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## **Roseville Energy Park**

### ***Annual Compliance Report*** **2017**

May 14, 2019

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

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## 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
		Permitting for Hazardous Material Transporation	
Traffic and Transportation	TRANS-4		June 1st
Visual Resources	VIS-2	Cooling Tower Operation	June 1st
		Surface Treatment	
Visual Resources	VIS-4	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

Technical Area	Condition Number	Verification Action	Date Required
Air Quality	AQ-114	Permits on Site	Available upon Request
Air Quality	AQ-115	Site Available for Inspection	As requested
Air Quality	AQ-116	Violations of PCAPCD Rules	Within 30 days of event
Air Quality	AQ-118	Equipment Alterations	60 Days prior to alteration
Air Quality	AQ-119	Permit Modifications	60 Days prior to exceedance
Air Quality	AQ-120	Change of Ownership	As required
Air Quality	AQ-121	Compliance with Air Toxics Hot Spots	Site Available for Inspection
Biological Resources	BIO-1	Designated Biologist	10 days prior to change
General Compliance Condition	COM-1	Unrestricted Access for Inspection	As required
General Compliance Condition	COM-2	Project Files	Maintained On-site
General Compliance Condition	COM-3	Compliance Submittal Format	As required
General Compliance Condition	COM-11	Reporting of Complaints, Notices, and Violations	Within 10 days of receipt
General Compliance Condition	COM-12	Planned Closure	12 months prior to start of closure activities
General Compliance Condition	COM-14	Unplanned Permanent Closure	Within 90 days of permanent closure
Hazardous Materials Management	HAZ-2	Hazardous Materials On-site	At least 30 days prior to receiving any hazmat on-site
Hazardous Materials Management	HAZ-5	Aqueous Ammonia Delivery Trucks	At least 60 days prior to delivery of aqueous ammonia
Hazardous Materials Management	HAZ-6	Aqueous Ammonia Delivery Route	At least 60 days prior to delivery of aqueous ammonia
Noise and Vibration	NOISE-2	Noise Complaints	Within 5 days of receiving a complaint
Noise and Vibration	NOISE-9	Noise Complaint Upgrade Requirements	Within 6 months of receiving a complaint
Waste Management	WASTE-4	Waste Management Enforcement Action	Within 10 days of becoming aware of an impending action

## Compliance Matrix

### 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	April 30th, June 30th, September 30th, 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 project status is per approved CEC decision. The Steam Turbine Generator was taken out of service on April 21, 2017 for the remainder of the 2017 calendar year. The facility was able to operate in simple cycle mode as the replacement of a like-kind Steam Turbine Generator was initiated.

## **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 modifications to the Roseville Energy Park (REP). The petition requested approval to modify the REP by replacing an existing ladder and cage access on the belt press structure with a staircase, build an extension of the existing catwalk to Combustion Turbine 2, and add five reinforced cement pads at various locations throughout the facility. The energy commission staff determined that this petition did not require formal approval because the modifications 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 three modifications were broken down into separate projects, with the catwalk project requiring an Energy Commission Work Authorization and Delegate Chief Building Official. Work Authorization No. 02 was initiated by the Energy Commission on November 22, 2017.

## **Submittal Deadline Resolutions**

This 2017 annual Compliance Report is being submitted late due to Roseville Electric staff changes and adjustments.

## **New Filings**

None for this report period.

