification No. 2810			



Field Measurement of Hydrogen Ion Activity (pH)

Instrument

Make/Model # Hach - HQ-400

Serial # 2222 73043667

Calibration: *Ensure the instrument has been calibrated before sample analysis proceeds.*

Sample ID	Sample Date	Sample Time (hr:min)	Analysis Date	Analysis within 15 min of sample? Yes, No	Instrument Response	Temp (°C)	Sampler Initials	Comments
	3/28/23	1035	3/28/23	yes	9.39	54°	BERD	

Appendix 5, SOIL & WATER-7

Per Soil & Water 7 the following is required:” the project owner shall submit any related monitoring required by the agreement to the CPM in the annual compliance report. The project owner shall submit any notice if violations from the Glenn Colusa Irrigation District to the CPM within 10 days of receipt and fully explain the corrective actions taken in the next annual compliance report.”

There is no reporting or monitoring requirement in the water agreement with the Glenn Colusa Irrigation District.

No notice of violations issued by GCID in the 2023 year.

Appendix 6, SOIL & WATER-8

Appendix 6, SOIL & WATER-8

All water used during 2023 was supplied by the Glenn Colusa Irrigation District. The total amount of water used during 2023 was 17,567,560 gallons.

Colusa Generating Station Totalized Canal Usage

Date	Totalized Value	Gallons/Day	Gallons Cumulative	Acre Ft Cumulative	Point Name
12/31/2022	129767928	0	0		PG.CGS.511-FIT-9002-3-TV
1/1/2023	129774408	6480	6480	0.019886363	
1/2/2023	129782104	7696	14176	0.063390852	
1/3/2023	129792048	9944	24120	0.137412316	
1/4/2023	129795696	3648	27768	0.222629066	
1/5/2023	129798952	3256	31024	0.3178381	
1/6/2023	129800944	1992	33016	0.419160349	
1/7/2023	129816408	15464	48480	0.567939809	
1/8/2023	129874208	57800	106280	0.89410072	
1/9/2023	129876768	2560	108840	1.228117973	
1/10/2023	129880208	3440	112280	1.572692184	
1/11/2023	129909208	29000	141280	2.006264009	
1/12/2023	129911256	2048	143328	2.446120907	
1/13/2023	129915304	4048	147376	2.898400644	
1/14/2023	129923784	8480	155856	3.376704511	
1/15/2023	129933520	9736	165592	3.884887026	
1/16/2023	129983032	49512	215104	4.545016087	
1/17/2023	129986504	3472	218576	5.215800312	
1/18/2023	129992184	5680	224256	5.904015793	
1/19/2023	129996064	3880	228136	6.604138541	
1/20/2023	130000192	4128	232264	7.316929639	
1/21/2023	130004240	4048	236312	8.042143577	
1/22/2023	130021720	17480	253792	8.821001594	
1/23/2023	130025232	3512	257304	9.610637528	
1/24/2023	130030592	5360	262664	10.41672268	
1/25/2023	130077280	46688	309352	11.36608785	
1/26/2023	130114456	37176	346528	12.42954182	
1/27/2023	130178344	63888	410416	13.68906061	
1/28/2023	130182448	4104	414520	14.96117409	
1/29/2023	130185920	3472	417992	16.24394274	
1/30/2023	130188952	3032	421024	17.53601624	
1/31/2023	130191344	2392	423416	18.8354305	
2/1/2023	130195304	3960	427376	20.14699755	
2/2/2023	130198664	3360	430736	21.46887604	
2/3/2023	130202352	3688	434424	22.80207258	
2/4/2023	130207224	4872	439296	24.15022071	
2/5/2023	130210840	3616	442912	25.50946593	
2/6/2023	130213576	2736	445648	26.87710761	
2/7/2023	130216032	2456	448104	28.25228647	
2/8/2023	130219776	3744	451848	29.63895523	
2/9/2023	130221720	1944	453792	31.03158989	
2/10/2023	130241672	19952	473744	32.48545492	
2/11/2023	130278040	36368	510112	34.05092909	
2/12/2023	130302520	24480	534592	35.69152952	
2/13/2023	130311896	9376	543968	37.3609038	
2/14/2023	130357040	45144	589112	39.16881975	
2/15/2023	130366528	9488	598600	41.00585326	
2/16/2023	130393856	27328	625928	42.92675321	
2/17/2023	130415728	21872	647800	44.91477578	
2/18/2023	130448720	32992	680792	47.00404694	
2/19/2023	130455184	6464	687256	49.11315536	
2/20/2023	130458464	3280	690536	51.23232973	
2/21/2023	130460744	2280	692816	53.35850114	
2/22/2023	130501176	40432	733248	55.60875364	
2/23/2023	130504408	3232	736480	57.86892478	
2/24/2023	130508872	4464	740944	60.1427954	
2/25/2023	130556784	47912	788856	62.56370237	
2/26/2023	130561632	4848	793704	64.99948727	
2/27/2023	130584312	22680	816384	67.50487445	
2/28/2023	130606568	22256	838640	70.0785627	
3/1/2023	130626128	19560		70.0785627	
3/2/2023	130643248	17120	17120	70.13110198	
3/3/2023	130671072	27824	44944	70.26902987	
3/4/2023	130686584	15512	60456	70.45456227	
3/5/2023	130701384	14800	75256	70.68551415	
3/6/2023	130714168	12784	88040	70.95569863	
3/7/2023	130725096	10928	98968	71.25941987	
3/8/2023	130729072	3976	102944	71.57534299	
3/9/2023	130735760	6688	109632	71.91179079	
3/10/2023	130744272	8512	118144	72.27436094	
3/11/2023	130752288	8016	126160	72.66153125	

