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Organization:	California Energy Commission
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Docketed Date:	8/29/2025

2024 Updated Annual Compliance Report

As required by California Energy Commission:
City of Roseville, Roseville Electric Utility-Roseville Energy Park
COM-7 (03-AFC-1)

07/28/2025

Julie Manfredi
Compliance Officer
City of Roseville – Roseville Energy Park
Phone: 916-774-5674

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I. COM-5 Compliance Matrix

a) Annual Compliance Reporting

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Air Quality	AQ-68	Cooling Tower Lab Analysis	June-August
Air Quality	AQ-SC12	Off-Road Equipment	June-August
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Visual Resources	VIS-4	Surface Treatment Maintenance	June-August
Visual Resources	VIS-5	Landscape Screening	June-August
Waste Management	WASTE-5	Waste Management Plan	June-August

b) As Required Compliance Reporting

Technical Area	Condition Number	Verification Action	Date Required
Air Quality	AQ-22	NOx Emissions Records	As Requested
Air Quality	AQ-30	Annual Source Test Protocol for NOx	30 days Prior
Air Quality	AQ-30	Annual Source Test Results for NOx	Within 60 Days of Test
Air Quality	AQ-31	Gas Turbine Operating Log	As Requested
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Air Quality	AQ-44	Annual Performance Test Results	Within 60 Days of Test
Air Quality	AQ-45	Cold Start NOx and CO Emissions Performance Test Protocol	Every 7 Years after Commissioning - Results within 60 Days of Test
Air Quality	AQ-45	Cold Start NOx and CO Emissions Performance Test Results	Every 7 Years after Commissioning - Protocol 30 Days Prior
Air Quality	AQ-46	Annual Performance Test Methods Protocol	30 Days Prior
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Air Quality	AQ-49	Annual Particulate Matter Performance Test Protocol	30 Days Prior
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Air Quality	AQ-50	Annual SOx Performance Test Protocol	30 Days Prior
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Air Quality	AQ-51	NH3 Slip Exceedance	Within 10 Days of Exceedance
Air Quality	AQ-51	Plan for Replacement or Reconditioning of Catalyst	30 Days Prior to Scheduled Date
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Air Quality	AQ-66	No Hexavalent Chromium Compounds Added to Cooling Tower	Records Available as Requested
Air Quality	AQ-110	Portable Equipment	Site Available for Inspection

c) Quarterly Compliance Reporting

Technical Area	Condition Number	Verification Action	Date Required
Air Quality	AQ-15	Operational Status of SCR and Oxidation Catalyst	April 30, July 30, October 30, January 30
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Air Quality	AQ-36	Upset Breakdown Reports	April 30, July 30, October 30, January 30
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Air Quality	AQ-39	CEMS Audits	April 30, July 30, October 30, January 30
Air Quality	AQ-40	CEMS QA Failures	April 30, July 30, October 30, January 30
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Air Quality	AQ-55	Alstom GX100 NOx and CO Emissions During Start-ups and Shut-downs	April 30, July 30, October 30, January 30
Air Quality	AQ-57	Alstom GX100 LB/Hr Emissions Except During Start-ups and Shut-downs	April 30, July 30, October 30, January 30

Technical Area	Condition Number	Verification Action	Date Required
Air Quality	AQ-59	Alstom GX100 Daily Emission Limits	April 30, July 30, October 30, January 30
Air Quality	AQ-60	GTX100 Turbine Quarterly Emission Limits	April 30, July 30, October 30, January 30
Air Quality	AQ-63	Cooling Tower Annual Emission Limits	April 30, July 30, October 30, January 30
Air Quality	AQ-69	Cooling Tower Emissions Nuisances	April 30, July 30, October 30, January 30
Air Quality	AQ-70	Cooling Tower PM-10 Emission Exceedances	April 30, July 30, October 30, January 30
Air Quality	AQ-71	Cooling Tower PM-10 Emission Limit	April 30, July 30, October 30, January 30
Air Quality	AQ-86	Firewater Pump Emergency Generator Diesel Engine & Generator Testing Limits	April 30, July 30, October 30, January 30
Air Quality	AQ-87	Firewater Pump Limits for Operation and Maintenance Testing	April 30, July 30, October 30, January 30
Air Quality	AQ-88	Firewater Pump Sulfur Content of Diesel Fuel	April 30, July 30, October 30, January 30
Air Quality	AQ-89	Firewater Pump Operation and Maintenance Records	April 30, July 30, October 30, January 30
Air Quality	AQ-90	Firewater Pump Emissions Nuisances	April 30, July 30, October 30, January 30
Air Quality	AQ-91	Firewater Pump Opacity Violations	April 30, July 30, October 30, January 30
Air Quality	AQ-99	Emergency Generator Diesel Engine & Generator Testing Limits	April 30, July 30, October 30, January 30
Air Quality	AQ-100	Emergency Generator Operation Run Time Limits	April 30, July 30, October 30, January 30
Air Quality	AQ-101	Emergency Generator Sulfur Content of Diesel Fuel	April 30, July 30, October 30, January 30
Air Quality	AQ-102	Emergency Generator Operation and Maintenance Records	April 30, July 30, October 30, January 30
Air Quality	AQ-103	Emergency Generator Emissions Nuisances	April 30, July 30, October 30, January 30
Air Quality	AQ-104	Emergency Generator Opacity Violations	April 30, July 30, October 30, January 30
Air Quality	AQ-117	Excess Emissions During Upset, Breakdown, or Maintenance	April 30, July 30, October 30, January 30

II. Project Operating Status

The Roseville Energy Park (REP) operated throughout most of the 2024 calendar year per the design basis.

III. Required Conditions

The required conditions are included in the Compliance Matrix within this Annual Report.

IV. Post-Certificate Changes

REP did not submit a post-certification petition with the California Energy Commission (CEC) in 2024.

V. Submittal Deadline Resolutions

Pursuant to COM-7, REP will submit its annual report no later than July 30th. This date is 30+ days later than in past years but mutually agreed upon due to the State of California COVID-19 and possible staff shortages.

VI. New Filings

REP had no post certification filings submitted in calendar year 2024.

The PCAPCD Operating Permits (REPR-29-01, REPR-20-01, REPR-20-02, REPR-01-02, and REPR-01-01) for major equipment at REP were renewed through the annual process and are valid from October 1, 2024 – September 30, 2025. No changes were made to the permit conditions.

In total, **three variances** were issued during calendar year 2024.

- *Short Term Variance 2024-02* was granted to identify the root cause of an unexpected mechanical vibration discovered after the 2021 hardware upgrade of combustion turbine generator #2. This Short-Term Variance was granted from March 27, 2024 through May 1, 2024.
    - Siemens prepared the unit for vibration tuning and testing and Generation staff at Roseville performed the following steps and completed the testing on April 2, 2024.
    - Generation staff conducted a series of controlled ramping and load-hold tests to support vibration tuning and data collection. To minimize NOx emissions during testing, the NOx setpoint was temporarily reduced, and emissions were closely managed throughout.
    - During testing, three high carbon monoxide (CO) exceedances occurred and were reported as Non-Compliance Event 2024-02.
    - The unit was returned to normal operations following the completion of testing and analysis.