## **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 2017.

### **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 did not receive any Notices of Violation in 2017.

# Appendix: Specific Conditions Operating Data

## a. AQ-42

### Tons 12 Month Rolling Summary CTL and CT2 Combined

From: 01/01/2017 00:00 To: 12/31/2017 23:59 Facility Name: ROSEVILLE ENERGY  
Generated: 05/13/2019 09:01 Location: Roseville, CA



\* = Excess Emission

Date	Units CTL & CT2		Units CTL & CT2		Units CTL & CT2		Units CTL & CT2		Units CTL & CT2	
	CO, Ton 1 Day(s)	Sum	NOx, Ton 1 Day(s)	Sum	PM10, Ton 1 Day(s)	Sum	SO2, Ton 1 Day(s)	Sum	VOC, Ton 1 Day(s)	Sum
Jan 2017	0.0312	3.5828	0.0883	8.4680	0.0181	1.8797	0.0080	0.0404	0.0268	2.7933
Feb 2017	0.0000	3.2033	0.0000	7.5399	0.0000	1.5109	0.0000	0.7558	0.0000	2.5179
Mar 2017	1.1041	4.0359	0.0330	6.9588	0.0046	1.3952	0.0022	0.6977	0.0077	2.3249
Apr 2017	0.0000	4.0359	0.0000	6.9588	0.0000	1.3952	0.0000	0.6977	0.0000	2.3249
May 2017	0.1341	4.0377	0.0169	6.8532	0.0019	1.3751	0.0010	0.6877	0.0032	2.2916
Jun 2017	2.6066	6.0359	0.2498	5.4935	0.0298	1.0702	0.0149	0.5350	0.0498	1.7838
Jul 2017	0.2105	5.5697	0.1036	3.8765	0.0132	0.7220	0.0067	0.3612	0.0221	1.2037
Aug 2017	0.4787	5.3519	0.2994	2.4248	0.0414	0.4163	0.0207	0.2083	0.0690	0.6945
Sep 2017	0.4855	5.3662	0.3093	1.7084	0.0458	0.2619	0.0229	0.1311	0.0761	0.4366
Oct 2017	0.3248	5.5479	0.1787	1.5246	0.0210	0.2136	0.0105	0.1069	0.0349	0.3561
Nov 2017	0.0547	5.6026	0.0369	1.5515	0.0028	0.2164	0.0014	0.1083	0.0047	0.3608
Dec 2017	0.0000	5.4302	0.0000	1.3261	0.0000	0.1766	0.0000	0.0883	0.0000	0.2943

Sum/Avg	5.4302	1.3261	0.1766	0.0883	0.2943
Limit Value					

All\_Tons\_12MonthRollingSummary



b. AQ-68



Global Technology  
Customer Analytical Services Laboratory

**WATER ANALYSIS**

PROSPECTNA  
PROSPECT

Project: W-20170104-004  
Date Authorized: 09-Jan-2017  
Submitter: Jamie Doran  
Submitter ID: A408412  
RD Program/LWR: 351182 WRC17-8

**PROJECT INFORMATION**

		System ID:	COOLING	
		Sample Number:	523808	523809
		Sample Date:	03-Jan-2017	03-Jan-2017
		Sample Name:	Cooling Make Up	Cooling Tower
		Sample Point:	Cooling Tower Make Up	Cooling Tower
Analysis	Analyte	Units		
Alkalinity, M & P	Alkalinity, Hydroxide (as CaCO <sub>3</sub> )	mg/L	< 0.1	< 0.1
	Alkalinity, P as CaCO <sub>3</sub>	mg/L	< 0.1	< 0.1
	Alkalinity, Total (as CaCO <sub>3</sub> )	mg/L	79.4	21.1
	pH		6.5	6.4
Anions	Chloride (as Cl)	mg/L	56.7	394.0
	Sulfate (as SO <sub>4</sub> )	mg/L	49.0	451.0
Conductivity	Conductivity	µS/cm	390.0	2068.0
Elements (Acid)	Aluminum, (as Al)	mg/L	< 0.1	0.3
	Calcium, Total (as CaCO <sub>3</sub> )	mg/L	79.6	235.6
	Copper, Total (as Cu)	mg/L	< 0.05	< 0.05
	Hardness - Total (Acidified as CaCO <sub>3</sub> )	mg/L	96.7	287.5
	Iron, Total (as Fe)	mg/L	0.13	0.34
	Magnesium, Total (as CaCO <sub>3</sub> )	mg/L	17.1	51.9
	Manganese, Total (as Mn)	mg/L	< 0.01	< 0.01
	Zinc, (as Zn)	mg/L	< 0.1	0.7
	Hardness - Calcium, Soluble (as CaCO <sub>3</sub> )	mg/L	76.6	215.5
	Hardness - Magnesium, Soluble (as CaCO <sub>3</sub> )	mg/L	15.8	48.3
Elements (Sol)	Hardness - Total, Soluble (as CaCO <sub>3</sub> )	mg/L	92.4	263.8
	Phosphorus, Soluble (as PO <sub>4</sub> )	mg/L	1.6	14.9
	Silicon, Soluble (as SiO <sub>2</sub> )	mg/L	15.1	59.1
	Sodium, Soluble (as Na)	mg/L	49.0	318.8
	Organic Phosphorus, Soluble (as PO <sub>4</sub> )	mg/L	0.2	1.7
Phosphorus	Orthophosphate, Soluble (as PO <sub>4</sub> )	mg/L	1.3	9.2
	Polyphosphate, Soluble (as PO <sub>4</sub> )	mg/L	< 0.1	4.0
	Total Inorganic Phosphorus, Sol (as PO <sub>4</sub> )	mg/L	1.4	13.1