3/12/2023	130792128	39840	166000	73.17096587					
3/13/2023	130801888	9760	175760	73.71035278					
3/14/2023	130810008	8120	183880	74.27465904					
3/15/2023	130818616	8608	192488	74.86538223					
3/16/2023	130826944	8328	200816	75.48166309					
3/17/2023	130836976	10032	210848	76.12873099					
3/18/2023	130844672	7696	218544	76.79941701					
3/19/2023	130854672	10000	228544	77.50079186					
3/20/2023	130863808	9136	237680	78.23020403					
3/21/2023	130872896	9088	246768	78.98750621					
3/22/2023	130889072	16176	262944	79.79445065					
3/23/2023	130897304	8232	271176	80.62665813					
3/24/2023	130906336	9032	280208	81.48658377					
3/25/2023	130913408	7072	287280	82.36821255					
3/26/2023	130920432	7024	294304	83.27139716					
3/27/2023	130984184	63752	358056	84.37022922					
3/28/2023	131007224	23040	381096	85.53976835					
3/29/2023	131017152	9928	391024	86.73977535					
3/30/2023	131025264	8112	399136	87.96467713					
4/1/2023	131041896	16632	415768	89.24062058					
4/2/2023	131049728	7832	423600	90.54059953					
4/3/2023	131058608	8880	432480	91.86783015					
4/4/2023	131066328	7720	440200	93.21875256					
4/5/2023	131074048	7720	447920	94.59336674					
4/6/2023	131081688	7640	455560	95.99142719					
4/7/2023	131090880	9192	464752	97.41769682					
4/8/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					These values factored into line 116
4/9/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/10/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/11/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/12/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/13/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/14/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/15/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/16/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/17/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/18/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/19/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/20/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/21/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/22/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/23/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
4/24/2023	131125736	34856	499608	98.95093544					These values include totals from line 99
4/25/2023	131128248	2512	502120	100.4918831					
4/26/2023	131128248	0	502120	102.0328308					
4/27/2023	131128248	0	502120	103.5737784					
4/28/2023	131128248	0	502120	105.1147261					
4/29/2023	131130680	2432	504552	106.6631372					
4/30/2023	131219960	89280	593832	108.4855383					
5/1/2023	131219960	0	593832	110.3079394					
5/2/2023	131219960	0	593832	112.1303405					
5/3/2023	131259920	39960	633792	114.0753741					
5/4/2023	131323568	63648	697440	116.2157361					
5/5/2023	131395352	71784	769224	118.5763947					
5/6/2023	131502064	106712	875936	121.26454					
5/7/2023	131526904	24840	900776	124.0289164					
5/8/2023	131526904	0	900776	126.7932928					
5/9/2023	131528704	1800	902576	129.5631931					
5/10/2023	131528704	0	902576	132.3330935					
5/11/2023	131530112	1408	903984	135.1073148					
5/12/2023	131530112	0	903984	137.8815362					
5/13/2023	131530112	0	903984	140.6557575					
5/14/2023	131530112	0	903984	143.4299789					
5/15/2023	131530112	0	903984	146.2042003					
5/16/2023	131620448	90336	994320	149.2556522					
5/17/2023	131683912	63464	1057784	152.5018678					
5/18/2023	131753968	70056	1127840	155.9630771					
5/19/2023	131791704	37736	1165576	159.5400938					
5/20/2023	131879792	88088	1253664	163.3874422					
5/21/2023	131885712	5920	1259584	167.2529585					
5/22/2023	131928472	42760	1302344	171.2497001					
5/23/2023	131928472	0	1302344	175.2464418					
5/24/2023	131928472	0	1302344	179.2431835					
5/25/2023	131959384	30912	1333256	183.3347905					

5/26/2023	131959384	0	1333256	187.4263975					
5/27/2023	131959384	0	1333256	191.5180045					
5/28/2023	131961368	1984	1335240	195.6157002					
5/29/2023	131996952	35584	1370824	199.822599					
5/30/2023	132014216	17264	1388088	204.082479					
5/31/2023	132015000	784	1388872	208.344765					
6/1/2023	132046248	31248		208.344765					
6/2/2023	132062656	16408	16408	208.3951192					
6/3/2023	132063616	960	17368	208.4484196					
6/4/2023	132063616	0	17368	208.50172					
6/5/2023	132077944	14328	31696	208.5989913					
6/6/2023	132241688	163744	195440	209.1987738					
6/7/2023	132352704	111016	306456	210.1392515					
6/8/2023	132411736	59032	365488	211.2608915					
6/9/2023	132465816	54080	419568	212.5484967					
6/10/2023	132465816	0	419568	213.8361019					
6/11/2023	132465816	0	419568	215.1237071					
6/12/2023	132490328	24512	444080	216.4865368					
6/13/2023	132607152	116824	560904	218.2078857					
6/14/2023	132673584	66432	627336	220.1331066					
6/15/2023	132695192	21608	648944	222.12464					
6/16/2023	132776368	81176	730120	224.365293					
6/17/2023	132791200	14832	744952	226.6514637					
6/18/2023	132798184	6984	751936	228.9590675					
6/19/2023	132798184	0	751936	231.2666713					
6/20/2023	132840768	42584	794520	233.7049604					
6/21/2023	132841920	1152	795672	236.1467849					
6/22/2023	132841920	0	795672	238.5886094					
6/23/2023	132841920	0	795672	241.0304339					
6/24/2023	132843664	1744	797416	243.4776105					
6/25/2023	132843664	0	797416	245.9247871					
6/26/2023	132867208	23544	820960	248.4442174					
6/27/2023	132871096	3888	824848	250.9755797					
6/28/2023	132877160	6064	830912	253.5255516					
6/29/2023	132944880	67720	898632	256.2833483					
6/30/2023	133043736	98856	997488	259.3445225					
7/1/2023	133275464	231728	1229216	263.1168429					
7/2/2023	133466888	191424	1420640	267.4766212					
7/3/2023	133628536	161648	1582288	272.3324783					
7/4/2023	133790184	161648	1743936	277.6844143					
7/5/2023	133884192	94008	1837944	283.3248498					
7/6/2023	133988440	104248	1942192	289.2852103					
7/7/2023	133995648	7208	1949400	295.2676913					
7/8/2023	134031392	35744	1985144	301.3598665					
7/9/2023	134098784	67392	2052536	307.6588598					
7/10/2023	134136712	37928	2090464	314.0742497					
7/11/2023	134272288	135576	2226040	320.9057066					
7/12/2023	134374992	102704	2328744	328.0523501					
7/13/2023	134474320	99328	2428072	335.5038195					
7/14/2023	134614736	140416	2568488	343.3862093					
7/15/2023	134770512	155776	2724264	351.7466575					
7/16/2023	134977504	206992	2931256	360.7423399					
7/17/2023	135160256	182752	3114008	370.2988669					
7/18/2023	135346896	186640	3300648	380.4281702					
7/19/2023	135520352	173456	3474104	391.0897898					
7/20/2023	135672720	152368	3626472	402.219009					
7/21/2023	135845312	172592	3799064	413.8778928					
7/22/2023	136049568	204256	4003320	426.1636145					
7/23/2023	136271936	222368	4225688	439.1317576					
7/24/2023	136438080	166144	4391832	452.6097772					
7/25/2023	136556320	118240	4510072	466.4506616					
7/26/2023	136697728	141408	4651480	480.7255107					
7/27/2023	136812880	115152	4766632	495.3537478					
7/28/2023	136992208	179328	4945960	510.5323215					
7/29/2023	137126992	134784	5080744	526.1245317					
7/30/2023	137232608	105616	5186360	542.040865					
7/31/2023	137387312	154704	5341064	558.4319668					
8/1/2023	137523360	136048	5477112	575.2405841					
8/2/2023	137703920	180560	5657672	592.6033189					
8/3/2023	137816016	112096	5769768	610.3100632					
8/4/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					These values factored into line 224
8/5/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
8/6/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
8/7/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!					Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!