- *Emergency Variance 2024-03* was granted to investigate and identify the root cause of unexpected VOC and NOx exceedances during its annual source testing and RATA for CT2 and on July 9, 2024 and July 12, 2024. The unexpected exceedances did not meet EPA Performance Specification 2 to be within 20%.
    - During the variance period, automatic calibrations were performed every eight hours and submitted to the PCAPCD daily. An internal investigation concluded that the likely contributors to the failed test results were minor drift in analyzer readings following gas bottle replacement and potential variability in portable lab equipment used during testing.
    - Although no emission exceedances occurred during the variance period, a separate Non-Compliance Event 2024-018 was reported due to an unrelated loss of ammonia control caused by a fiber optic signal failure. This issue was resolved through the installation of an alternate cable route.
    - Re-testing was completed successfully between July 23 and July 24, 2024 after manual calibrations were applied, and the updated test results were submitted to the PCAPCD on August 28, 2024.

- *Emergency Variance 2024-07* was granted Emergency Variance #2024-07 investigate and identify the root cause of unexpected electrical generator trip on Combustion Turbine 2 (CT2).
    - On November 16, 2024, the REP was taken offline by its facility operators out of an abundance of caution and remained offline through March of 2025.
    - In coordination with generation staff and after extensive investigation and troubleshooting by Siemens the cause of CT2's electrical trip has been identified as failed gas turbine components.
    - Parts and materials were specifically identified when the engine was disassembled, and repair activities were completed.

VII. Projected Compliance Activities

The REP has planned and budgeted the following repetitive compliance activities:

- Maintain compliant operations of the facility through the purchase and use of required consumables
- Planning of prudent preventative maintenance tasks
- Compliance training of site personnel
- Conduct and complete required annual testing i.e., RATA and Source Testing
- Evaluate critical spares in stock and update lists based on industry best management practices
- Timely compliance report submittals

VIII. Compliance File Additions

Visual Condition of Certification (VIS-5) has been added to this Annual Report as the Blue Oaks / Phillip Road extensions have been completed, however landscaping south of Blue Oaks is not complete.

This project will continue to be evaluated over the next fiscal year. Simultaneously, or when we submit the landscaping plan to the City of Roseville Planning Department, we will also submit to the Compliance Project Manager (CPM) for review and approval. Commencement of the landscape installation will begin after the CPM approves the plan.

Soil & Water – 2 has been added as an amendment to the CY2022 and CY2023 Annual Reports and added to future year reports beginning with the CY2024 report which will be completed in 2025.

IX. Contingency Plan Evaluation

After reviewing the On-Site Contingency Plan, it has been determined that the measures outlined in the plan are sufficient for an unplanned facility closure. At this time, the state of the facility has not changed since the CEC's initial review of the plan.

X. Complaint, NOV, Official Warnings, and Citations List with Resolutions

Roseville Energy Park did not receive any complaints, official warnings or citations for calendar year 2024.

Roseville Energy Park received 2 NOVs for non-compliance events during calendar year 2024.

- **NOV 6048** *was issued due to a carbon monoxide (CO) emission exceedance during the startup of Combustion Turbine 2 (CT2), which was initiated in response to an urgent shutdown of CT1 following an ammonia valve failure on June 14, 2024.*
    - **Cause:** CO emissions during startup exceeded the permitted limit of 89.5 lbs./hr. as specified in Permit to Operate REPR-20-02, Condition #51. The exceedance was attributed to a delayed ramp-up to Pmin after generator synchronization and was reported as Non-Compliance Event 24-013.
    - **Correction:** During the next startup, Power Plant Operators ensured sufficient time for generator breaker synchronization and proper ramp-up to Pmin to prevent recurrence.

- **NOV 5951 and 5952** *were issued due to a volatile organic compounds (VOC) emissions exceedances during RATA testing on May 22, 2024 and May 30, 2024. Both NOVs were issued under a single action for the same issue affecting CT2 (REP) and CT6 (RPEAK), with no delineation as to which NOV applied to which unit. Therefore, both NOV numbers are listed above.*
    - **Cause:**
        - During annual source testing and RATA conducted on May 22, VOC emissions from CT2 were measured at 2.1 ppmvd @ 15% O_2, exceeding the permitted limit of 2.0 ppmvd (1-hour average) as outlined in Permit to Operate REPR-20-02, Condition #49.
        - Additionally, the NOx monitor on CT2 failed the RATA, with a relative accuracy of 23.2% ppm @ 15% O_2 and 20.4% for lb/hr. This did not meet the 40 CFR Part 60, Appendix B Performance Specification limit of 20% of the reference mean, as required by Permit REPR-20-02, Condition #15.
        - The NOx RATA failure was attributed to minor variations in calibration gas bottle concentrations, which led to analyzer drift. VOC test failures were attributed to contamination.
    - **Correction:**
        - Emergency Variance 24-03 was requested and granted by the PCAPCD Hearing Board on July 12, 2025, allowing continued operation during troubleshooting and repair.
        - The facility replaced calibration gases, performed manual calibrations, and addressed the analyzer drift.
        - Retesting was performed on July 23 and July 24, 2024, with results demonstrating compliance with both VOC permit limits and NOx monitor RATA requirements, as documented in test reports dated August 28, 2024.

XI. Appendix: Specific Conditions Operating Data

i) AQ-42 – Combustion Turbine #1

Tons 12 Month Rolling Summary
CT1

From: 01/01/2024 00:00 **To:** 12/31/2024 23:59 **Facility Name:** ROSEVILLE ENERGY
Generated: 06/19/2025 12:36 **Location:** Roseville, CA

* = Excess Emission

Date	Unit CT1 CO, Ton 1 Day(s) Sum	Rolling Sum	Unit CT1 NOx, Ton 1 Day(s) Sum	Rolling Sum	Unit CT1 PM10, Ton 1 Day(s) Sum	Rolling Sum	Unit CT1 SO2, Ton 1 Day(s) Sum	Rolling Sum	Unit CT1 VOC, Ton 1 Day(s) Sum	Rolling Sum
Jan 2024	0.3153	2.1486	0.8487	4.6040	0.1819	0.9832	0.0905	0.4901	0.3030	1.6371
Feb 2024	0.1200	1.8046	0.3754	4.4330	0.0815	0.9538	0.0396	0.4712	0.1358	1.5882
Mar 2024	0.0000	1.5619	0.0000	3.9090	0.0000	0.8426	0.0000	0.4130	0.0000	1.4035
Apr 2024	0.2268	1.7887	0.6590	4.5680	0.1460	0.9886	0.0679	0.4809	0.2426	1.6461
May 2024	0.2047	1.7573	0.5603	5.0974	0.1275	1.1138	0.0608	0.5406	0.2126	1.8549
Jun 2024	0.3434	2.0644	0.3320	5.3716	0.0708	1.1731	0.0346	0.5695	0.1179	1.9536
Jul 2024	0.2229	2.0389	0.8028	5.2642	0.1875	1.1620	0.0923	0.5636	0.3125	1.9353
Aug 2024	0.2211	2.0584	0.6871	5.1488	0.1681	1.1540	0.0799	0.5573	0.2792	1.9212
Sep 2024	0.1686	1.9773	0.6930	5.1201	0.1695	1.1636	0.0819	0.5627	0.2824	1.9372
Oct 2024	0.2185	2.0413	0.7415	5.6998	0.1779	1.3107	0.0851	0.6326	0.2964	2.1824
Nov 2024	0.3701	2.4114	0.5732	6.2730	0.1279	1.4386	0.0622	0.6948	0.2133	2.3957
Dec 2024	0.4250	2.8364	0.9013	7.1743	0.2093	1.6479	0.1011	0.7959	0.3485	2.7442
Sum/Avg	2.8364		7.1743		1.6479		0.7959		2.7442	
Limit Value										

CT1_Tons_12MonthRollingSummary 1

ii) AQ-42 – Combustion Turbine #2

Tons 12 Month Rolling Summary

CT2

From: 01/01/2024 00:00 **To:** 12/31/2024 23:59 **Facility Name:** ROSEVILLE ENERGY

