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Roseville Energy Park

Annual Compliance Report
2019

May 5, 2020

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

Table of Contents

Compliance Matrix

A. Annual Compliance Reporting

Technical Area	Condition Number	Verification Action	Date Required
Air Quality	AQ-42	NOx and VOC Emissions	June 1st
Air Quality	AQ-68	Cooling Tower Lab Analysis	June 1st
Air Quality	AQ-SC12	Off-Road Equipment	June 1st
Biological Resources	BIO-2	Designated Biologist	June 1st
Biological Resources	BIO-4	WEAP Training	June 1st
General Compliance Condition	COM-5	Compliance Matrix	June 1st
General Compliance Condition	COM-7	Annual Compliance Report Submittal	June 1st
General Compliance Condition	COM-13	On-Site Contingency Plan Review	June 1st
Hazardous Materials Management	HAZ-1	Hazardous Materials at the Facility	June 1st
Soil and Water Resources	Soil & Water-7	Water Use Summary	June 1st
Soil and Water Resources	Soil & Water-8	Status Report on ZLD	June 1st
Traffic and Transportation	TRANS-4	Permitting for Hazardous Material Transporation	June 1st
Visual Resources	VIS-2	Cooling Tower Operation	June 1st
Visual Resources	VIS-4	Surface Treatment Maintenance	June 1st
Waste Management	WASTE-5	Waste Management Plan	June 1st

Compliance Matrix

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
Air Quality	AQ-35	All Permit Records Maintained for at least 5 Years	As requested
Air Quality	AQ-44	Annual Performance Test Protocol	30 days prior
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 - Protocol 30 days prior
Air Quality	AQ-45	Cold start NOx and CO Emissions Performance Test Results	Every 7 Years after commissioning - Results within 60 days of test
Air Quality	AQ-46	Annual Performance Test Methods Protocol	30 days prior
Air Quality	AQ-46	Annual Performance Test Methods Results	Within 60 days of test
Air Quality	AQ-49	Annual Particulate Matter Performance Test Protocol	30 days prior
Air Quality	AQ-49	Annual Particulate Matter Performance Test Results	Within 60 days of test
Air Quality	AQ-50	Annual SOx Performance Test Protocol	30 days prior
Air Quality	AQ-50	Annual SOx Performance Test Results	Within 60 days of test
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
Air Quality	AQ-53	NOx Excursions	Within 5 working days of occurrence
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 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-20	Sulfur content of natural gas	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-21	Start-ups and Shut-downs	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-32	Hourly, daily, and quarterly NOx and CO emissions	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-33	Hourly, daily, and quarterly SOx emissions	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-34	Invalid Data and CEMS Downtime	and December 31st
Air Quality	AQ-36	Upset Breakdown Reports	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-37	Notices of Non-compliance	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-38	Upset Breakdown Corrections	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-39	CEMS Audits	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-40	CEMS QA Failures	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-41	Excess Emissions Reports	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-47	Emissions Nuisances	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-48	Opacity Violations	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-51	Hourly and 24 hour NH3 Slip Concentrations	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-55	NOx and CO Emissions during Start-ups and Shut-downs	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-57	LB/HrEmissions except during Start ups and Shut-downs	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-59	Daily Emissions Limits	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-60	Quarterly Emissions Limits	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-63	Annual Emissions Limits	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-69	Nuisance Complaints	April 30th, June 30th, September 30th, and December 31st
Air Quality	AQ-70	Cooling Tower Emissions	April 30th, June 30th, September 30th, and December 31st

Project Operating Status

The Roseville Energy Park operated throughout the 2019 calendar year per the design basis with no significant changes to facility operations.

Required Conditions

The required conditions documentation is included in the Annual Compliance Report Appendix.

Post-Certificate Changes

The Roseville Energy Park filed a petition with the California Energy Commission requesting 4 modifications to the Roseville Energy Park (REP) back in 2017. The petition requested approval for three modifications. The energy commission staff determined that this petition did not require formal approval for two of the three modifications requested because they did not have any significant effect on the environment, would not alter any conditions of certification and would remain in full compliance with LORS. The two modifications that did not require CEC formal approval were for a staircase to replace the ladder and cage on the belt press structure and the addition of five cement pads at various locations within the facility. Those two projects were started and successfully completed in 2019.

The third modification required formal approval and was to extend the existing catwalk to Combustion Turbine #1. This modification required an Energy Commission Work Authorization and Delegate Chief Building Official. Work Authorization No. 02 was initiated by the Energy Commission on November 22, 2017. On January 10, 2018 work authorization No. 02 was assigned to West Coast Code Consultants (WC3), Inc. to provide Delegate Chief Building Official Services for the construction of an extension of the existing catwalk to Combustion Turbine #1 at the Roseville Energy Park. This project was declared complete during the final inspection by the Delegate Chief Building Official, WC3, on May 23, 2019.