8/8/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!							Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
8/9/2023	Bad Input	#VALUE!	#VALUE!	#VALUE!							Totalizer kept going so adjusted spread sheet to capture total during loss of input to DC!
8/10/2023	138664880	848864	6618632	630.6218721							These values included from line 217
8/11/2023	138764096	99216	6717848	651.2381633							
8/12/2023	138886304	122208	6840056	672.2294965							
8/13/2023	139009744	123440	6963496	693.5996527							
8/14/2023	139123440	113696	7077192	715.3187287							
8/15/2023	139287392	163952	7241144	737.5409542							
8/16/2023	139440480	153088	7394232	760.2329889							
8/17/2023	139642368	201888	7596120	783.5445943							
8/18/2023	139882720	240352	7836472	807.5938119							
8/19/2023	140044544	161824	7998296	832.1396485							
8/20/2023	140189744	145200	8143496	857.131087							
8/21/2023	140273760	84016	8227512	882.3803607							
8/22/2023	140474416	200656	8428168	908.2454243							
8/23/2023	140586192	111776	8539944	934.4535153							
8/24/2023	140710176	123984	8663928	961.0420988							
8/25/2023	140883040	172864	8836792	988.1611817							
8/26/2023	141011168	128128	8964920	1015.673475							
8/27/2023	141084880	73712	9038632	1043.411981							
8/28/2023	141240320	155440	9194072	1071.627514							
8/29/2023	141418512	178192	9372264	1100.389898							
8/30/2023	141556592	138080	9510344	1129.576034							
8/31/2023	141793424	236832	9747176	1159.488979							
9/1/2023	141920992	127568	9874744	1189.793415							
9/2/2023	141972608	51616	9926360	1220.256255							
9/3/2023	142035840	63232	9989592	1250.913147							
9/4/2023	142083312	47472	10037064	1281.715724							
9/5/2023	142173472	90160	10127224	1312.794992							
9/6/2023	142266944	93472	10220696	1344.161115							
9/7/2023	142438432	171488	10392184	1376.053514							
9/8/2023	142540848	102416	10494600	1408.260216							
9/9/2023	142668384	127536	10622136	1440.858312							
9/10/2023	142857072	188688	10810824	1474.035468							
9/11/2023	143022896	165824	10976648	1507.721519							
9/12/2023	143217520	194624	11171272	1542.004849							
9/13/2023	143323232	105712	11276984	1576.612596							
9/14/2023	143552816	229584	11506568	1611.92491							
9/15/2023	143717920	165104	11671672	1647.743909							
9/16/2023	143911536	193616	11865288	1684.157092							
9/17/2023	144002336	90800	11956088	1720.84893							
9/18/2023	144071952	69616	12025704	1757.754412							
9/19/2023	144088048	16096	12041800	1794.70929							
9/20/2023	144111504	23456	12065256	1831.736152							
9/21/2023	144180128	68624	12133880	1868.973613							
9/22/2023	144218544	38416	12172296	1906.328968							
9/23/2023	144339312	120768	12293064	1944.054947							
9/24/2023	144429664	90352	12383416	1982.058204							
9/25/2023	144494912	65248	12448664	2020.261701							
9/26/2023	144591600	96688	12545352	2058.761921							
9/27/2023	144671488	79888	12625240	2097.507309							
9/28/2023	144768160	96672	12721912	2136.549371							
9/29/2023	144856320	88160	12810072	2175.861987							
9/30/2023	144970608	114288	12924360	2215.525339							
10/1/2023	144970608	0	12924360	2255.188691							
10/2/2023	145083472	112864	13037224	2295.198409							
10/3/2023	145230656	147184	13184408	2335.659818							
10/4/2023	145334704	104048	13288456	2376.440538							
10/5/2023	145499312	164608	13453064	2417.72642							
10/6/2023	145711696	212384	13665448	2459.664085							
10/7/2023	145884448	172752	13838200	2502.131905							
10/8/2023	146047824	163376	14001576	2545.101107							
10/9/2023	146179824	132000	14133576	2588.475402							
10/10/2023	146321776	141952	14275528	2632.28533							
10/11/2023	146392624	70848	14346376	2676.312683							
10/12/2023	146430448	37824	14384200	2720.456114							
10/13/2023	146568800	138352	14522552	2765.02413							
10/14/2023	146651600	82800	14605352	2809.84625							
10/15/2023	146776528	124928	14730280	2855.05176							
10/16/2023	146896384	119856	14850136	2900.625093							
10/17/2023	147022464	126080	14976216	2946.585352							
10/18/2023	147110000	87536	15063752	2992.814248							
10/19/2023	147300272	190272	15254024	3039.627066							
10/20/2023	147448864	148592	15402616	3086.895897							