Generated: 06/19/2025 12:37 **Location:** Roseville, CA

* = Excess Emission

Date	Unit CT2 CO, Ton 1 Day(s)		Unit CT2 NOx, Ton 1 Day(s)		Unit CT2 PM10, Ton 1 Day(s)		Unit CT2 SO2, Ton 1 Day(s)		Unit CT2 VOC, Ton 1 Day(s)	
	Sum	Rolling Sum	Sum	Rolling Sum	Sum	Rolling Sum	Sum	Rolling Sum	Sum	Rolling Sum
Jan 2024	0.3059	2.3823	0.7360	4.0340	0.1569	0.8334	0.0772	0.4105	0.2615	1.3900
Feb 2024	0.0494	1.9792	0.0281	3.5444	0.0044	0.7346	0.0023	0.3596	0.0073	1.2251
Mar 2024	0.0071	1.2791	0.0054	3.0635	0.0018	0.6528	0.0009	0.3189	0.0030	1.0890
Apr 2024	0.1880	1.4671	0.0383	3.1018	0.0042	0.6570	0.0020	0.3209	0.0070	1.0960
May 2024	0.1524	1.6195	0.3268	3.4286	0.0677	0.7247	0.0318	0.3527	0.1127	1.2087
Jun 2024	0.2889	1.9084	0.7329	4.1615	0.1559	0.8806	0.0725	0.4252	0.2599	1.4686
Jul 2024	0.2313	1.8712	0.8666	4.4717	0.1864	0.9479	0.0890	0.4544	0.3102	1.5803
Aug 2024	0.2995	1.9018	0.6915	4.3046	0.1785	0.9414	0.0817	0.4458	0.2978	1.5690
Sep 2024	0.2726	1.9597	0.8389	4.5958	0.1830	1.0074	0.0859	0.4758	0.3047	1.6784
Oct 2024	0.2326	2.0616	0.5982	4.8912	0.1289	1.0724	0.0610	0.5066	0.2147	1.7866
Nov 2024	0.1571	2.1848	0.2090	5.0717	0.0409	1.1086	0.0192	0.5235	0.0680	1.8468
Dec 2024	0.0000	2.1848	0.0000	5.0717	0.0000	1.1086	0.0000	0.5235	0.0000	1.8468
Sum/Avg	2.1848		5.0717		1.1086		0.5235		1.8468	
Limit Value										

iii) AQ-68 – Analytical Report

ChemTreat
10041 Lickinghole Road - Ashland, Virginia 23005 · t/ 804.935.2418 · www.chemtreat.com
Analytical Lab

Certificate of Analysis

Apr 22, 2024

Laboratory No.	W-240416-036
Company	CITY OF ROSEVILLE (C007748)
Address	5120 PHILLIP RD, 95747-9116,
Account Manager	Karl Wolff
Request Date	Apr 16, 2024
Sample Class	Water

Analysis	RECYCLED WATER	COOLING TOWER
	Apr 11, 2024	Apr 11, 2024
Lab pH	7.04	6.86
Conductivity	471 umho	2745 umho
P-Alkalinity, as CaCO3	<1 mg/L	<1 mg/L
M-Alkalinity, as CaCO3	62 mg/L	33 mg/L
Calcium Hardness, as CaCO3	35 mg/L	154 mg/L
Magnesium Hardness, as CaCO3	20 mg/L	74 mg/L
Iron, as Fe	0.04 mg/L	0.04 mg/L
Copper, as Cu	<0.01 mg/L	<0.01 mg/L
Zinc, as Zn	0.04 mg/L	0.04 mg/L
Sodium, as Na	79 mg/L	561 mg/L
Potassium, as K	15 mg/L	61 mg/L
Chloride, as Cl	70 mg/L	558 mg/L
Sulfate, as SO4	27 mg/L	425 mg/L
Nitrate, as NO3	43 mg/L	209 mg/L
Ortho-Phosphate, as PO4	11 mg/L	26 mg/L
Silica, as SiO2	16 mg/L	65 mg/L
Total Phosphate, as PO4	12 mg/L	30 mg/L
Filtered Phosphate, as PO4	-	30 mg/L
Fluoride, as F	0.80 mg/L	4.2 mg/L
Bromide, as Br	-	17 mg/L

Comments

Respectfully Submitted,

Joel Phillips
Director, Analytical Lab
ChemTreat International, Inc.

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ChemTreat

10041 Lickinghole Road - Ashland, Virginia 23005 · t/ 804.935.2418 · www.chemtreat.com

Analytical Lab

Certificate of Analysis

Apr 22, 2024

Laboratory No.	W-240416-036
Company	CITY OF ROSEVILLE (C007748)
Address	5120 PHILLIP RD, 95747-9116,
Account Manager	Karl Wolff
Request Date	Apr 16, 2024
Sample Class	Water

Analysis	RECYCLED WATER	COOLING TOWER
	Apr 11, 2024	Apr 11, 2024
Polymer, PAA	-	6.0 mg/L
Filtered Polymer	-	5.0 mg/L
Ammonia, as NH3	1.0 mg/L	0.16 mg/L
Aluminum, as Al	<0.01 mg/L	0.15 mg/L
Barium, as Ba	<0.01 mg/L	0.02 mg/L
Manganese, as Mn	<0.01 mg/L	0.35 mg/L
Molybdenum, as Mo	-	<0.05 mg/L
Strontium, as Sr	0.08 mg/L	0.36 mg/L
TOC	-	9.0 mg/L
Turbidity, as NTU	203 ntu	2.5 ntu

Comments

Respectfully Submitted,

JO Phillips

Joel Phillips
Director, Analytical Lab
ChemTreat International, Inc.

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iv) AQ-SC12 – Off road equipment handling or loading equipment

REP currently does not own or utilize any off-road material loading or handling equipment.

v) BIO-2 – Designated Biologist Duties

Kelly Fitzgerald-Holland, CWB®
Senior Wildlife Biologist and Regulatory Specialist

resume

Kelly Fitzgerald-Holland is a senior wildlife biologist and environmental compliance expert. She leads GEI's Biological Resources Team, overseeing field surveys and construction compliance monitoring. She is a Certified Wildlife Biologist®, who has over 27 years of experience in ecological research, program management, environmental regulation and compliance, and conservatin planning. She has served as senior wildlife biologist and task lead manager for a large number of projects that require endangered species permitting and biological analysis for California Environmental Quality Act (CEQA)/National Environmental Policy act (NEPA) compliance. Ms. Holland specializes in evaluating impacts on threatened and endangered wildlife species and their habitats and coordinating with agency staff to ensure compliance with the Federal and State Endangered Species Acts (ESA and CESA, respectively). Ms. Holland is a recognized expert in ESA consultations and impact analysis, and has lead a number of workshops and trainings on ESA and CESA.

PROJECT EXPERIENCE

On-Call Biological Services for City of Roseville, IEC Corporation, Roseville, CA. Project manager and senior wildlife biologist who provided on-call biological services to assist the City of Roseville with compliance at the City's Electric Energy Park facility. Served as the Designated Biologist approved by the California Energy Commission (CEC). Assisted with biological resource consultations to evaluate compliance with permits, and prepare annual statements, as defined in the CEC Conditions of Certification.