Submittal Deadline Resolutions

Pursuant to COM-7 the Roseville Energy Park will submit its annual report no later than June 1st.

New Filings

The Roseville Energy Park had no post certification filings in 2019.

Projected Compliance Activities

Roseville Energy Park has planned and budgeted for the required compliance activities including:

- Maintaining compliant operations of the facility through the purchase and use of required consumables, and
- Planning of prudent preventative maintenance tasks, and
- Compliance training of site personnel, and
- Performing required testing i.e. RATA and Source Testing, and
- Evaluating critical spares in stock and updating lists based on industry best management practices
- Planning and budgeting for timely compliance report submittals

Compliance File Additions

There were no activities requiring additions to the compliance file in 2019.

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. The state of the facility at this time has not changed since the CEC's initial review of the plan.

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

Roseville Energy Park conducts routine maintenance activities throughout each year. In 2019 a third party vendor was hired to sand blast and paint the interiors of its three blow down filters for the cooling tower. This work was successfully performed and completed between October 22, 2019 and October 23, 2019. Two compressors each over 50 horsepower were brought on site. Our local Placer County Air Pollution Control District Compliance Manager requested support documentation as the equipment did not have the appropriate sticker affixed. The vendor supplied the PERP registration documentation sent to the California Air Resource Board on October 15, 2019. No further communication has been received from the Placer County Air Pollution Control District.

Tons 12 Month Rolling Summary

CT1 and CT2 Combined

CITY OF ROSEVILLE CALIFORNIA

From: 01/01/2019 00:00 **To:** 12/31/2019 23:59 **Facility Name:** ROSEVILLE ENERGY
Generated: 04/23/2020 05:53 **Location:** Roseville, CA

* = Excess Emission

Date	Units CT1 & CT2 CO, Ton 1 Day(s) Sum	Rolling Sum	Units CT1 & CT2 NOx, Ton 1 Day(s) Sum	Rolling Sum	Units CT1 & CT2 PM10, Ton 1 Day(s) Sum	Rolling Sum	Units CT1 & CT2 SO2, Ton 1 Day(s) Sum	Rolling Sum	Units CT1 & CT2 VOC, Ton 1 Day(s) Sum	Rolling Sum
Jan 2019	0.5215	3.4462	1.4533	8.2089	0.2737	1.5235	0.1367	0.7615	0.4562	2.5392
Feb 2019	0.5333	3.9795	1.8478	10.0050	0.3507	1.8718	0.1752	0.9356	0.5845	3.1198
Mar 2019	0.2289	4.2084	0.5615	10.5665	0.1028	1.9746	0.0514	0.9870	0.1711	3.2909
Apr 2019	0.0000	4.2084	0.0000	10.5665	0.0000	1.9746	0.0000	0.9870	0.0000	3.2909
May 2019	0.1005	3.9382	0.1739	10.5337	0.0300	1.9759	0.0151	0.9877	0.0501	3.2932
Jun 2019	0.0783	3.9322	0.1074	10.5484	0.0204	1.9838	0.0102	0.9917	0.0340	3.3065
Jul 2019	0.1329	3.6349	0.4979	9.8697	0.0934	1.8340	0.0467	0.9169	0.1557	3.0568
Aug 2019	0.3103	3.5361	0.9684	9.0854	0.1815	1.6948	0.0909	0.8475	0.3027	2.8246
Sep 2019	0.3351	3.8712	0.5520	9.6374	0.0943	1.7891	0.0471	0.8946	0.1574	2.9820
Oct 2019	0.3310	3.6667	0.3916	8.6208	0.0696	1.5963	0.0349	0.7982	0.1162	2.6610
Nov 2019	0.5504	3.5681	1.0151	8.9063	0.1824	1.6530	0.0911	0.8264	0.3043	2.7560
Dec 2019	0.0841	3.2063	0.2389	7.8078	0.0455	1.4443	0.0227	0.7220	0.0758	2.4080
Sum/Avg	3.2063		7.8078		1.4443		0.7220		2.4080	
Limit Value										

b. AQ-68

SOLENIS
Strong bonds. Trusted solutions.