10/21/2023	147642768	193904	15596520	3134.759796					
10/22/2023	147784880	142112	15738632	3183.05982					
10/23/2023	147819696	34816	15773448	3231.46669					
10/24/2023	147860304	40608	15814056	3279.998181					
10/25/2023	147955744	95440	15909496	3328.822567					
10/26/2023	147958368	2624	15912120	3377.655006					
10/27/2023	147971408	13040	15925160	3426.527462					
10/28/2023	147978944	7536	15932696	3475.423046					
10/29/2023	148031200	52256	15984952	3524.478998					
10/30/2023	148057728	26528	16011480	3573.61636					
10/31/2023	148060512	2784	16014264	3622.762267					
12/1/2023	149000928	940416	16954680	3674.7942					
12/2/2023	149039328	38400	16993080	3726.943979					
12/3/2023	149039360	32	16993112	3779.093855					
12/4/2023	149100352	60992	17054104	3831.430909					
12/5/2023	149101680	1328	17055432	3883.772039					
12/6/2023	149101680	0	17055432	3936.113168					
12/7/2023	149104000	2320	17057752	3988.461418					
12/8/2023	149104000	0	17057752	4040.809667					
12/9/2023	149180912	76912	17134664	4093.39395					
12/10/2023	149189584	8672	17143336	4146.004847					
12/11/2023	149189584	0	17143336	4198.615744					
12/12/2023	149243216	53632	17196968	4251.391231					
12/13/2023	149243216	0	17196968	4304.166718					
12/14/2023	149282752	39536	17236504	4357.063536					
12/15/2023	149312160	29408	17265912	4410.050604					
12/16/2023	149348400	36240	17302152	4463.148888					
12/17/2023	149348400	0	17302152	4516.247173					
12/18/2023	149371840	23440	17325592	4569.417392					
12/19/2023	149409840	38000	17363592	4622.704228					
12/20/2023	149409840	0	17363592	4675.991065					
12/21/2023	149417488	7648	17371240	4729.301372					
12/22/2023	149417488	0	17371240	4782.61168					
12/23/2023	149419984	2496	17373736	4835.929647					
12/24/2023	149419984	0	17373736	4889.247614					
12/25/2023	149419984	0	17373736	4942.565582					
12/26/2023	149485504	65520	17439256	4996.084622					
12/27/2023	149485504	0	17439256	5049.603663					
12/28/2023	149568064	82560	17521816	5103.37607					
12/29/2023	149568080	16	17521832	5157.148527					
12/30/2023	149568080	0	17521832	5210.920984					
12/31/2023	149613808	45728	17567560	5264.833774					

Appendix 7, SOIL & WATER-9

Per Soil &Water 9, in regard to the Septic System, the following is required: “Any testing results or correspondence exchanged between the project owner and the California Department of Health Services or the Colusa County Environmental Health Division.”

There is no testing required for the Septic System at the Colusa Generating Station and there was no formal correspondence with the Colusa County Department of Environmental Health. In 2012 we signed a maintenance contract with Hydrotec Solutions Inc., to provide quarterly maintenance of our septic system in accordance with our O&M manual. This company was recommended to us by the Colusa County Department of Environmental Health. They began their quarterly maintenance in the third quarter of 2012 and have continued through the present.

Attached is their 2023 report.

PGE Colusa Generating Station

1ST QTR., 2023

COMPLETED: 4/6/23

2023 PG&E Colusa Generating Station

	Date		STEP Tank EC			STEP Tank			STEP Tank ETM		
	Date	# days	(Doses)	Net Cycles	ADC	Events	Net	Avg/day	(hrs/min)	Net Run Time	ADRT
4th	11/10/22	86	4217	175	2.03	5110	992	12	229:49:02	21:19:50	0:14:53
**1st	3/28/23	138	4551	334	2.42	1179	-3931	-28	247:54:32	18:05:30	0:07:52
2nd											
3rd											
4th											

** This panel is once again giving us "ETM" readings, but somehow is showing the "Events" as going backwards.

PIEZOMETER MEASUREMENTS

3/28/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	N/A	
Piez #2	N/A	
Piez #3	N/A	

***Was told not to do because the rain made the area too dangerous to go into.**

SCUM & SLUDGE MEASUREMENTS

3/28/23

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM	8"	0"	0"	0"
SLUDGE	12"	6"	5"	1"

PGE Colusa Generating Station

2ND QUARTER 2023

COMPLETED: 7/7/23

2023 PG&E Colusa Generating Station

	Date		STEP Tank EC			STEP Tank			STEP Tank ETM		
	Date	# days	(Doses)	Net Cycles	ADC	Events	Net	Avg/day	(hrs/min)	Net Run Time	ADRT
4th	11/10/22	86	4217	175	2.03	5110	992	12	229:49:02	21:19:50	0:14:53
**1st	3/28/23	138	4551	334	2.42	1179	-3931	-28	247:54:32	18:05:30	0:07:52
2nd	6/22/23	86	4783	232	2.70	1643	464	5	260:28:32	12:34:00	0:08:46
3rd											
4th											

** This panel is once again giving us "ETM" readings, but somehow is showed the "Events" going backwards in 1st Qtr.

PIEZOMETER MEASUREMENTS

3/28/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	N/A	
Piez #2	N/A	
Piez #3	N/A	

***Was told not to do because the rain made the area too dangerous to go into.**

6/22/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	2.10'	DRY
Piez #2	2.20'	DRY
Piez #3	2.40'	1.90'

SCUM & SLUDGE MEASUREMENTS

3/28/23

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM	8"	0"	0"	0"
SLUDGE	12"	6"	5"	1"

6/22/23

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM	10"	0"		
SLUDGE	8"	4"		

****No reading on this trip.**

PGE Colusa Generating Station

3RD QUARTER 2023

COMPLETED: **10/23/23**

2023 PG&E Colusa Generating Station

	Date		STEP Tank EC			STEP Tank			STEP Tank ETM		
	Date	# days	(Doses)	Net Cycles	ADC	Events	Net	Avg/day	(hrs/min)	Net Run Time	ADRT
4th	11/10/22	86	4217	175	2.03	5110	992	12	229:49:02	21:19:50	0:14:53
**1st	3/28/23	138	4551	334	2.42	1179	-3931	-28	247:54:32	18:05:30	0:07:52
2nd	6/22/23	86	4783	232	2.70	1643	464	5	260:28:32	12:34:00	0:08:46
3rd	9/28/23	98	5066	283	2.89	2371	728	7	276:37:42	16:09:10	0:09:53
4th	12/21/23										

** This panel is once again giving us "ETM" readings, but somehow is showing the "Events" going backwards in 1st Qtr.

PIEZOMETER MEASUREMENTS

3/28/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	N/A	
Piez #2	N/A	
Piez #3	N/A	

*Was told not to do because the rain made the area too dangerous to go into.

6/22/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	2.10'	DRY
Piez #2	2.20'	DRY
Piez #3	2.40'	1.90'

9/28/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	2.10'	DRY
Piez #2	2.20'	DRY
Piez #3	2.40'	1.93'

SCUM & SLUDGE MEASUREMENTS

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM	8"	0"	0"	0"
SLUDGE	12"	6"	5"	1"

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM	10"	0"		
SLUDGE	8"	4"		

**No reading on this trip.

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM				
SLUDGE				

* Did not measure on this visit.