Reclamation District 17 Levee Seepage Area Repair Project, Reclamation District 17, San Joaquin County, CA. Project manager for this $1.5 million project that would construct needed repairs to the eastside of the San Joaquin River levee to enable the levee system to withstand 100-year flood conditions and receive Federal Emergency Management Agency certification. GEI provided comprehensive environmental services, including NEPA/CEQA documentation, environmental permitting, habitat mitigation design, and construction compliance monitoring. Served as the principal biologist and regulatory specialist who prepared a biological assessment that evaluated project plans, and coordinated with the regulatory agencies (U.S. Fish and Wildife Service (USFWS) and the National Marine Fisheries Service) during ESA Section 7 consultation. Led the development of the permitting and mitigation strategy, which included the mitigation and monitoring plan to offset project impacts on the riparian brush rabbit. Oversaw implementation of compliance monitoring and mitigation.

Tisdale Weir Rehabilitation and Fish Passage Project, U.S. Army Corps of Engineers and California Department of Water Resources (DWR), Sutter County, CA. Project manager for this $310,000 effort that provided various environmental services support for this project. Tisdale Weir is a critical, State-owned component of the State Plan of Flood Control. The project would construct needed structural repairs to Tisdale Weir and modify the weir to add new on-

EDUCATION
M.S., Environmental Science, Washington State University, Pullman
B.A., Environmental Studies, University of California, Santa Cruz

EXPERIENCE IN THE INDUSTRY
27 years

EXPERIENCE WITH GEI
8 years

CERTIFICATIONS
Certified Wildlife Biologist, The Wildlife Society (TWS) (since 2014)
Wilderness First Aid (exp. 12/3/2026)

PROFESSIONAL ASSOCIATIONS
TWS Certification Review Board (2022 - Present)
Conservation Affairs Committee Chair, Western Section of TWS (2016 – 2024)
Past-President, Western Section of TWS (Pres.-Elect, 2019; President, 2020)
Board Member, Western Section TWS (2016 - 2024)
The Wildlife Society (since 2008)

PRESENTATIONS & TRAININGS
CEQA: Biological Resources Analysis for Water Projects Workshop (Two-part Series). Association of Women in Water, Energy, and Environment. 2024.

Federal Policy Engagement with Local Impacts: Supporting Science-Based Decision-Making From a Section Perspective. TWS, 2023 Annual Conference, Louisville, KY. Nov. 2023.

Major Environmental Regulations 4-Hour Workshop. Western Section of TWS Annual Meeting, Reno, NV. Feb. 2022.

CEQA for Biologists 4-Hour Training.
*AEP, Sacramento, CA. July 2021.
*TWS, Arcata, CA. December 2019.
*TWS/AFS, Reno, NV. September 2019.
*AEP, Sacramento, CA. January 2018.

Wetlands and Endangered Species Act 8-Hour Training. Beale Air Force, Yuba County, California. May 2014.

Endangered Species Act Section 7 Consultation and Incidental Take Permit Applications – Overview. Sacramento, California. October 2014.

GEI Consultants

site fish passage facilities (notch/channel/baffles/fish collection basin) to allow passage from behind the weir to the river to decrease the incidence of stranding. GEI revised the biological assessment to include additional analysis on the project's impacts on designated critical habitat and federally listed fish species, prepared a fish rescue plan to support project permit conditions, and conducted an anslysis of compensatory mitigation strategies and approaches. In addition, GEI provided technical assistance on other project permit applications, including the Clean Water Act Sections 401 and 404 permits and the California Fish and Game Code Section 1600 permit, and on the vegetation management plan, a long-term management plan, and an adaptative management plan.

Right-of-Way Reinforcement Program, El Dorado Irrigation District (EID), El Dorado County, CA. Project manager for implementing biological surveys and constraints evaluation along 32 miles of pipeline corridor where vegetation management treatments would be implemented. Senior wildlife biologist who led the preparation of the biological resource analysis for the Initial Study/Mitigation Negative Declaration. This program would treat vegetation within the 60-foot-wide utility corridor along the EID's approximately 88-mile transmission line system to allow for EID staff to access and maintain the water conveyance system. Conducted the biological resources impact analysis, developed mitigation measures, and provided cost analysis for mitigation.

Sly Park Day Use Area Shoreline Stabilization Project, EID, El Dorado County, CA. Assistant project manager for preconstruction survey in aquatic habitat for special-status species, notably California red-legged frog. Supported client coordination and task management for deliverables, including a technical memo of survey activities and results and daily monitoring reports.

Marysville Ring 2B Project, Odin Construction, Marysville, CA. Project manager for providing biological services to avoid and minimize impacts to special-status species (e.g., giant garter snake [GGS], Swainson's hawk, and valley elderberry longhorn beetle) and habitats during levee construction. Biological services included: developing and delivering worker environmental awareness program (WEAP) trainings; surveying for and mapping elderberry shrubs; conducting biological construction monitoring; and enforcing permit compliance during construction. The project's purpose is to reduce overall flood risk to the city of Marysville by reinforcing a portion of the levee adjacent to the Yuba River.

American River Watershed Common Features (ARCF), Natomas Basin – Reach D /Highway 99 Window Project, Odin Construction, Sutter County, CA. Project manager for providing construction compliance monitoring for biological and cultural resources. Services included: developing and delivering WEAP trainings; conducting preconstruction nesting bird surveys; and conducting biological and cultural resources construction monitoring; and enforcing permit compliance during construction. The project consists of the construction of 744 feet of cut off wall to complete the window (gap) in the existing Natomas levee cut off wall located in Reach D. The window resides both through and on either side of California State Route 99.

Yolo Bypass East Levee (North Area) Project, Odin Construction, West Sacramento (Yolo County), CA. Project manager for providing construction compliance monitoring for biological and cultural resources. Services included: developing and delivering WEAP trainings; conducting preconstruction nesting bird surveys; and conducting biological and cultural resources construction monitoring; and enforcing permit compliance during construction. The work includes proposed improvements and repairs to the Yolo Bypass East Levee. A segment of the levee will be repaired to restore landside levee embankments, improve landside toe drainage, and mitigate seepage through construction of a subdrain system and pumping station.

Sutter Bypass Pumping Plant Rehabilitation Project, DWR, Sutter County, CA. Project manager for providing biological services to avoid and minimize impacts to the threatened GGS during the rehabilitation of three pumping plants along the Sutter Bypass. Biological services included conducting preconstruction surveys and biological monitoring during construction, and preparing and delivering WEAP training.

Sutter Collecting Canals Aquatic Vegetation and Sediment Removal Project, DWR, Sutter County, CA. Project manager for providing biological services to avoid and minimize impacts to the threatened GGS during removal of aquatic vegetation along the Sutter Bypass and removal of sediment along the Sutter Collecting Canals. Biological services included conducting preconstruction surveys and biological monitoring during aquatic vegetation and sediment removal, as well as implementing a scent-detection dog survey of the canals. The scent-detection dog survey was conducted by a subconsultant along sections of the Sutter Collecting Canals and around

three associated pumping stations at the request of DWR, as a supplement to the preconstruction surveys. The survey was conducted with a fully trained GGS scent-detection dog and survey methodology followed previously developed protocols for detection of GGS. The objective of the survey was to further explore the potential benefits of enhanced survey techniques (e.g., scent-detection dogs) along collecting canals to help identify potential GGS locations to further DWR's commitment to environmental sustainability. Developed a study design to test rodent abatement methodology, and specifically examining the effectiveness of various traps to manage rodent populations on levee systems.

Calaveras Cement CKD 3 Closure Project, Lehigh Hanson, County of Calaveras, CA. Project manager for this $40,000 effort of providing biological surveys and compliance monitoring for the project. The project involved the cleanup and closure of areas pertaining to the Lehigh Southwest Cement Company. Environmental services included developing and delivering a WEAP training program, and conducting biological construction monitoring for nesting birds and special-status species: California red-legged frog, foothill yellow-legged frog, and western pond turtle.