Global Technology
Customer Analytical Services Laboratory

P731015
Roseville Electric
xxxx
Rosevile CA
US 00000

Project: W-20190114-016
Date Authorized: 23-Jan-2019
Submitter: Jamie Doran
Submitter ID: A408412
RD Program/LWR: 351182 WRC19-0119

SAMPLE INFORMATION

System ID:		COOLING	
Sample Number:		678830	678831
Sample Date:		11-Jan-2019	11-Jan-2019
Sample Name:		Raw Make Up	Cooling Tower
Sample Point:		Cooling Make Up	Cooling Tower
Analyte	**Units**		
Alkalinity, Hydroxide (as CaCO3)	mg/L	< 0.1	< 0.1
Alkalinity, P as CaCO3.	mg/L	< 0.1	< 0.1
Alkalinity, Total (as CaCO3)	mg/L	87.1	27.7
Aluminum, Total (as Al)	mg/L	< 0.05	0.3
Calcium, Total (as CaCO3)	mg/L	55.7	256.2
Chloride (as Cl)	mg/L	64.6	464.0
Conductivity.	µS/cm	518.0	3120.0
Copper, Total (as Cu)	mg/L	< 0.05	< 0.05
Hardness - Calcium, Soluble (as CaCO3)	mg/L	46.5	228.1
Hardness - Magnesium, Soluble (as CaCO3)	mg/L	19.8	81.8
Hardness - Total , Soluble (as CaCO3)	mg/L	66.3	309.9
Hardness, Total (Acidified as CaCO3)	mg/L	77.7	345.0
Iron, Total (as Fe)	mg/L	< 0.05	0.05
Magnesium, Total (as CaCO3)	mg/L	22.0	88.8
Manganese, Total (as Mn)	mg/L	< 0.01	< 0.01
Metals Poured		No	No
Organic Phosphorus, Soluble (as PO4)	mg/L	0.1	0.3
Orthophosphate, Soluble (as PO4)	mg/L	12.2	48.3
pH		7.3	6.6
Polyphosphate, Soluble (as PO4)	mg/L	< 0.1	1.7
Silicon, Soluble (as SiO2)	mg/L	15.9	79.4
Sodium, Soluble (as Na)	mg/L	73.3	621.4
Sulfate (as SO4)	mg/L	26.0	630.0
Total Inorganic Phosphorus, Sol (as PO4)	mg/L	12.2	50.0
Total Phosphorus, Soluble (as PO4)	mg/L	12.3	50.3
Zinc, Total (as Zn)	mg/L	< 0.1	< 0.1

Date Printed: 24-Jan-2019

P731015
Roseville Electric
xxxx
Rosevile CA
US 00000

Project: W-20190114-016
Date Authorized: 23-Jan-2019
Submitter: Jamie Doran
Submitter ID: A408412
RD Program/LWR: 351182 WRC19-0119

SAMPLE INFORMATION

Click link to visit the **CAL-NA-IWT-Laboratories SalesForce Chatter**

Analytical Interpretation Guide
http://nadewillims01/awt_cal/analytinterp/analytinterp.htm

Final Reports are archived in the **F.A.S.T. System**
http://nadewillims01/fast/fasthome.asp

Data in Excel format can be queried from the **Solenis Data Search Engine**:
http://nadewillims01/ahwt-query/query.php

Date Printed: 24-Jan-2019

c. AQ-SC12

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

d. BIO-2

Kelly Fitzgerald-Holland
Senior Wildlife Biologist & Regulatory Specialist

Kelly Fitzgerald-Holland is a Certified Wildlife Biologist, senior wildlife biologist, and environmental compliance expert. She has nearly 20 years of experience in ecological research, program management, environmental regulation and compliance, and terrestrial ecosystem monitoring in the western U.S. She has served as senior wildlife biologist or task lead manager for a large number of projects that require endangered species permitting and biological analysis for CEQA/NEPA compliance. Ms. Holland specializes in evaluating impacts on threatened and endangered wildlife species and their habitats and coordinating with resource agency staff to ensure compliance with the Federal and State Endangered Species Acts, including completing Section 7 consultation. Prior to her position at GEI, she spent 4 years conducting ESA consultations as a USFWS biologist, reviewing projects to assess impacts on listed species, providing technical assistance to minimize impacts on listed species, , and preparing biological opinions for projects that impacted federally listed species and designated critical habitat.. While at USFWS, Ms. Holland garnered extensive knowledge of the federally threatened giant garter snake, assisting with conservation and recovery planning for this species through research consolidation, technical oversight, and coordination with species experts. . In addition to having worked for USFWS, as well as the National Park Service and U.S. Forest Service, Ms. Holland has worked extensively with state and federal agencies to assist clients with compliance with CESA/ESA, Migratory Bird Treaty Act, and CEQA/NEPA.