PGE Colusa Generating Station

4TH QUARTER 2023

COMPLETED: **1/19/24**

2023 PG&E Colusa Generating Station

	Date		STEP Tank EC			STEP Tank			STEP Tank ETM		
	Date	# days	(Doses)	Net Cycles	ADC	Events	Net	Avg/day	(hrs/min)	Net Run Time	ADRT
4th	11/10/22	86	4217	175	2.03	5110	992	12	229:49:02	21:19:50	0:14:53
**1st	3/28/23	138	4551	334	2.42	1179	-3931	-28	247:54:32	18:05:30	0:07:52
2nd	6/22/23	86	4783	232	2.70	1643	464	5	260:28:32	12:34:00	0:08:46
3rd	9/28/23	98	5066	283	2.89	2371	728	7	276:37:42	16:09:10	0:09:53
4th	12/21/23	84	5285	219	2.61	2878	507	6	295:17:06	18:39:24	0:13:20

** This panel is once again giving us "ETM" readings, but somehow is showing the "Events" going backwards in 1st Qtr.

PIEZOMETER MEASUREMENTS

3/28/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	N/A	
Piez #2	N/A	
Piez #3	N/A	

*Was told not to do because the rain made the area too dangerous to go into.

6/22/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	2.10'	DRY
Piez #2	2.20'	DRY
Piez #3	2.40'	1.90'

9/28/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	2.10'	DRY
Piez #2	2.20'	DRY
Piez #3	2.40'	1.93'

12/21/23	<u>TOTAL DEPTH</u>	<u>DEPTH TO H2O</u>
Piez #1	2.10'	DRY
Piez #2	2.20'	DRY
Piez #3	2.40'	1.67'

SCUM & SLUDGE MEASUREMENTS

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM	8"	0"	0"	0"
SLUDGE	12"	6"	5"	1"

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM	10"	0"		
SLUDGE	8"	4"		

**No reading on this trip.

	<u>SEPTIC</u>		<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>	<u>INLET</u>	<u>OUTLET</u>
SCUM				
SLUDGE				

* Did not measure on this visit.

	<u>SEPTIC</u>		#	<u>DOSING</u>	
	<u>INLET</u>	<u>OUTLET</u>		<u>INLET</u>	<u>OUTLET</u>
SCUM	2"	0"		0"	0"
SLUDGE	0"	1"		1"	1"

Appendix 8, TLSN-3



Per TLSN-3, the following is required: “Any reports of line-related complaints shall be summarized along with related mitigation measures for the first five years and provided in an annual report to the CPM.”

There were no line related complaints in 2023.

Appendix 9, VIS-1

Per VIS-1, the following is required: “The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify:

- a) the condition of the surfaces of all structures and buildings at the end of the reporting year; b)**
- major maintenance activities that occurred during the reporting year; and**
- c) the schedule of major maintenance activities for the next year.**

Surface coating applications for the most part remain in good condition after their completion in March 2011, as a result no maintenance activities occurred in 2023.

Appendix 10, VIS-3

Per VIS-3, the following is required: The project owner shall report landscaping maintenance activities, including of dead or dying vegetation, for the previous year of operation in each annual compliance report."

During 2022 maintenance was completed by Sierra Integrated Services Inc. All vegetation is healthy and there is no dying vegetation.



TJ Gomez
Pacific Gas & Electric Company
Colusa Generating Station
4780 Dirks Road
Colusa, CA 94509

February 9, 2023

First Quarter 2023 Landscape Tree & Shrub Maintenance Report

An inspection was performed on the landscape trees and shrubs bordering the entrance of the facility. The trees were visually inspected for signs of structural issues, moisture/irrigation issues, and pest and diseases. Based on the observations most trees and shrubs did not appear to have any of the above listed issues, however, there continues to be small Eucalyptus that has increasing dieback towards the top and some leaves continue to have discoloration and spotting. The additional two small Eucalyptus continue to show dieback and leaf discoloration in the same row.

The pines located to the left of the main gate show improvement on needle coloring overall appearance. Needle drop and discoloration appears to be less than in previous observations, however, one pine continues to have a significant lean at the base of the tree. The small Eucalyptus to the left of the gate that was showing signs of improvement by pushing new growth is again showing decline and further die-back. The bark on the trunk and limbs is cracking and falling off. This tree will probably need to be removed and replaced.

Recommendations

Continue to inspect and test irrigation system to ensure it is properly working and adequately supplying water to each tree. The irrigation system should be off during this quarter.

Continue to maintain a weed free zone around each tree and shrub. Weeds can compete for nutrients and moisture and can create harborage and protection for rodents that can damage the tree bark. Application of a pre-emergent herbicide can assist in this effort.

Continued monitoring of the trees of concern. All others have continued stable status.

Anne-Marie Patterson
President
Pest Control Advisor/QAL
Sierra Integrated Services, Inc.
916-717-9631



TJ Gomez
Pacific Gas & Electric Company
Colusa Generating Station
4780 Dirks Road
Colusa, CA 94509

April 26, 2023

Second Quarter 2023 Landscape Tree & Shrub Maintenance Report

An inspection was performed on the landscape trees and shrubs bordering the entrance of the facility. The trees were visually inspected for signs of structural issues, moisture/irrigation issues, and pest and diseases. Based on the observations most trees and shrubs did not appear to have any of the above listed issues. There are two small eucalyptus trees of concern that we have been monitoring. It now appears that the decline in these two specimens warrant removal and replacement. One is located to the left of the entrance gate on the corner and the other is to the right of the gate. There are two additional small eucalyptus to the right of the gate that still have some die back but not to the extent of the ones needing replacement.

All of the other trees are maintaining as expected and have good new spring growth. The weedy vegetation surrounding the base of the trees has been line trimmed away.

Recommendations

Continue to inspect and test irrigation system to ensure it is properly working and adequately supplying water to each tree. The irrigation system should supplying irrigation to the trees at this point in the year.

Continue to maintain a weed free zone around each tree and shrub. Weeds can compete for nutrients and moisture and can create harborage and protection for rodents that can damage the tree bark. Application of a pre-emergent herbicide can assist in this effort.

Continued monitoring of the trees of concern. All others have continued stable status.

Anne-Marie Patterson
President
Pest Control Advisor/QAL
Sierra Integrated Services, Inc.
916-717-9631



TJ Gomez
Pacific Gas & Electric Company
Colusa Generating Station
4780 Dirks Road
Colusa, CA 94509

July 6, 2023

Third Quarter 2023 Landscape Tree & Shrub Maintenance Report

An inspection was performed on the landscape trees and shrubs bordering the entrance of the facility. The trees were visually inspected for signs of structural issues, moisture/irrigation issues, and pest and diseases. Based on the observations most trees and shrubs did not appear to have any of the above listed issues. The four small eucalyptus which were showing signs of significant decline or were dead were cut down and new re-placement trees were planted. All of the other trees continue to maintain as expected.