John Smith Road Landfill Expansion Project, Waste Connections, Hollister, CA. Project manager for this effort that provided environmental compliance strategies for this landfill expansion project, with over $250,000 in tasks that include special-status species surveys and habitat evaluations, a wetland delineation, preconstruction surveys, WEAP trainings, and development of an habitat conservation plan (HCP). The existing 65-acre landfill site, located in Hollister, California, would be expanded by nearly 390 acres. Developed a Species Impact Avoidance Strategy for the site. Prepared the biological resources CEQA section that evaluated impacts related to the landfill expansion. Oversaw the preparation of a visual simulation analysis, and the CEA sections for cultural resources and aesthetics. Prepared HCP (ESA Section 10) and CESA 2081(b) incidental take permit application.

Calaveras Cement CKD 3 Closure Project, Lehigh Hanson, County of Calaveras, CA. Project manager for this $40,000 effort of providing biological surveys and compliance monitoring for the project. The project involved the cleanup and closure of areas pertaining to the Lehigh Southwest Cement Company. Environmental services included developing a WEAP training, and conducting biological construction monitoring for nesting birds and special-status species: California red-legged frog, foothill yellow-legged frog, and western pond turtle.

Ranch 35 Quarry Project, Mitchell Chadwick, LLP, San Benito County, CA. Project manager for this $127,000 effort of providing biological surveys and habitat evaluation for the project site. GEI biologists conducted a comprehensive survey of the 126-acre project site to characterize habitats and identify the potential for special-status species occurrence in order to identify environmental constraints to site development. The environmental report provided recommendations to avoid and minimize impacts to biological resources identified on the site. In addition, GEI biologists conducted a wetland assessment and a rare plant survey of the site.

Hidden Canyon Quarry Project, Mitchell Chadwick, LLP, Monterey County, CA. Project manager for this $31,500 effort of providing biological surveys and habitat evaluation for the project site. GEI biologists conducted a comprehensive survey of three areas surrounding an 184-acre existing quarry. These three areas, totaling approximately 200 acres, are being considered for expansion of quarry operations. GEI biologists surveyed these areas to characterize habitats and identify the potential for special-status species occurrence in order to identify environmental constraints to site development. The environmental report provided recommendations to avoid and minimize impacts to biological resources identified on the site.

ARCF 2016, Folsom Dam Raise, and Marysville Ring Levee Projects, DWR, Sacramento and Marysville, CA. Senior wildlife biologist who coordinated environmental surveys – specifically focused on nesting birds, including Swainson's hawk – to support construction of the Lower American River (LAR) Contract 1, LAR Contract 2, and Sacramento Erosion River Contract 1/ River Mile 55.2 Left Bank Protection, among other components of the ARCF 2016 Project, Marysville Ring Levee Phase 3 project, and Folsom Dam Raise project. Oversaw updates to habitat mapping and rare plant surveys for project sites.

Morrison Creek/Beach Lake Levee Project, Sacramento Area Flood Control Agency, Sacramento County, CA. Senior wildlife biologist who oversaw biological surveys and habitat evaluation for the project site. GEI biologists conducted a comprehensive survey of the project site to characterize habitats and identify the potential for special-status species occurrence in order to identify environmental constraints to site development. The environmental report provided recommendations to avoid and minimize impacts to biological resources identified on the site. Led the development of a biological assessment to support ESA consultation with USFWS.

vi) BIO-4 – Worker Environmental Awareness Program

Worker Environmental Awareness Program (WEAP) Training is provided to employees of REP and contractors in the form of a video and by review of the program documentation. Training is acknowledged through a signature page. These records are retained at REP for at least 12 months following the termination of an individual's employment.

vii) COM-13 – Unplanned Temporary Closure/On-Site Contingency Plan

After reviewing the On-Site Contingency Plan, it has been determined that the measures outlined in the plan are sufficient for an unplanned facility closure. At this time, the state of the facility has not changed since the CEC's initial review of the plan.

viii) HAZ-1 – Hazardous Materials Contained On-Site

There were no changes to the Hazardous Materials and Wastes Inventory Matrix Report between 2023 and 2024.

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Aqueous Ammonia Storage Area**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	**Ammonium Hydroxide**	**Gallons**	**9000**	**10000**	5000			Ammonia	28%		
	CAS No 1336-21-6	State Liquid	Storage Container Aboveground Tank		Pressure	Waste Code 122		Water	72%		
		Type Mixture	Days on Site: 365		Temperature						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location
Closed Cooling Water System

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**AntiFreeze** CAS No 57-55-6	**Gallons** State Liquid Type Mixture	**800** Storage Container Other Days on Site: 365	**400**	300 Pressue Ambient Temperature Ambient	Waste Code					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Combustion Turbine Generator #3 & hydraulic starting system**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
	Mobile Jet Oil	**Gallons**	**81**	**81**	81		- Physical				
Combustible Liquid, Class II	CAS No	State: Liquid	Storage Container: Other		Pressue	Waste Code	Flammable				
		Type: **Pure**			Temperature						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location
Combustion Turbine Generator #4 & hydraulic starting system