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

EXPERIENCE IN THE INDUSTRY
20 years

REGISTRATIONS AND LICENSES
Certified Wildlife Biologist, the Wildlife Society (2014)

PROFESSIONAL ASSOCIATIONS
The Wildlife Society
Conservation Affairs Committee Chair, Western Section of The Wildlife Society

PRESENTATIONS
- *Wetlands and Endangered Species Act Training.* Beale Air Force, Yuba County, California. May 2014.
- *Endangered Species Act Section 7 Consultation and Incidental Take Permit Applications – Overview.* AECOM Employee Brown Bag Series, Sacramento, California. October 2014.
- *Restoring Habitats and Connective Corridors to Support Species Recovery in the Natomas Basin, Sacramento, CA.* The Western Section of the Wildlife Society, 2012 Annual Conference, Sacramento, CA, 2012.
- *Organizational Structure and Permitting Processes of the US Fish and Wildlife Service,* Association of Environmental Professionals luncheon, Sacramento, CA, February 2009.
- *The Effects of Land Management Practices on Reptile Populations: How Grazing Regimes Impact Reptile Density, Diversity, Foraging Opportunities, and Thermoregulation Behaviors.* Physiological Ecology Meeting, White Mountain Research Station, Bishop, CA, 1997.

PROJECT EXPERIENCE

Flood Management Projects

Natomas Levee Improvement Program, Sacramento Area Flood Control Agency, Sacramento and Sutter Counties, CA. Senior wildlife biologist who prepared the biological assessments and 2081(b) permit applications for the program's Landside Improvements Project, coordinated closely with client and agency staff throughout the consultation process, assisted with the environmental analyses in NEPA and CEQA documents, assisted with the development of a comprehensive habitat mitigation and monitoring plan for the project, and oversaw the development and implementation of the project's mitigation and monitoring plan and the long-term management plan. She continues to lead environmental compliance for this program.

Reclamation District 17, Reclamation District 17 Levee Repair Project, San Joaquin County, CA. Regulatory specialist for ESA compliance and senior wildlife biologist who prepared biological assessment that evaluated Reclamation District 17 (RD 17) plans for needed repairs to the eastside of the San Joaquin River levee. The repairs are designed to enable the levee system to withstand 100-year flood conditions and receive Federal Emergency Management Agency certification. Ms. Holland prepared the biological assessment to support ESA compliance and the development of the permitting and mitigation strategy.

GEI Consultants

North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project, Sacramento Area Flood Control Agency, Sacramento and Sutter Counties, CA. . Senior wildlife biologist and environmental compliance expert who prepared the CEQA / NEPA environmental analyses for terrestrial biological and lead the ESA compliance effort, which required preparing a Biological Assessment and supplementary material and coordinating with USFWS, NMFS, and USACE. This project, also known as SAFCA's Levee Accreditation Project, includes improvements to ensure that levees protecting Sacramento are adequate to meet State requirements. Levee improvements are needed along the most the rivers and streams in the Sacramento region; other issues, including high-hazard/unacceptable encroachments and vegetation affecting all levee segments to varying degrees, must be addressed to allow accreditation of these levee segments.

California Department of Water Resources, Central Valley Flood Management Planning Program, Summary and Analysis of Rodent Damage and Giant Garter Snake in the Sacramento River Flood Control Project, Multiple Counties, California. Senior wildlife biologist who prepared a technical memorandum (490 pages) that summarizes the background, discussions, and findings of the Rodent Damage Repair Subcommittee (RDRS) from July 2012 through May 2014. The RDRS is a group formed by the Interagency Flood Management Collaborative Program (IFMCP) that consists of a number of stakeholders involved with resolving conflict concerning the potential impacts on federally and state-listed species, specifically the giant garter snake, associated with conducting repairs necessary to maintain the integrity of the Sacramento River Flood Control Project in northern California. The purpose of this technical memorandum is to provide information that can be used to evaluate future flood maintenance activities in a forthcoming CEQA. This document organizes and synthesizes available research and data on flood control management and potential impacts to natural resources, specifically evaluates the impacts to species that result from controlling and repairing rodent damage to levees, and defines best management practices and conservation measures for rodent control and damage repair in levees while protecting and avoiding impacts to giant garter snake.

Sacramento River Flood Control System Evaluation, Phase III, Mid-Valley Project, Yolo County, California. Senior wildlife biologist who oversees coordination with wildlife agencies on environmental compliance for the Knights Landing Drainage District's Ridge Cut Slough portion of the project. The proposed project seeks to improve integrity of the Knights Landing Drainage District's east levee by reducing the potential for erosion and levee failure due to levee instability and seepage under or through the levee. Levee improvements would include reconstruction of a portion of the levee and construction of a landside spoil berm.

Central Valley Flood Protection Plan Conservation Strategy, California Department of Water Resources (DWR), FESSRO, Central Valley, CA. Senior wildlife biologist who supported DWR in the development of a conservation framework, conservation strategy, regional permitting effort, and supporting documents for the CVFPP. Developed a conservation framework and strategy that would take a comprehensive approach to ecological and environmental planning throughout the Central Valley and integrate it with flood management planning efforts.

Central Valley Flood Protection Plan PEIR, California Department of Water Resources (DWR), Northern and Central CA. Senior wildlife biologist who provided support and technical analysis for environmental planning and technical support services to prepare the CVFPP PEIR. The Plan and EIR provided the basis for State implementation of Central Valley flood protection, including the Delta, and incorporates CEQA compliance in overall flood protection planning enabling site-specific flood management actions to proceed incrementally. Assisted with the impact evaluation for terrestrial biological resources.