Recommendations

Continue to inspect and test irrigation system to ensure it is properly working and adequately supplying water to each tree. It is especially important that the newly planted trees are getting adequate and frequent water.

Continue to maintain a weed free zone around each tree and shrub. Weeds can compete for nutrients and moisture and can create harborage and protection for rodents that can damage the tree bark.

Monitor the new plantings. All others have continued stable status.

Anne-Marie Patterson
President
Pest Control Advisor/QAL
Sierra Integrated Services, Inc.
916-717-9631



TJ Gomez
Pacific Gas & Electric Company
Colusa Generating Station
4780 Dirks Road
Colusa, CA 94509

December 20, 2023

Fourth Quarter 2023 Landscape Tree & Shrub Maintenance Report

An inspection was performed on the landscape trees and shrubs bordering the entrance of the facility. The trees were visually inspected for signs of structural issues, moisture/irrigation issues, and pest and diseases. Based on the observations most trees and shrubs did not appear to have any of the above listed issues, however of the new eucalyptus plantings had died and another is showing signs of some leaf drying. The two others appear to be establishing nicely.

Recommendations

Continue to inspect and test irrigation system to ensure it is properly working and adequately supplying water to each tree. It is especially important that the newly planted trees are getting adequate and frequent water. Lack of irrigation may have caused the death of one the new plantings. The irrigation system will need to be turned off during the rainy season.

Continue to maintain a weed free zone around each tree and shrub. Weeds can compete for nutrients and moisture and can create harborage and protection for rodents that can damage the tree bark.

Some resprouting was seen on one of the eucalyptus stumps that was removed. Those resprouts will need to be removed so that they do not compete with the newly planted replacement.

Continue to monitor new plantings and plan for a spring fertilization. All others have continued stable status.

Anne-Marie Patterson
President
Pest Control Advisor/QAL
Sierra Integrated Services, Inc.
916-717-9631

Appendix 11, Waste-5

The Waste Management Plan was followed during 2023. The following pages reflect the practices that were utilized throughout the year.

TABLE 2-1
 Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Analysis Required
General Wastes				
Non-recyclable non-hazardous office and lunchroom waste	Waste paper, metal, plastic, cardboard, wood	Non-hazardous solid waste, based on waste management practices and staff training.	Commercial waste bins	Not required
Recyclable office materials	Waste paper, metal, plastic, cardboard	Not a waste, based on waste management practices and staff training.	Commercial recycling bins	Not required
Janitorial products and waste from their use	Janitorial products (e.g., window cleaner, floor stripper, wax, drain cleaners, etc.) may contain chemicals that are hazardous. These chemicals are consumed during normal use.	Use according to instructions on product labels does not constitute disposal. Discarded full-strength products may exhibit characteristics of ignitability, corrosivity, reactivity, or toxicity.	Empty containers of 5 gallons or less (meeting the definition of an empty container) can be disposed of in commercial waste bins. Discarded unused products will be characterized based on review of product labels and MSDSs and disposed of appropriately.	Not required
Used consumer electronic products and components	Cell phones, personal computers, computer peripherals (e.g., printers), pagers, personal digital assistants, process control system components	Universal hazardous waste	Universal waste destination facility to be identified	Not required
Light tubes	Includes fluorescent light tubes, high-pressure sodium lamps, and other lamps that exhibit a characteristic of a hazardous waste.	Universal hazardous waste	Universal waste destination facility to be identified	Not required
Batteries	Rechargeable nickel-cadmium batteries, lithium batteries, alkaline batteries,	Universal hazardous waste	Universal waste destination facility to be identified	Not required

TABLE 2-1
 Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Analysis Required
	silver button batteries, mercury batteries, small sealed lead-acid batteries, carbon-zinc batteries, and any other batteries that exhibit a characteristic of a hazardous waste			
Lead acid batteries – automotive or large industrial	Contain lead and sulfuric acid	Recyclable hazardous waste	Destination facility to be identified	Not required
Off-specification chemicals	Unusable new products, materials that cannot be returned to the vendor, and expired materials (shelf-life exceeded)	Chemical products may be non-hazardous, listed hazardous wastes, or characteristic waste.	Non-hazardous waste will be discarded in commercial waste bins. Hazardous waste will be disposed appropriately following characterization based on product labels and MSDSs.	Not required; management to be determined based on product label and MSDS.
Spent sorbent	Varies with wastes absorbed. May contain oil, solvents, coolant, or diesel fuel. Listed solvents are not expected to be used at the facility.	Non-hazardous waste if used to absorb a non-hazardous liquid; non-RCRA hazardous waste if used to absorb oil; RCRA hazardous waste if used to absorb a listed solvent or material that causes the sorbent to become a characteristic or listed hazardous waste	Non-hazardous waste will be discarded in commercial waste bins. Oil-contaminated sorbent will be disposed as a non-RCRA hazardous waste based on generator knowledge. Other hazardous waste sorbent will be disposed based on either generator knowledge if the material absorbed is known or analysis if it is not known.	Not required except when the material being absorbed is not known.
Aerosol cans	Aerosol cleaners and lubricants may contain listed chemicals. In addition, aerosol propellants and materials may be ignitable. Materials may also be	Universal hazardous waste	Empty, expired unused, or partially used aerosol cans	Not required; management can to be determined based on product label and MSDS.