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	Mobile Jet Oil	**Gallons**	**81**		81		- Physical				
Combustible Liquid, Class II	CAS No	State: Liquid	Storage Container: Other		Pressue	Waste Code	Flammable				
		Type: **Pure**			Temperature						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Cooling Tower**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	Dispersant - Cooling water treatment	**Gallons**	**300**	**275**	300			Phosphonobutane Tricarboxylic Acid	10%		37971-36-1
	CAS No	State: Liquid	Storage Container: Aboveground Tank		Pressue: Ambient	Waste Code		Acrylic copolymer	10%		MIXTURE
		Type: Pure	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Cooling Tower Chemical Enclosure**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS CAS No.
	Corrosion Inhibitor CAS No 64665-57-2	**Gallons** State Liquid Type Mixture	**800** Storage Container Aboveground Tank Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code				
	Corrosion Inhibitor CAS No 8780	**Gallons** State Liquid Type Mixture	**55** Storage Container Other Days on Site: 365	**55**	55 Pressue Ambient Temperature Ambient	Waste Code		Sodium Hydroxide Sodium Molybdate Sodium Totylnazole Sodium Metaborate Sodium Nitrite		1310-73-2 7631-95-0 64665-57-2 7775-19-1 7631-99-4
	Sodium Hypochlorite >5% - 12.5% CAS No 7681-52-9	**Gallons** State Liquid Type Mixture	**8000** Storage Container Aboveground Tank Days on Site: 365	**8000**	5000 Pressue Ambient Temperature Ambient	Waste Code		SODIUM HYPOCHLORITE WATER	12% 88%	7681-52-9 7732-18-5
DOT: 8 - Corrosives (Liquids and Solids) Oxidizing, Class 1	**Sulfuric Acid** CAS No 7664-93-9	**Gallons** State Liquid Type Mixture	**6000** Storage Container Aboveground Tank	**6000**	4000 Pressue Ambient Temperature Ambient	Waste Code		Sulfuric Acid Water	93% 7%	7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Electrical/Mechanical Building**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
	CCCW Molybdate Treatment Drewgard CAS No 315	**Gallons** State Liquid Type Pure	**55** Storage Container Plastic/Non-metalic Drum	**55**	55 Pressue Ambient Temperature Ambient	Waste Code	- Physical Corrosive To Metal - Physical Hazard Not Otherwise Classified - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Sodium hydroxide MOLYBDENUM COMPOUND		✓ ✓	1310-73-2 Trade Secret
	Corrosion Inhibitor CAS No	**Gallons** State Liquid Type Mixture	**400** Storage Container Aboveground Tank	**400**	280 Pressue Temperature	Waste Code		Cyclohexylamine Monoethanolamine Methoxypropylamine	5% 20% 20%		108-91-8 141-43-5 5332-73-0
	Nalco Elimin-Ox Oxygen Scavenger CAS No	**Gallons** State Liquid Type Mixture	**400** Storage Container Aboveground Tank Days on Site: 365	**400**	280 Pressue Ambient Temperature Ambient	Waste Code		Carbohydrazid			497-18-7
	Trisodium phosphate CAS No 7601-54-9	**Gallons** State Liquid Type Mixture	**400** Storage Container Aboveground Tank Days on Site: 365	**400**	300 Pressue Temperature	Waste Code		Trisodium Phosphate Sodium Hydroxide	 5%		7601-54-9 1310-73-2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **HRSG Area**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	Calibration Gases	**Cu. Feet**	**20000**	**250**	7500			Nitric Oxide	1%		10102-43-9
	CAS No	State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code		Carbon Monoxide	1%		630-08-0
		Type: Mixture			Temperature: Ambient			Oxygen	21%		7782-44-7
								Carbon Dioxide	20%		124-38-9
								Nitrogen			7727-37-9
DOT: 3 - Flammable and Combustible Liquids	**Diesel Fuel No. 2**	**Gallons**	**1500**	**1500**	1500						
	CAS No: 68476-34-6	State: Liquid	Storage Container: Aboveground Tank		Pressue: Ambient	Waste Code					
		Type: Pure	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Plant**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	Nitrogen Gas	**Cu. Feet**	**53**	**53**	35.31		- Physical Gas Under Pressure				
	CAS No	State: Gas	Storage Container: Other		Pressue	Waste Code					
		Type	Days on Site: 365		Temperature						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Power Plant**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	Fuel Gas Drains CAS No 68919-39-1	**Gallons** State Liquid Type Waste	**350** Storage Container Aboveground Tank Days on Site: 365	**250**	150 Pressue Temperature	95 Waste Code 213		Natural Gas Condensate Benzene	 2%		68919-39-1 71-43-2
	Waste Oil CAS No	**Gallons** State Liquid Type Waste	**110** Storage Container Steel Drum Days on Site: 365	**55**	30 Pressue Ambient Temperature Ambient	1000 Waste Code 221					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Recycled Water Tank Area**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**Diesel Fuel No. 2** CAS No 68476-34-6	**Gallons** State Liquid Type Pure	**290** Storage Container Aboveground Tank Days on Site: 365	**290**	290 Pressue Ambient Temperature	Waste Code					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **RPEAK - CTG3 and CTG4**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic	**Ammonium Hydroxide Solution** CAS No 1336-21-6	**Gallons** State Liquid Type Pure	**2640** Storage Container Aboveground Tank	**330**	600 Pressue Temperature	Waste Code 122	- Physical Flammable - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Aqueous Ammonia	70%		1336-21-6

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **RPEAK area**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	Calibration Gases	**Cu. Feet**	**2000**	**125**	700			Nitric Oxide			
	CAS No	State: Gas	Storage Container: Cylinder		Pressue	Waste Code		Carbon Monoxide			
		Type: Mixture			Temperature			Oxygen			
								Carbon Dioxide			
								Nitrogen			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location
Steam Turbine Circuit Breaker

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	SF6	**Cu. Feet**	**25.6**	**25.6**	25.6						
	CAS No	State: Gas	Storage Container: Other		Pressue: Ambient	Waste Code					
		Type: Pure			Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **Various**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	Equipment Lubricating Oil	**Gallons**	**15000**	**3170**							
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code					
		Type: Mixture			Temperature: Ambient						
	Hydraulic Oil	**Gallons**	**250**	**150**	150						
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code					
		Type: Mixture	Days on Site: 365		Temperature: Ambient						
DOT: 2.1 - Flammable Gases	**Liquefied Petroleum Gas (lpg)**	**Cu. Feet**	**1000**	**67.7**	250			Propane	97%		74-98-6
	CAS No 74-98-6	State: Gas	Storage Container: Other		Pressue: > Ambient	Waste Code		Propylene	97%		115-07-1
		Type: Mixture			Temperature: Ambient			Butanes	3%		106-97-8
								Sulphur	1%		7704-34-9
	Transformer Insulating Oil	**Gallons**	**29000**	**7000**							
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code					
		Type: Mixture	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **ZLD Area**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
	AntiFoam CAS No	**Gallons** State: Liquid Type: Mixture	**1600** Storage Container: Tote Bin Days on Site: 365	**200**	280 Pressue: Ambient Temperature: Ambient			Parrafin Wax Hydrotreated Light Distillate Strait Run Middle Distillate	1% 20% 60%		8002-74-2 64742-47-8 64741-44-2
	AntiFoam CAS No FC2386	**Gallons** State: Liquid Type: Mixture	**1600** Storage Container: Tote Bin	**400**	280 Pressue: Ambient Temperature: Ambient			Alkoxylated Alcohol Water	40% 60%		
	Anti-Scalant CAS No	**Gallons** State: Liquid Type: Mixture	**800** Storage Container: Tote Bin Days on Site: 365	**400**	280 Pressue: Ambient Temperature: Ambient						
	Coagulant CAS No	**Gallons** State: Liquid Type: Mixture	**800** Storage Container: Tote Bin Days on Site: 365	**400**	280 Pressue: Ambient Temperature: Ambient						
	Conntect 6000 Compressor Cleaner CAS No	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient						
	Soda Ash 100% CAS No 497-19-8	**Pounds** State: Solid Type: Pure	**3000** Storage Container: Bag Days on Site: 365	**3000**	2000 Pressue: Ambient Temperature: Ambient						
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**Sodium Bisulfite** CAS No 7631-90-5	**Gallons** State: Liquid Type: Mixture	**800** Storage Container: Tote Bin Days on Site: 365	**400**	280 Pressue: Ambient Temperature: Ambient			Sodium Bisulfite Water			7631-90-5
DOT: 8 - Corrosives (Liquids and Solids)	**Sodium Hydroxide Solid** CAS No 1310-73-2	**Gallons** State: Liquid Type: Mixture	**3000** Storage Container: Aboveground Tank Days on Site: 365	**3000**	2500 Pressue: Ambient Temperature: Ambient			Sodium Hydroxide Water Sodium Chloride	50% 50% 1%		1310-73-2 7647-14-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric**
Facility Name **Roseville Energy Park**
5120 Phillip Rd, Roseville 95747

Chemical Location **ZLD Area**

CERS ID **10207330**
Facility ID
Status **Submitted** on 9/14/2023 5:18 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	**Sulfuric Acid**	**Gallons**	**6000**	**6000**	4000			Sulfuric Acid	93%		7664-93-9
	CAS No 7664-93-9	State Liquid	Storage Container Aboveground Tank		Pressue	Waste Code		Water	7%		
Oxidizing, Class 1		Type Mixture	Days on Site: 365		Temperature						

ix) Soil & Water-2 – Drainage, Erosion, Sedimentation Control Plan (ESCP)

Once operational, the Project owner shall provide in the annual compliance report information on the results of monitoring and maintenance actives. A field copy of the plan shall be maintained on-site and available for CPM review. The BMP implementation schedule shall reflect actual on-site conditions and location of each erosion and sediment control BMP. The ECSP shall include the following elements.