Rio Vista Rock Stockpile Project IS/MND and Permitting, California Department of Water Resources (DWR), Solano County, CA. Regulatory biologist who provided permitting support to the DWR, Division of Flood Management and Division of Engineering for the Rio Vista Rock Stockpile Project, which was established to enhance response to large-scale flood events in the Sacramento–San Joaquin Delta. Providing biological surveys, a wetland delineation, and mitigation plan preparation in support of an after-the-fact permit under Section 404 of the Clean Water Act for accidental fill of wetlands during rock stockpiling activities.

GEI Consultants

Feather River Levee Repair Project EIR/EIS, Permitting, and Monitoring, Three Rivers Levee Improvement Authority, Yuba County, CA. Regulatory specialist who provided senior regulatory oversight for CWA and ESA compliance following issuance of the Section 7 biological opinion. Coordinated with the USFWS and TRLIA staff to develop a compensatory mitigation strategy, resolving complex jurisdictional issues and facilitating nationwide permit approvals for project design revisions. The project would address identified deficiencies in the levees, build a large setback levee, and make related improvements to the Yuba River levee. Key issues included flood control, endangered species, wetlands, fisheries, and conversion of agricultural land. Completed and EIR, and EIS (USACE), agency consultation, permitting, and monitoring services.

Water Projects

Monterey Amendment to the State Water Project Contracts and Associated Actions as Part of a Settlement Agreement Revised EIR (Kern Water Bank), California Department of Water Resources, Kern County, CA. Senior wildlife biologist for work assisting DWR with the preparation of a court-ordered CEQA document under an extreme schedule. DWR prepared two previous EIRs (Monterey and Monterey Plus) to evaluate numerous SWP contracting issues, including the Kern Water Bank. After several court rulings, the most recent court decision required Kern Water Bank operations and maintenance to be further evaluated. The Revised EIR focused on groundwater bank operations, biological and agricultural impacts, land use changes, energy use, greenhouse gas emissions, and cumulative impacts with other groundwater banks. Ms. Holland worked closely with the Attorney General's Office and DWR's Legal, Division of Integrated Regional Water Management, and South Central Region Office staff to prepare the requisite environmental documents to meet court-ordered requirements for the complex and controversial CEQA documentation necessary for this project.

San Joaquin River Restoration Program, US Bureau of Reclamation, Fresno, Madera, and Merced Counties, CA. Senior wildlife biologist who supported a joint program EIS/EIR, program biological assessment, and project-level biological assessment. The program EIS/EIR combined a program-level analysis of the Settlement, addressing future river channel modifications, installation of water management and fish protection facilities, replacement of affected infrastructure, and implementation of management actions to restore both riparian and aquatic habitats, along with project-specific analyses of the initial interim water releases and alternative conveyance routes. Assisted Reclamation with acquisition of a Section 404 permit authorization, including a Section 7 biological opinion.

Other Development Projects

California High Speed Rail Authority, California High Speed Train Project, Merced to Fresno Segment, Merced, Madera, and Fresno Counties, CA. Senior regulatory/wildlife biologist who led the development of a comprehensive mitigation strategy for the project. The mitigation strategy addressed the mitigation requirements described in the project's state and federal permits. Development of the mitigation strategy included major field effort, such as habitat mapping, surveys for special-status species, wetland delineations, and the California Rapid Assessment Method (CRAM) for wetlands. Ms. Holland prepared a Mitigation Strategy and Implementation Plan and a permit-specific mitigation plan that identified mitigation opportunities for wetland species, including listed vernal pool crustaceans, California tiger salamander, and vernal pool/wetland plants.

Beale Air Force Base, ESA Compliance, Yuba County. Senior wildlife biologist who prepared biological assessments for a variety of projects proposed at Beale Air Force Base. The biological assessments analyzed the impacts of projects on wetland-associated species, including listed vernal pool crustaceans and California tiger salamander. The projects included stormwater or sewer system upgrades or bridge replacements, that were either covered under the Special Area Management Plan Programmatic Biological Opinion or adhered to the environmental protection measures described in that document.

GEI Consultants

Habitat Conservation Plans

Southern California Edison, Cross Valley Corridor Project Habitat Conservation Plan, San Joaquin Valley, CA. Senior biologist who lead development of an HCP to obtain ESA incidental take coverage for 12 species, including include vernal pool invertebrates and plants, California tiger salamander, burrowing owl, and San Joaquin kit fox, over a 10-year period. The Cross Valley Corridor project entails replacement and construction of new transmission lines in the San Joaquin Valley, and the future operation and maintenance of those facilities.