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.

#### 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.



#### 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.



**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.

**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.



### **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 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 outlined 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. Satyawat. 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. Djoseretro, 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.

Hazardous Materials And Wastes Inventory Matrix Report									
CERIS Business/Orig. Facility Name <b>City of Roseville, Roseville Electric Roseville Energy Park 5120 Phillip Rd, Roseville 95747</b>		Chemical Location <b>Closed Cooling Water System</b>		CERIS ID Facility ID Status <b>10207330 Submitted on 3/27/2017 11:13 AM</b>					
DOT Code/Fire Haz. Class <b>DOT: 3 - Flammable and Combustible Liquids Combustible liquid, Class III-B, Other Health Hazard, Irritant</b>	Common Name <b>Antifreeze</b>	CAS No. <b>57-55-6</b>	Unit <b>Gallons</b>	Max. Daily <b>400</b>	Quantities Largest Cont. <b>160</b>	Avg. Daily <b>300</b>	Annual Waste Amount <b>-</b>	Federal Hazard Categories <b>- Acute Health</b>	Component Name <b>Phosphonobutane Tricarboxylic Acid</b>
			State <b>Liquid</b>	Storage Container <b>Other</b>		Pressure <b>Ambient</b>	Waste Code <b>-</b>		
			Type <b>Mixture</b>	Days on Site: 365		Temperature <b>Ambient</b>			

Hazardous Materials And Wastes Inventory Matrix Report									
CERIS Business/Orig. Facility Name <b>City of Roseville, Roseville Electric Roseville Energy Park 5120 Phillip Rd, Roseville 95747</b>		Chemical Location <b>Aqueous Ammonia Storage Area</b>		CERIS ID Facility ID Status <b>10207330 Submitted on 3/27/2017 11:13 AM</b>					
DOT Code/Fire Haz. Class <b>DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic</b>	Common Name <b>Ammonium Hydroxide</b>	CAS No. <b>1336-21-6</b>	Unit <b>Gallons</b>	Max. Daily <b>9000</b>	Quantities Largest Cont. <b>10000</b>	Avg. Daily <b>5000</b>	Annual Waste Amount <b>-</b>	Federal Hazard Categories <b>- Fire - Reactive - Pressure Release - Acute Health - Chronic health</b>	Component Name <b>Ammonia Water</b>
			State <b>Liquid</b>	Storage Container <b>Aboveground Tank</b>		Pressure <b>Temperature</b>	Waste Code <b>122</b>		
			Type <b>Mixture</b>	Days on Site: 365					