The REP's ESCP was preceded by its Storm Water Pollution Prevention Plan (SWPPP) as required by its National Pollutant Discharge Elimination System (NPDES) Permit once operational. The attached SWPPP has been maintained and managed to effectively address the items listed below.

In 2017, subsequent to the approval of the 2005 ECSP, the REP submitted a Petition for Staff Approved Modification (Docket #03-AFC-01C) to replace five gravel areas with cement pads. The CEC approved the modification and issued a final notice of determination, determining that the work would not significantly impact the environment, thus waiving the petition to amend. The replacement work was completed between 2019 and 2020.

The REP has continued to maintain the areas as specified in the ECSP and the Best Management Practices (BMP's) outlined in the SWPPP, with no changes made in 2024.

***Vicinity Map** – A map shall be provided indicating the location of all Project elements with depiction of significant geographic features to include watercourses, creeks, wetlands, and sensitive habitat.*

***Site Delineation** – The REP site and all Project elements shall be delineated showing boundary lines of all construction areas and the location of existing and proposed structures, pipelines, roads, and drainage facilities.*

***Watercourses and Critical Areas** – The ESCP shall show the location of watercourses and critical areas such as creeks, rivers, wetlands and other environmentally sensitive areas. Indicate the proximity of those features to the REP construction site and all pipeline construction corridors.*

***Drainage** – The ESCP shall provide a topographic site map showing existing, interim and proposed drainage systems; drainage area boundaries and water shed sizes in acres; the hydraulic analysis to support the selection of BMPs to divert off-site drainage around or through the plant and laydown areas; and all pipeline trenching and boring sites. On the map, spot elevations are required where relatively flat conditions exist. The spot elevations and contours shall be extended off-site for a minimum distance of 100 feet in flat terrain.*

***Clearing and Grading** – The plan shall provide a delineation of areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slope, location, and extent of all proposed gradings as shown by contours, cross sections or other means. The locations of any disposal areas, fills, or other special features will also be*

shown. Illustrate existing and proposed topography tying in proposed contours with existing topography. The ESCP shall include a statement of the quantities of material excavated or filled for each element of the REP (site and pipeline corridors), whether such excavations or fill is temporary or permanent, and the amount of such material to be imported or exported.

***Best Management Practices** – The ESCP shall show the location, timing, and maintenance schedule of all erosion and sediment control BMPs to be used prior to initial grading, during Project element excavation and construction, and final grading/stabilization. BMPs shall include measures designed to control dust and stabilize construction access roads and entrances.*

***Erosion Control Drawings** -- The erosion control drawings and narrative must be designed and sealed by a professional engineer/erosion control specialist.*

x) SOIL & WATER-7 - Recycled and Potable Water Use Summary Report

	RECYCLE GALLONS	POTABLE GALLONS
JANUARY	15,056,242	50,591
FEBRUARY	5,341,952	48,908
MARCH	349,362	43,305
APRIL	8,710,706	77,169
MAY	12,143,821	43,581
JUNE	13,289,969	60,390
JULY	27,442,678	123,922
AUGUST	104,810,325	543,511
SEPTEMBER	22,841,497	82,645
OCTOBER	21,342,764	84,874
NOVEMBER	8,356,377	43,634
DECEMBER	11,720,388	21,716

	RECYCLE GALLONS	POTABLE GALLONS
MINIMUM	349,362	21,716
MAXIMUM	104,810,325	543,511
AVERAGE	20,950,507	102,020

ANNUAL TOTALS

	RECYCLE	POTABLE
GALLONS	251,406,080	1,224,244
ACRE-FEET	771.54	3.76

Divide gallon by / 325,851

YEAR	RECYCLE GALLONS	POTABLE GALLONS	AVERAGE RECYCLE	AVERAGE POTABLE	RANGE RECYCLE	RANGE POTABLE
2007	19,393,396	1,121,252	9,696,698	560,626	2,349,468	467,500
2008	173,325,812	19,278,952	1,606,579	1,606,579	25,880,052	13,541,044
2009	195,834,628	231,880	16,319,552	19,323	21,445,908	107,712
2010	133,425,248	97,988	11,118,771	8,166	25,010,128	32,912
2011	44,785,004	323,136	3,732,084	26,928	15,782,052	68,068
2012	165,731,368	665,720	13,810,947	55,477	24,362,360	199,716
2013	165,444,136	586,432	13,787,011	48,869	25,059,496	198,220
2014	135,300,484	480,216	11,275,040	40,018	25,474,636	106,964
2015	176,179,432	471,988	14,681,619	39,332	21,033,012	109,208
2016	115,772,448	41,5888	9,647,704	34,657	24,060,168	120,428
2017	18,581,816	434,588	1,548,484	36,215	5,578,584	107,712
2018	76,291,512	299,948	11,737,155	46,145	14,555,332	80,036
2019	82,147,859	322,410	6,845,655	26,868	15,877,361	88,269
2020	101,108,683	27,300	8,425,723	2,275	24,238,316	5,500
2021	154,064,638	335,874	12,838,720	27,990	20,595,500	44,900
2022	175,013,030	501,942	14,584,419	41,828.50	23,685,507	111,459
2023	103,141,739	374,779	8,595,144	31,231	24,286,191	67,571
2024	251,406,080	1,224,244	20,950,507	102,020	104,460,963	521,795

xi) SOIL & WATER-8 – Status Report on Operation of ZLD system

- **2024**
  - No disruptions

- **Maintenance**

  All routine preventative maintenance tasks were completed in 2024.

  Additional maintenance tasks were included but were not limited to:

  - Performed belt press repairs and maintenance as needed
  - Performed vendor recommended routine maintenance for all pumps and motors
  - Performed annual vapor compressor maintenance
  - Replace steam traps as needed
  - Re-gasket and cleaned heat exchangers for both crystallizer skids
  - Replaced various HERO and UF filters as needed
  - Performed quarterly silica and hardness analyzer maintenance
  - Performed routine inspection and cleaning of waste tanks
  - Replaced Vapor Compressor A to increase efficiency
  - Replaced Vapor Compressor B to increase efficiency
  - Refurbished failed Decarbonator Pump A
  - Refurbished failed Decarbonator Pump B
  - Refurbished failed BFU Blower 002
  - Repaired failed Belt Press Platen

- **Volumes of interim waste streams stored onsite.**

  - The maximum waste stream volumes stored at any one time are limited to the following onsite storage capacities:

    - NaZ regeneration waste – 40,000 gallons
    - WAC neutralized regeneration waste – 20,000 gallons
    - HERO reject – 40,000 gallons

- **Volumes of residual solids generated and transported to landfills.**

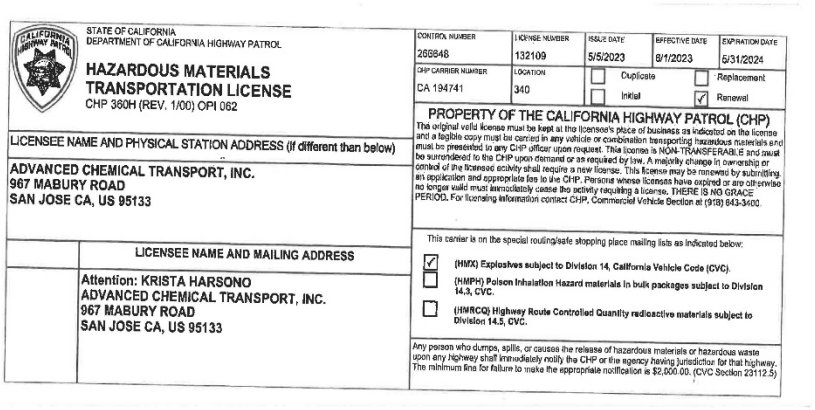
  - REP ZLD generated approximately 328 tons of solid waste in 2024.
  - All solid wastes were shipped for disposal to Western Placer Waste Management Authority.

xii) TRANS-4 – Transport of Hazardous Material

All hazardous materials from REP are transported by Fremouw Environmental Services, which was acquired by Advanced Chemical Transport (ACT), Inc. in 2023–2024. Below is a copy of ACT's current hazardous materials transport license.