Waste Connections Inc., Avenal Landfill Expansion Project Habitat Conservation Plan, Kings County, California. Senior wildlife biologist who prepared the HCP, which would provide incidental take coverage for San Joaquin kit fox during expansion activities and future operations at the landfill **over a** 15-year permit term. The proposed landfill expansion would increase the landfill footprint and directly impact potentially suitable foraging and dispersal habitat for the kit fox. The HCP outline**d** measures and commitments to (1) help to maintain viable populations of kit fox within the HCP Planning Area over the 15-year permit term and (2) contribute to local and/or regional conservation of kit fox and its habitat to fully compensate for unavoidable impacts resulting from implementation of the project.

PUBLICATIONS

De Dijn, B.P.E., I.E. Molgo, M.A. Norconk, L.T. Gregory, B. O'Shea, C. Marty, M. Luger, M. Ringler, S. Crothers IV, B. Noonan, K. Fitzgerald, S. Mitro, A. Vreedzaam, and D. Satyawan. 2007. Biodiversity of the Brownsberg (Chapter 13). Pages 135–155 in Alonso, L.E. and J.H. Mol (eds.). 2007. A Rapid Biological Assessment of the Lely and Nassau Plateaus, Suriname (With Additional Information on the Brownsberg Plateau). RAP Bulletin of Biological Assessment 43. Conservation International, Arlington, Virginia.

Lim, B. K., M. D. Engstrom, H. H. Genoways, F. M. Catzeflis, K. A. Holland, S. L. Peters, M. Djosetro, S. Brandon, and S. Mitro. 2005. Results of the ALCOA Foundation—Suriname Expeditions. XIV. Mammals of Brownsberg Nature Park, Suriname. Annals of Carnegie Museum 74(4):225–274.

Holland, K. A. 2003. Utilizing Ecological Indicators to Assist in the Management of Brownsberg Nature Park, Suriname, South America. M.S. Thesis. Pullman, WA: Washington State University.

Holland, K. A. 1997. The University of the Wilderness: A Natural History of Education. B.A. Thesis. Santa Cruz, CA: University of California, Santa Cruz.

From: Holland, Kelly [mailto:kholland@geiconsultants.com]
Sent: Monday, May 8, 2017 2:08 PM
To: Johnson, Jamie <JJohnson@roseville.ca.us>
Subject: Designated Biologist Record Summary

Kelly Fitzgerald-Holland, the Designated Biological for the City of Roseville, visited the Roseville Energy Park on March 2, 2017. No sensitive biological resources, including native raptors, waterfowl, and songbirds or their nests, were observed during this site visit. Compliance measures, including fencing and buffers around detention basins, were in place. No observations of sensitive biological resources have been reported to Ms. Fitzgerald-Holland during 2016.

Kelly Fitzgerald-Holland, CWB
Senior Wildlife Biologist & Regulatory Specialist
GEI Consultants, Inc.
T: 916.341.9125 | **M:** 916.627.9957

e. BIO-4

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

f. COM-13

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. The state of the facility at this time has not changed since the CEC's initial review of the plan.

g. HAZ-1

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	**City of Roseville, Roseville Electric**	Chemical Location	CERS ID **10207330**
Facility Name	**Roseville Energy Park** 5120 Phillip Rd, Roseville 95747	**Aqueous Ammonia Storage Area**	Facility ID Status **Submitted** on 4/20/2020 11:58 AM

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** CAS No 1336-21-6	**Gallons** State Liquid Type Mixture	**9000** Storage Container Aboveground Tank Days on Site: 365	**10000**	5000 Pressue Temperature	Waste Code 122		Ammonia Water	28 % 72 %		

Printed on 4/20/2020 11:59 AM

Page 1 of 13

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 4/20/2020 11:58 AM

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 **Cooling Tower**

CERS ID **10207330**
Facility ID
Status **Submitted** on 4/20/2020 11:58 AM

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**	**800**	**400**	400			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 4/20/2020 11:58 AM

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.
	Corrosion Inhibitor CAS No 64665-57-2	**Gallons** State Liquid Type Mixture	**800** Storage Container Aboveground Tank Days on Site: 365	**400**	400 Pressure 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 Pressure 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 Pressure 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 Pressure 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 4/20/2020 11:58 AM

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.
	CCCW Molybdate Treatment Drewgard CAS No 315	**Gallons** State Liquid Type Pure	**55** Storage Container Plastic/Non-metallic Drum	**55**	55 Pressure 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** | Chemical Location **HRSG Area** | CERS ID **10207330**

Facility Name **Roseville Energy Park** | Facility ID

5120 Phillip Rd, Roseville 95747 | Status **Submitted** on 4/20/2020 11:58 AM

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**	**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**	Chemical Location	CERS ID **10207330**
Facility Name	**Roseville Energy Park**	**Plant**	Facility ID
	5120 Phillip Rd, Roseville 95747		Status **Submitted** on 4/20/2020 11:58 AM