TABLE 2-1
 Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Analysis Required
	corrosive or reactive.			
Used oil	Used oil includes lubricating oil, gearbox oil, compressor oil, bearing oil, transformer oil, metal working oil, and hydraulic oil that is not mixed with solvents.	Non-RCRA hazardous waste	Evergreen Oil or similar used oil recycler	Testing to confirm total halogen concentration is less than 1,000 parts per million. Testing is typically provided as a service by the oil recycler.
Painting wastes	Large-scale work is contracted out. Paint wastes include cans of unused or partially used paint, empty paint cans, and paint contaminated materials (brushes, rollers, tarps, and wipes).	It is assumed that waist paints are hazardous wastes. Paint-contaminated material is typically non-hazardous unless disposed when the paint is still wet.	Discarded unused or partially used paint will be characterized based on review of product labels and MSDSs and will be disposed of appropriately.	None required
Biohazard wastes	Biohazard waste may result from first air operations.	Biohazard	Transport to a local hospital for disposal by incineration	None required
Sanitary wastewater	Wastewater from toilets, sinks, showers, and janitorial closets.	Non-hazardous. Waste management provisions include posting signs at sinks and training employees regarding materials prohibited from draining at sinks.	Delta Diablo Sanitation District treatment plant	Monitoring per Industrial Waste Permit
Used oil filters	Used oil filters are hazardous based on oil content and may exhibit hazardous characteristics for lead and other heavy metals.	Used oil filters are classified as recyclable hazardous wastes provided that they are managed per requirements including draining of free-flowing oil	Drained oil filters may be transported to an approved destination such as Evergreen Oil under a bill of lading, provided that requirements for used oil filter management have been met.	None required

TABLE 2-1
 Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Analysis Required
Reusable soiled textiles (shop towels)	Varies with material absorbed. May contain oil, solvents, or other chemicals.	May be managed as a recyclable material excluded from classification as a waste if managed in accordance with requirements for reusable soiled textiles.	Recycle at facility that is compliant with requirements for reusable soiled textiles.	None required
Empty product containers	Empty containers may contain residues that have hazardous characteristics. Care should be taken in handling empty containers previously holding ignitable materials as they may contain ignitable vapors.	Empty containers meeting the regulatory definition of empty (e.g. all contents have been poured out) may be disposed of as non-hazardous waste provided they also meet empty container management requirements.	Empty containers of 5 gallons or less may be disposed with commercial waste. Empty containers of greater than 5 gallons need to be labeled with the word "empty" and the date they were emptied and either sent for reconditioning or for scrap within one year of becoming empty.	None required
Scrap metal	Used metal parts	Recyclable materials (22 CCR 66261.6(a)(3))	Place in scrap metal bins for transportation to a scrap metal recycler.	None
Compressed gas cylinders	Cylinders containing pressurized oxygen, acetylene, argon, nitrogen, and calibration gas blends; may contain residual pressure.	Non-hazardous solid waste when empty	Return refillable cylinders to vendors. Dispose of non-refillable cylinders as non-hazardous waste.	None
Spent solvent, sludge, and filters from parts washers.	Water-based and hydrocarbon based spent solvent, sludge, and filters.	Hydrocarbon-based solvent is typically hazardous and is collected and recycled.	Contract a parts washer service to recycle parts washer spent solvent in accordance with regulation.	None required unless operations change or solvent changes.
Used blasting grit	Used blasting grit may contain metal from the parts processed as well as coating	The material will be collected for characterization prior to	Manage as a hazardous waste. The material will be disposed at an approved	The analysis to be performed will be based on the waste profiling requirements of the

TABLE 2-1
 Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Analysis Required
	residue.	disposal.	disposal facility in accordance with federal, state, and local regulations.	disposal facility.
Oil/water separator sludge	Material collecting on the bottom of the oil/water separator may include oil-contaminated metals and other solids.	The material will be managed as a hazardous waste based on waste analysis.	Manage as a hazardous waste. The material will be disposed at an approved disposal facility in accordance with federal, state, and local regulations.	The analysis to be performed will be based on the waste profiling requirements of the disposal facility.
Used engine coolant	Used engine coolants are mixtures of water and organic compounds such as ethylene glycol.	Spent coolants are typically non-RCRA hazardous wastes.	Recycle at Evergreen Oil or similar facility.	None required
Wet Surface Air Cooler (WSAC) Sludge	WSAC sludge is a mixture of ambient particulate matter and water.	Dependent on samples—likely non-hazardous. Class II/III landfill if nonhazardous; Class I if hazardous.	Store in bins. Bins are to be covered if rain is predicted. Storage is allowed until container is full. Waste will be transported off-site weekly.	Perform total analysis (i.e. TCLP, TTLP, WET, etc.) to characterize the waste. If process remains consistent through year, perform characterization 1x/year
Salt Cake	Residual concentrated brine solution	Dependent on samples—likely non-hazardous. Class II/III landfill if nonhazardous; Class I if hazardous.	Store in bins. Bins are to be covered if rain is predicted. Storage is allowed until container is full. Waste will be transported off-site weekly.	Perform total analysis (i.e. TCLP, TTLP, WET, etc.) to characterize the waste. If process remains consistent through year, perform characterization 1x/year.

MSDS = Material Safety Data Sheet.

Table 2-1

Characterization of Waste Streams at the Colusa Generating
Station Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Analysis Required
Soil & Rock	Excavated soil/rock From Oil spills	Depends on sample likely non-hazardous Class II/III if nonhazardous Class I if hazardous	Manage as a hazardous Waste. The material will disposed at an approved facility. In accordance with federal,state and local regulation	Preform total analysis (i.e., TPH,CAM17) to characterize the waste.

2022 Waste Stream Detailed

Waste Stream	Quantity	On-Site Storage	Off-Site Disposal
Non RCRA Hazardous Waste, Solid (Drained Oil Filters)	550 Pounds	Store for less than 90 days	Shipped to approved TSD facility (CHES)
Non RCRA Hazardous Waste, Solid (Oily Debris)	3400 Pounds	Store for less than 90 days	Shipped to approved TSD facility (CHES)
Non RCRA Hazardous Waste, Liquids (Mixed Oils)	2795 Pounds	Store for less than 90 days	Shipped to approved TSD facility (CHES)
Universal Waste (Electronic Devices)	575 Pounds	Store for less than 365 days	Shipped to approved TSD facility (CHES)
Hazardous Waste Liquid (Waste Water)	52400 Gallons	Stored for less than 90 days	Shipped to approved TSD facility (Seaport)
Hazardous Waste Adhesives	45 Pounds	Stored for less than 90 days	Shipped to approved TSD facility (CHES)
Non RCRA Hazardous Waste Flammable Solids. Organic NOS (Acetone, Ethyl Benzene)	10 Pounds	Stored for less than 90 days	Shipped to approved TSD facility (CHES)
Non RCRA Hazardous Waste, Liquids (Water Chemtreat)	3600 Pounds	Stored for less than 90 days	Shipped to approved TSD facility (CHES)
Non RCRA Hazardous Waste, Liquids (Oil, Water)	600 Pounds	Stored for less than 90 days	Shipped to approved TSD facility (CHES)
Universal Waste (Batteries)	65 Pounds	Stored for less than 180 days	Shipped to approved TSD facility (CHES)
Non- RCRA Hazardous Waste, Solid (Aluminum Oxide, Sodium Oxide)	3200 Pounds	Stored for less than 90 days	Shipped to approved TSD facility (CHES)
Non RCRA Hazardous Waste, Solids (Silicone Pyrophosphate, Quartz Dust)	800 Pounds	Stored for less than 90 days	Shipped to approved TSD facility (CHES)
Waste Flammable Liquids (Gasoline, Diesel)	75 Pounds	Stored for less than 90 days	Shipped to approved TSD facility (CHES)
Universal Waste (Aeresols)	65 Pounds	Stored less than 90 days	Shipped to apporved TSD facility (CHES)