Hazardous Materials And Wastes Inventory Matrix Report									
CERIS Business/Orig. Facility Name <b>City of Roseville, Roseville Electric Roseville Energy Park 5120 Phillip Rd, Roseville 95747</b>		Chemical Location <b>Cooling Tower</b>		CERIS ID Facility ID Status <b>10207330 Submitted on 3/27/2017 11:13 AM</b>					
DOT Code/Fire Haz. Class <b>DOT: 3 - Flammable and Combustible Liquids Combustible liquid, Class III-B, Other Health Hazard, Irritant</b>	Common Name <b>Dispersant - Cooling water treatment</b>	CAS No. <b>57-55-6</b>	Unit <b>Gallons</b>	Max. Daily <b>1500</b>	Quantities Largest Cont. <b>1500</b>	Avg. Daily <b>300</b>	Annual Waste Amount <b>-</b>	Federal Hazard Categories <b>- Acute Health - Chronic health</b>	Component Name <b>Phosphonobutane Tricarboxylic Acid</b>
			State <b>Liquid</b>	Storage Container <b>Aboveground Tank</b>		Pressure <b>Ambient</b>	Waste Code <b>-</b>		
			Type <b>Pure</b>	Days on Site: 365		Temperature <b>Ambient</b>			

g. HAZ-1

Hazardous Materials And Wastes Inventory Matrix Report										
ERI Business/Org: <b>City of Roseville, Roseville Electric</b> Facility Name: <b>Roseville Energy Park</b> 5120 Phillip Rd, Roseville 95747			Chemical Location: <b>Cooling Tower Chemical Enclosure</b>				CERS ID: <b>10207330</b> Facility ID: Status: <b>Submitted on 3/27/2017 11:13 AM</b>			
DOT Code/Reg. Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EMS CAS No.
	<b>Corrosion Inhibitor</b>	<b>Gallons</b>	<b>1500</b>	<b>1500</b>	<b>800</b>					
	CAS No.	State	Storage Container		Pressure	Waste Code				
	64665-57-2	Liquid	Tank Inside Building		Ambient					
		Type	Mixture	Days on Site: 365	Temperature					
	<b>Corrosion Inhibitor</b>	<b>Gallons</b>	<b>55</b>	<b>55</b>	<b>55</b>		- Acute Health	Sodium Hydroxide	1310-73-2	
	CAS No.	State	Storage Container		Pressure	Waste Code		Sodium Molybdate	7631-95-0	
		Liquid	Other		Ambient			Sodium Tolythazole	64665-57-2	
		Type	Mixture	Days on Site: 365	Temperature			Sodium Metaborate	7775-19-1	
Corrosive, Irritant	<b>Sodium Hypochlorite &gt;5% - 12.5%</b>	<b>Gallons</b>	<b>8000</b>	<b>8000</b>	<b>5000</b>		- Acute Health	SODIUM HYPOCHLORITE	12 %	7681-52-9
	CAS No.	State	Storage Container		Pressure	Waste Code		WATER	88 %	7732-18-5
	7681-52-9	Liquid	Aboveground Tank		Ambient					
		Type	Mixture	Days on Site: 365	Temperature					
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Water Reactive, Class 1, Toxic, Oxidizing, Class 1	<b>Sulfuric Acid</b>	<b>Gallons</b>	<b>6000</b>	<b>6000</b>	<b>4000</b>		- Reactive - Acute Health - Chronic health	Sulfuric Acid	93 %	7664-93-9
	CAS No.	State	Storage Container		Pressure	Waste Code		Water	7 %	
	7664-93-9	Liquid	Aboveground Tank		Ambient					
		Type	Mixture		Temperature					