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 4/20/2020 11:58 AM

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	**Gallons**	**350**	**250**	150	95		Natural Gas Condensate			68919-39-1
	CAS No	State	Storage Container		Pressue	Waste Code		**Benzene**	2 %		71-43-2
	68919-39-1	Liquid	Aboveground Tank			213					
		Type			Temperature						
		Waste	Days on Site: 365								
	Waste Oil	**Gallons**	**110**	**55**	30	1000					
	CAS No	State	Storage Container		Pressue	Waste Code					
		Liquid	Steel Drum		Ambient	221					
		Type			Temperature						
		Waste	Days on Site: 365		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 **Recycled Water Tank Area**

CERS ID **10207330**
Facility ID
Status **Submitted** on 4/20/2020 11:58 AM

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**	**Gallons**	**290**	**290**	290						
	CAS No 68476-34-6	State Liquid	Storage Container Aboveground Tank		Pressue Ambient	Waste Code					
		Type Pure	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
Steam Turbine Circuit Breaker

CERS ID **10207330**
Facility ID
Status **Submitted** on 4/20/2020 11:58 AM

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	Storage Container		Pressue	Waste Code					
		Gas	Other		Ambient						
		Type			Temperature						
		Pure			Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **City of Roseville, Roseville Electric** | Chemical Location **Various** | CERS ID **10207330**

Facility Name **Roseville Energy Park** | Facility ID

5120 Phillip Rd, Roseville 95747 | Status **Submitted** on 4/20/2020 11:58 AM

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 4/20/2020 11:58 AM

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.
	AntiFoam CAS No	**Gallons** State: Liquid Type: Mixture	**1600** Storage Container: Tote Bin Days on Site: 365	**200**	280 Pressure: Ambient Temperature: Ambient	Waste Code		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 Pressure: Ambient Temperature: Ambient	Waste Code		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 Pressure: Ambient Temperature: Ambient	Waste Code					
	Coagulant CAS No	**Gallons** State: Liquid Type: Mixture	**800** Storage Container: Tote Bin Days on Site: 365	**400**	280 Pressure: Ambient Temperature: Ambient	Waste Code					
	Conntect 6000 Compressor Cleaner CAS No	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	55 Pressure: Ambient Temperature: Ambient	Waste Code					
	Soda Ash 100% CAS No 497-19-8	**Pounds** State: Solid Type: Pure	**3000** Storage Container: Bag Days on Site: 365	**3000**	2000 Pressure: Ambient Temperature: Ambient	Waste Code					
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 Pressure: Ambient Temperature: Ambient	Waste Code		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 Pressure: Ambient Temperature: Ambient	Waste Code		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 4/20/2020 11:58 AM

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						

h. SOIL & WATER-7

	RECYCLE GALLONS	POTABLE GALLONS
JANUARY	13372890	8229
FEBRUARY	15938701	6733
MARCH	5303675	8229
APRIL	61340	8977
MAY	1837211	12717
JUNE	1987569	32914
JULY	5023156	61340
AUGUST	13396079	95002
SEPTEMBER	7306952	52364
OCTOBER	4081361	17953
NOVEMBER	9621419	11221
DECEMBER	4217506	6733

MONTHLY	RECYCLE	POTABLE
MINIMUM	61340	6733
MAXIMUM	15938701	95002
AVERAGE	6845655	26868
	GALLONS	GALLONS

ANNUAL TOTALS

	RECYCLE	POTABLE
GALLONS	82147859	322410
ACRE-FEET	252	0.99

Divide gallon by / 325,851

YEAR	RECYCLE GALLONS	POTABLE GALLONS	AVERAGE RECYCLE	AVERAGE POTABLE	RANGE RECYCLE	RANGE POTABLE
2007	19393396	1121252	9696698	560626	2349468	467500
2008	173325812	19278952	1606579	1606579	25880052	13541044
2009	195834628	231880	16319552	19323	21445908	107712
2010	133425248	97988	11118771	8166	25010128	32912
2011	44785004	323136	3732084	26928	15782052	68068
2012	165731368	665720	13810947	55477	24362360	199716
2013	165444136	586432	13787011	48869	25059496	198220
2014	135300484	480216	11275040	40018	25474636	106964
2015	176179432	471988	14681619	39332	21033012	109208
2016	115772448	415888	9647704	34657	24060168	120428
2017	18581816	434588	1548484	36215	5578584	107712
2018	76291512	299948	11737155	46145	14555332	80036
2019	82147859	322410	6845655	26868	15877361	88269