Non Regulated Solid (Non PCB Ballasts)	15 Pounds	Stored less than 180 days	Shipped to approved TSD facility (CHES)
Waste Alcohols , N.O.S. (Ethanol, Methanol)	50 Pounds	Stored less than 90 days	Shipped to approved TSD facility (CHES)

Attachment D

Post-Certification Changes

Per Com-7 Item 4 we are to provide; “A Summary of the current project operating status and an explanation of any significant changes to the facility operations during the year.”

No significant changes were made at CGS in 2023.

Attachment E

Summary of Missed Deadlines

Per Com-7 Item 5 we are to provide: “An explanation for any submittal deadlines that have been missed, accompanied by an estimate of when the information will be provided”

No submittal deadlines have been missed for 2023.

Attachment F

Governmental Agency Submittals and Issuances

The following is a listing of filings submitted to, or permits issued by, other governmental agencies during the year:

CGS Agency Submittals; January 1, 2023 – December 31, 2023

Colusa County Air Pollution Control District

Quarterly Operating Report (Permit Condition 17) – January 30, 2023; April 24, 2023; July 31, 2023; October 26, 2023

Annual RATA/Source Test – November 2023

Title V Annual Certification of Compliance January 2023

EPA

Semi Annual CEMs Report (X.G.5) – January 2023; July 31, 2023

CUPA

Revised Hazardous Materials Business Plan via CERS – January 24, 2023

State Water Resources Control Board

Annual Stormwater Report – July 2023

Exceedance Response Action Level 1 Action Plan – July 2023

Attachment G

Projected Compliance Activities 2024

Per Com-7 Item 7 we are to provide; “A projection of project compliance activities scheduled during the next year.”

In 2024 PG&E intends to continue reporting on the standard required compliance items. These include but are not limited to:

- *Quarterly CEMS Reports/Operations Reports
- *Annual Compliance Reports
- *Notifications of Source Testing and Associated Source Test Reports
- *Annual Storm Water Report
- *Netting below ACC to prevent bat fatalities

Attachment H

Additions to On-Site Compliance Files

Per Com-7 Item 8 we are to provide; “A listing of this year’s additions to the on-site compliance files.”

All of the above noted items in Attachment F which were submitted to agencies other than the CEC, as well as those items submitted to the CEC have been added to the site compliance files.

Attachment I

Contingency Plan Evaluation

Per Com-7 Item 9 we are to provide; “An Evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions for bringing the plan up to date.”

Upon Review of the Site Contingency Plan there have been no changes in operations or company business practices to warrant changing of the on-site contingency plan for unplanned facility closure.

Attachment J

Complaints / NOVs / Citations

Per Com-7 Item 10 we are to provide: "A listing of complaints, notices of violation, official warnings, and citations received during the year, a description of the resolution of any resolved matters, and the status of any unresolved matters"

In 2023, CGS did not receive any complaints, warnings, or citations.

Attachment K

Worker Safety-6, Maxwell Fire Department Payment

Per Worker Safety-6 The owner shall provide the CEC CPM with verification of funding to the Maxwell Fire Department for required fire protection services mitigation pursuant to the agreement with the Department or the CEC CPM approved independent consultant study.

Colusa County



Transaction Date: 05/08/2023

Receipt Date: 05/08/2023

Receipt: 210033

Cashier ID: jgutierrez

<u>Category</u>	<u>Account String</u>	<u>Description</u>	<u>Amount</u>
MFPGE	411-47998-000-0	PG&E Payment per agreement	355,139.00

Total Tendered: 355,139.00
Total Received: 355,139.00
Change Due:

Maxwell Fire Protection District

231 West Oak
P.O. Box 651
Maxwell, Ca. 95955
Bus. (530) 438-2320
Emergency Dial 911

May 1, 2023

**Josh Harris, Plant Manager
Pacific Gas & Electric
Colusa Generating Station
4780 Dirks Road
Maxwell, CA 95955**

Dear Josh,

This is a request for the annual payment as stated by the agreement between PG&E and the Maxwell Fire Protection District dated March 24, 2009. The payment is to be adjusted for inflation based on the Bureau of Labor statistics for the San Francisco Region and County taxes collected on the project. The inflation factor for 2022 was 5.6% and the taxes collected on the project for 2022 was \$8,951.00. Total due the Maxwell Fire Protection District is stated below.

Annual payment	\$344,783.00
Inflation 2019	+\$19,307.00
County Taxes	-\$8,951.00
Total Due	\$355,139.00

Sincerely,

Kenny Cohen Maxwell Fire Chief.



WARNING - THIS DOCUMENT CONTAINS A VOID PANTOGRAPH, COLORED BACKGROUND AND WATERMARK ON THE BACK



Pacific Gas and Electric Company®

77 Beale Street, San Francisco, CA 94105

THE BANK OF NEW YORK MELLON 53-292 113

Date: 05/04/2023

Check No. 5073463

Pay \$*****355,139.00*

*THREE HUNDRED FIFTY-FIVE THOUSAND ONE HUNDRED THIRTY-NINE***** AND 00/100 DOLLARS

To The Order Of

ACCOUNTS PAYABLE

MAXWELL FIRE DISTRICT
COUNTY OF COLUSA
PO Box 651
MAXWELL CA 95955



Pacific Gas and Electric Company®

9087503

⑈0005073463⑈ ⑆011302920⑆ 059978⑈

ORIG. - PAYOR
DUP. - AUDITOR
TRIP. - DEPT.

COUNTY OF COLUSA
COLUSA, CALIFORNIA

No. 5073463

RECEIPT OF DEPARTMENT DATE

RECEIVED \$.....

FROM

ADDRESS

FOR

CASH
CHECK
M.O.

Officer/Dept. Head

The money covered by this receipt to be deposited with COUNTY TREASURER, who will issue his official receipt therefor to the department listed above.

BY