Hazardous Materials And Wastes Inventory Matrix Report											
CERS Business/Org. <b>City of Roseville, Roseville Electric</b>			Chemical Location				CERS ID		<b>10207330</b>		
Facility Name <b>Roseville Energy Park</b>			<b>Electrical/Mechanical Building</b>				Facility ID				
5120 Phillip Rd, Roseville 95747							Status		<b>Submitted on 3/27/2017 11:13 AM</b>		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
	<b>Corrosion Inhibitor</b>	<b>Gallons</b>	<b>400</b>	<b>400</b>	<b>280</b>		- Acute Health	Cyclohexylamine	5 %		108-91-8
	CAS No. ....	State	Storage Container		Pressure	Waste Code		Monoethanolamine	20 %		141-43-5
		Liquid	Aboveground Tank					Methoxypropyl amine	20 %		5332-73-0
		Type			Temperature						
		Mixture									
	<b>Naico Elim-Ox Oxygen Scavenger</b>	<b>Gallons</b>	<b>400</b>	<b>400</b>	<b>280</b>		Acute Health	Carbohydrazid			497-18-7
	CAS No. ....	State	Storage Container		Pressure	Waste Code					
		Liquid	Aboveground Tank		Ambient						
		Type			Temperature						
		Mixture	Days on Site: 365		Ambient						
	<b>Trisodium phosphate</b>	<b>Gallons</b>	<b>400</b>	<b>400</b>	<b>300</b>		- Acute Health	Trisodium Phosphate			7601-54-9
	CAS No. ....	State	Storage Container		Pressure	Waste Code		Sodium Hydroxide	5 %		1310-73-2
	7601-54-9	Liquid	Aboveground Tank								
		Type			Temperature						
		Mixture	Days on Site: 365								



Hazardous Materials And Wastes Inventory Matrix Report									
CERS Business/Org: City of Roseville, Roseville Electric Roseville Energy Park 5120 Phillip Rd, Roseville 95747		Chemical Location HRSG Area		CERS ID 10207330 Facility ID Submitted on 3/27/2017 11:13 AM Status		Hazardous Components (For mixture only)			
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Component Name	% Wt. EHS CAS No.
	Calibration Gases	Cu. Feet	7500	250	7500		- Pressure Release	Nitric Oxide	1% 10102-43-9
	CAS No.	State	Storage Container		Pressure	Waste Code	- Acute Health	Carbon Monoxide	1% 630-08-0
		Gas	Cylinder		> Ambient			Oxygen	21% 7782-44-7
		Type			Temperature			Carbon Dioxide	20% 124-38-9
		Mixture			Ambient			Nitrogen	7727-37-9
DOT: 3 - Flammable and Combustible Liquids	Diesel Fuel No. 2	Gallons	1500	1500	1500		- Fire - Acute Health		
	CAS No. 68476-34-6	State	Storage Container		Pressure	Waste Code	- Chronic health		
Combustible Liquid, Class II		Liquid	Aboveground Tank		Ambient				
		Type			Temperature				
		Pure	Days on Site: 365		Ambient				

Hazardous Materials And Wastes Inventory Matrix Report									
CERS Business/Org: City of Roseville, Roseville Electric Roseville Energy Park 5120 Phillip Rd, Roseville 95747		Chemical Location Power Plant		CERS ID 10207330 Facility ID Submitted on 3/27/2017 11:13 AM Status		Hazardous Components (For mixture only)			
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Component Name	% Wt. EHS CAS No.
	Fuel Gas Drains	Gallons	350	250	150	95	- Fire	Natural Gas Condensate	2% 68919-39-1
	CAS No. 68919-39-1	State	Storage Container		Pressure	Waste Code	- Acute Health	Benzene	71-43-2
		Liquid	Aboveground Tank		Temperature		- Chronic health		
		Type							
		Waste	Days on Site: 365						
	Waste Oil	Gallons	110	55	30	1000	- Fire		
	CAS No.	State	Storage Container		Pressure	Waste Code	- Acute Health		
		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 Roseville Energy Park 5120 Phillip Rd, Roseville 95747		Chemical Location Recycled Water Tank Area		CERS ID 10207330 Facility ID Submitted on 3/27/2017 11:13 AM Status		Hazardous Components (For mixture only)			
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Component Name	% Wt. EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids	Diesel Fuel No. 2	Gallons	290	290	290		- Fire - Acute Health		
	CAS No. 68476-34-6	State	Storage Container		Pressure	Waste Code	- Chronic health		
Combustible Liquid, Class II		Liquid	Aboveground Tank		Ambient				
		Type			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:  
**Various**