i. SOIL & WATER - 8

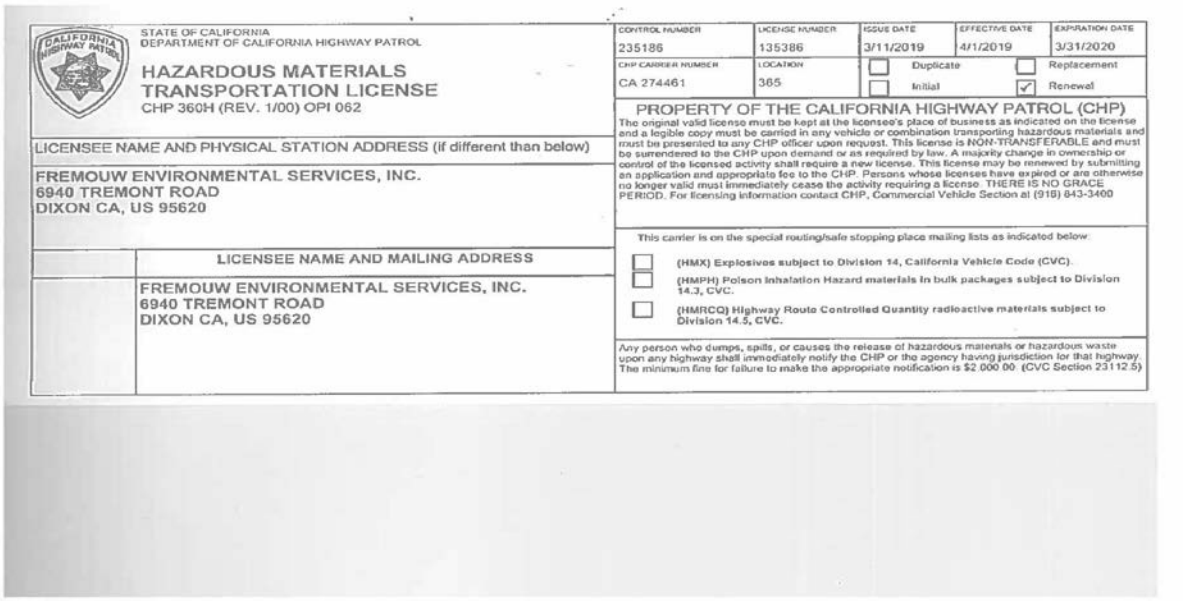
Zero Liquid Discharge Operational Status Report

- **Disruptions**
  - Acid leak at pump repaired
  - Crystallizer flange leak repaired
  - Forced Circulation Heat Exchanger vent pipe repaired

- **Maintenance**
  - All routine preventative maintenance tasks were completed as necessary.
  - Additional maintenance tasks 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 various HERO and UF filters as needed
    - Performed quarterly silica and hardness analyzer maintenance
    - Replaced expansion boots as needed
    - HERO Reject Heat Exchanger rebuilt
    - HERO Regen Waste Heat Exchanger refurbished
    - Silt Density Index Monitor installed
- **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 as listed:
    - 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 163.5 tons of solid waste in 2019
  - All solid wastes were shipped for disposal to:
    Western Placer Waste Management Authority

j. TRANS-4

All hazardous materials are transported from the Roseville Energy Park by Fremouw Environmental Services. Below is their hazardous materials transport license.



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
235186	135386	3/11/2019	4/1/2019	3/31/2020

CHP CARRIER NUMBER	LOCATION		
CA 274461	365	☐ Duplicate	☐ Replacement
		☐ Initial	☑ Renewal

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

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

FREMOUW ENVIRONMENTAL SERVICES, INC.
6940 TREMONT ROAD
DIXON CA, US 95620

LICENSEE NAME AND MAILING ADDRESS

FREMOUW ENVIRONMENTAL SERVICES, INC.
6940 TREMONT ROAD
DIXON CA, US 95620

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 14.5, 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)

k. VIS-2

Roseville Energy Park 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 since.

l. VIS-4

Roseville Energy Park constructed the facility according to the plan that was approved by the CEC and the City of Roseville Planning Department. The status of the facility surface treatments completed during 2019 are as follows:

- Concrete poured to replace gravel. See attached sample pictures.


USA

m. WASTE-5

2019 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			All metals, machine parts and large electrical wastes are recycled. Minor waste streams, ordinary refuse, are not tracked.
Oily rags, oil absorbent	6	2	Drums
Sanitary waste	N/A	N/A	Not tracked
Nitrate blowdown of ZLD	266361	Varies	Varies based on facility capacity
Plant equipment drains	0	0	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	2545	Varies	Varies based on oil analysis and filtration limitations
Used Oil filters	2		Drums
Laboratory analysis waste	0	0	
SCR & CO catalyst units	0	0	
Chemical cleaning waste	2		Drums
Condensate from natural gas pipeline	0	0	
Batteries, alkaline, lead acid, nickel cadmium, mercury	0		