Please note that the gap in effective license dates for ACT was due to the company's transition from a corporation (Inc.) to a limited liability company (LLC), which required submission of a new license application under California Highway Patrol (CHP) oversight.

Additionally, CHP conducted terminal inspections at all ACT facilities in California prior to license approval. These inspections began on June 28, 2024, and were completed by October 31, 2024 contributing to the delay in license reissuance.



STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

HAZARDOUS MATERIALS TRANSPORTATION LICENSE
CHP 360H (REV. 1/00) OPI 062

CONTROL NUMBER	LICENSE NUMBER	ISSUE DATE	EFFECTIVE DATE	EXPIRATION DATE
269848	132109	5/5/2023	8/1/2023	6/31/2024

CHP CARRIER NUMBER	LOCATION		
CA 194741	340	☐ Duplicate / ☐ Replacement	☐ Initial / ☑ Renewal

LICENSEE NAME AND PHYSICAL STATION ADDRESS (If different than below)

ADVANCED CHEMICAL TRANSPORT, INC.
967 MABURY ROAD
SAN JOSE CA, US 95133

LICENSEE NAME AND MAILING ADDRESS

Attention: KRISTA HARSONO
ADVANCED CHEMICAL TRANSPORT, INC.
967 MABURY ROAD
SAN JOSE CA, US 95133

PROPERTY OF THE CALIFORNIA HIGHWAY PATROL (CHP)

The original valid license must be kept at the licensee's place of business as indicated on the license and a legible copy must be carried in any vehicle or combination transporting hazardous materials and must be presented to any CHP officer upon request. This license is NON-TRANSFERABLE and must be surrendered to the CHP upon demand or as required by law. A majority change in ownership or control of the licensed activity shall require a new license. This license may be renewed by submitting an application and appropriate fee to the CHP. Persons whose licenses have expired or are otherwise no longer valid must immediately cease the activity requiring a license. THERE IS NO GRACE PERIOD. For licensing information contact CHP, Commercial Vehicle Section at (916) 843-3400.

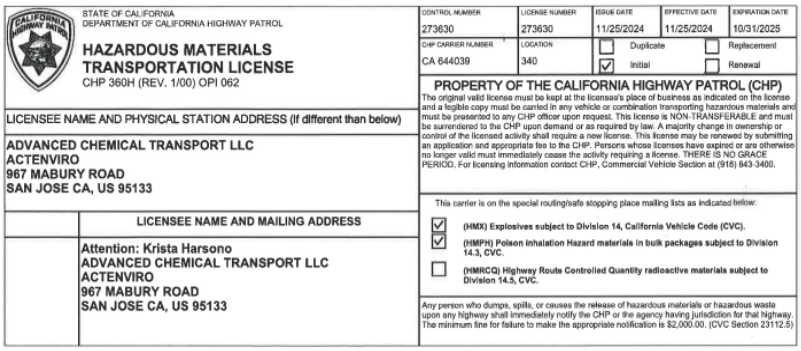
This carrier is on the special routing/safe stopping place mailing lists as indicated below:

☑ (HMX) Explosives subject to Division 14, California Vehicle Code (CVC).

☐ (HMPH) Poison Inhalation Hazard materials in bulk packages subject to Division 14.3, CVC.

☐ (HMRCQ) Highway Route Controlled Quantity radioactive materials subject to Division 14.3, CVC.

Any person who dumps, spills, or causes the release of hazardous materials or hazardous waste upon any highway shall immediately notify the CHP or the agency having jurisdiction for that highway. The minimum fine for failure to make the appropriate notification is $2,000.00. (CVC Section 23112.5)



STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

HAZARDOUS MATERIALS TRANSPORTATION LICENSE
CHP 360H (REV. 1/00) OPI 062

CONTROL NUMBER	LICENSE NUMBER	ISSUE DATE	EFFECTIVE DATE	EXPIRATION DATE
273630	273630	11/25/2024	11/25/2024	10/31/2025

CHP CARRIER NUMBER	LOCATION		
CA 644039	340	☐ Duplicate	☐ Replacement
		☑ Initial	☐ Renewal

LICENSEE NAME AND PHYSICAL STATION ADDRESS (If different than below)

ADVANCED CHEMICAL TRANSPORT LLC
ACTENVIRO
967 MABURY ROAD
SAN JOSE CA, US 95133

LICENSEE NAME AND MAILING ADDRESS

Attention: Krista Harsono
ADVANCED CHEMICAL TRANSPORT LLC
ACTENVIRO
967 MABURY ROAD
SAN JOSE CA, US 95133

PROPERTY OF THE CALIFORNIA HIGHWAY PATROL (CHP)

The original valid license must be kept at the licensee's place of business as indicated on the license and a legible copy must be carried in any vehicle or combination transporting hazardous materials and must be presented to any CHP officer upon request. This license is NON-TRANSFERABLE and must be surrendered to the CHP upon demand or as required by law. A majority change in ownership or control of the licensed activity shall require a new license. This license may be renewed by submitting an application and appropriate fee to the CHP. Persons whose licenses have expired or are otherwise no longer valid must immediately cease the activity requiring a license. THERE IS NO GRACE PERIOD. For licensing information contact CHP, Commercial Vehicle Section at (916) 843-3400.

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xiii) VIS-2 – Cooling Tower

REP constructed the Cooling Tower according to the CEC approved design. As a result of a prior CEC request, sound dampening walls were installed around fan motors. No further modifications have been made and the Cooling Tower operated throughout 2024 within the approved design parameters.

xiv) VIS-4 – Surface Treatment of Project Structures and Buildings

REP constructed the facility according to the plan that was approved by the CEC and the City of Roseville Planning Department.

xv) VIS-5 – Landscape Screening

The Blue Oaks / Phillip Road extensions have been completed, however construction and landscaping south of Blue Oaks is not complete therefore this project will be evaluated over the next year.

xvi) WASTE-5 – 2024 Waste Management Activities

WASTE STREAMS	ACTUAL	PLANNED	COMMENTS
Rags, discarded metal & machine parts, electrical material from routine maintenance, empty containers, other solid waste including typical industrial refuse, office wastes	N/A	N/A	All metals, machine parts and large electrical wastes are recycled. Minor waste streams, ordinary refuse, are not tracked.
Oily rags, oil absorbent	13	N/A	Drums
Sanitary waste	N/A	N/A	Not tracked
Nitrate blowdown of ZLD	709690	N/A	Varies based on facility capacity
Plant equipment drains	N/A	N/A	All drains go to Cooling Tower
Turbine/HRSG wash water	330	330	Washed turbines once, filled 1–330-gal tote.
Cooling Tower sludge	0	0	
Used oil	455	N/A	Varies based on oil analysis and filtration limitations
Used oil filters	8	N/A	Drums
Laboratory analysis waste	0	0	
SCR & CO catalyst units	0	0	
Chemical cleaning waste	0	0	Drums
Condensate from natural gas pipeline	0	0	
Batteries, alkaline, lead acid, nickel cadmium, mercury	0.22	N/A	5-gallon sized tubes collected