CERS ID: **10207330**  
 Facility ID:  
 Status: **Submitted on 3/27/2017 11:13 AM**

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

CERS Business/Org				Chemical Location				CERS ID			
City of Roseville, Roseville Electric				ZLD Area				10207330			
Facility Name				Facility ID				Submitted on 3/27/2017 11:13 AM			
5120 Phillip Rd, Roseville 95747				Status							
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Quantities		Annual	Federal Hazard	Hazardous Components			
				Largest Cont.	Avg. Daily	Waste Amount	Categories	Component Name	% Wt	EHS CAS No.	
DOT: 8 - Corrosives (Liquids and Solids)	Antifoam	Gallons	1600	200	280		- Acute Health	Paraffin Wax	1 %	8002-74-2	
	CAS No.	State	Storage Container		Pressure	Waste Code		Hydrotreated Light Distillate	20 %	64742-47-8	
		Liquid	Tote Bin		Ambient			Strait Run Middle Distillate	60 %	64741-44-2	
	Type	Mixture	Days on Site: 365		Temperature						
DOT: 8 - Corrosives (Liquids and Solids)	Antifoam	Gallons	1600	400	280		- Chronic health	Alkoxylated Alcohol	40 %		
	CAS No.	State	Storage Container		Pressure	Waste Code		Water	60 %		
	FC2386	Liquid	Tote Bin		Ambient						
	Type	Mixture	Days on Site: 365		Temperature						
DOT: 8 - Corrosives (Liquids and Solids)	Anti-Scalant	Gallons	800	400	280						
	CAS No.	State	Storage Container		Pressure	Waste Code					
		Liquid	Tote Bin		Ambient						
	Type	Mixture	Days on Site: 365		Temperature						
DOT: 8 - Corrosives (Liquids and Solids)	Coagulant	Gallons	800	400	280						
	CAS No.	State	Storage Container		Pressure	Waste Code					
		Liquid	Tote Bin		Ambient						
	Type	Mixture	Days on Site: 365		Temperature						
DOT: 8 - Corrosives (Liquids and Solids)	Comnnect 6000 Compressor Cleaner	Gallons	55	55	55						
	CAS No.	State	Storage Container		Pressure	Waste Code					
	497-19-8	Liquid	Plastic/Non-metallic Drum		Ambient						
	Type	Mixture	Days on Site: 365		Temperature						
DOT: 8 - Corrosives (Liquids and Solids)	Soda Ash 100%	Pounds	3000	3000	2000		- Acute Health				
	CAS No.	State	Storage Container		Pressure	Waste Code					
	497-19-8	Solid	Bag		Ambient						
	Type	Pure	Days on Site: 365		Temperature						
DOT: 8 - Corrosives (Liquids and Solids)	Sodium Bisulfite	Gallons	800	400	280		- Acute Health	Sodium Bisulfite		7631-90-5	
	CAS No.	State	Storage Container		Pressure	Waste Code					
	7631-90-5	Liquid	Tote Bin		Ambient			Water			
	Type	Mixture	Days on Site: 365		Temperature						
DOT: 8 - Corrosives (Liquids and Solids)	Sodium Hydroxide Solid	Gallons	3000	3000	2500		- Reactive - Acute Health	Sodium Hydroxide	50 %	1310-73-2	
	CAS No.	State	Storage Container		Pressure	Waste Code					
		Liquid	Aboveground Tank		Ambient			Water	50 %		
	Type	Mixture	Days on Site: 365		Temperature			Sodium Chloride	1 %	7647-14-5	

# Hazardous Materials And Wastes Inventory Matrix Report

EHS Business/Org:		City of Roseville, Roseville Electric		EHS ID		10207330	
Facility Name		Roseville Energy Park		Chemical Location		ZLD Area	
5120 Phillip Rd, Roseville 95747				Submitted on 3/27/2017 11:13 AM			
DOT Code/Fire Haz. Class		Common Name		Annual Waste Amount		Federal Hazard Categories	
DOT: 8 - Corrosives (Liquids and Solids)		Sulfuric Acid		- Reactive		Sulfuric Acid	
Corrosive, Water Reactive, Class 2, Toxic, Oxidizing, Class 1		CAS No. 7664-93-9		- Acute Health		Water	
		Gallons		6000		93 %	
		State		Storage Container		7664-93-9	
		Liquid		Aboveground Tank			
		Type		Pressure			
		Mixture		Temperature			
		Days on Site: 365					

#### h. SOIL & WATER-7

	RECYCLE GALLONS	POTABLE GALLONS
JANUARY	791384	7480
FEBRUARY	6732	8976
MARCH	411400	10472
APRIL	415140	10472
MAY	522852	16456
JUNE	3530560	53108
JULY	1276836	98736
AUGUST	3828264	114444
SEPTEMBER	5585316	77044
OCTOBER	2184160	16456
NOVEMBER	29172	14212
DECEMBER	0	6732

MONTHLY	RECYCLE	POTABLE
MINIMUM	6732	6732
MAXIMUM	5585316	114444
AVERAGE	1548484	36215
	GALLONS	GALLONS

	ANNUAL TOTALS	
	RECYCLE	POTABLE
GALLONS	18581816	434588
ACRE-FEET	355	1.28

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


## **i. SOIL & WATER -8**

### **Zero Liquid Discharge Operational Status Report**

- **Disruptions**
  - Re-timed vapor compressor B
  - Installed new ZLD sump pumps
  - Crystallizer a distillate heater
  - Cleaned forced circulation heat exchanger
  - Replaced vapor compressor A
  - ZLD PP-035 Brine regen pump repair
- **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
- **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 48 tons of solid waste in 2017
  - 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 <b>HAZARDOUS MATERIALS TRANSPORTATION LICENSE</b> CHP 360H (REV. 1/00) OPI 062	CONTROL NUMBER 224518	LICENSE NUMBER 135386	ISSUE DATE 3/3/2017	EFFECTIVE DATE 4/1/2017	EXPIRATION DATE 3/31/2018
	CHP CARRIER NUMBER CA 274461	LOCATION 365	<input type="checkbox"/> Duplicate <input type="checkbox"/> Initial	<input type="checkbox"/> Replacement <input checked="" type="checkbox"/> Renewal	
<b>PROPERTY OF THE CALIFORNIA HIGHWAY PATROL (CHP)</b> 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) <b>FREMOUW ENVIRONMENTAL SERVICES, INC. 6940 TREMONT ROAD DIXON CA, US 95620</b>					
This carrier is on the special routing/stopping place mailing lists as indicated below: <input type="checkbox"/> (HMD) Explosives subject to Division 14, California Vehicle Code (CVC). <input type="checkbox"/> (HSPH) Poison Inhalation Hazard materials in bulk packages subject to Division 14.3, CVC. <input type="checkbox"/> (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)					
LICENSEE NAME AND MAILING ADDRESS <b>FREMOUW ENVIRONMENTAL SERVICES, INC. 6940 TREMONT ROAD DIXON CA, US 95620</b>					

**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 during the 2017-2018 timeframe are as follows:

- Anti-rust painting was performed in the ZLD and Balance of Plant. See attached sample picture.
- Pressure washed cooling tower external walls. See attached picture.
- Painted building structures as needed. See attached picture.









**m. WASTE-5**

Roseville Energy Park has proposed no changes to the waste management plan and is currently following the CEC approved plan.