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# **Roseville Energy Park**

# Annual Compliance Report 2018

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		Annual Compliance Report	
Condition	COM-7	Submittal	June 1st
General Compliance		On-Site Contingency Plan	
Condition	COM-13	Review	June 1st
Hazardous Materials		Hazardous Materials at the	
Management	HAZ-1	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	
Traffic and Transportation	TRANS-4	Material Transporation	June 1st
Visual Resources	VIS-2	Cooling Tower Operation	June 1st
		Surface Treatment	č
Visual Resources	VIS-4	Maintenance	June 1st
Waste Management	WASTE-5	Waste Management Plan	June 1st

# **Compliance Matrix**

# **B. As Required Compliance Reporting**

	Condition		
Technical Area	Number	Verification Action	Date Required
Air Quality	AQ-22	NOx emissions records	As requested
		Annual Source Test Protocol	
Air Quality	AQ-30	for NOX	30 days prior
		Annual Source Test Results	
Air Quality	AQ-30	for NOX	Within 60 days of test
Air Quality	AQ-31	Gas Turbine Operating Log	As requested
		All Permit Records	
		Maintained for at least 5	
Air Quality	AQ-35	Years	As requested
		Annual Performance Test	
Air Quality	AQ-44	Protocol	30 days prior
		Annual Performance Test	
Air Quality	AQ-44	Results	Within 60 days of test
		Cold start NOx and CO	Every 7 Years after
		Emissions Performance Test	commissioning - Protocol
Air Quality	AQ-45	Protocol	30 days prior
		Cold start NOx and CO	Every 7 Years after
		Emissions Performance Test	commissioning - Results
Air Quality	AQ-45	Results	within 60 days of test
		Annual Performance Test	
Air Quality	AQ-46	Methods Protocol	30 days prior
		Annual Performance Test	
Air Quality	AQ-46	Methods Results	Within 60 days of test
		Annual Particulate Matter	
Air Quality	AQ-49	Performance Test Protocol	30 days prior
		Annual Particulate Matter	
Air Quality	AQ-49	Performance Test Results	Within 60 days of test
		Annual SOx Performance	
Air Quality	AQ-50	Test Protocol	30 days prior
		Annual SOx Performance	
Air Quality	AQ-50	Test Results	Within 60 days of test
			Within 10 days of
Air Quality	AQ-51	NH3 Slip Exceedance	exceedance
		Plan for replacement or	30 Days prior to Scheduled
Air Quality	AQ-51	reconditioning of Catalyst	Date
			Within 5 working days of
Air Quality	AQ-53	NOx Excursions	occurrence
		No Hexavalent Chromium	
		compounds added to	Records available as
Air Quality	AQ-66	Cooling Tower	requested
Air Quality	AQ-110	Portable Equipment	Site Available for Inspection

	Condition		
Technical Area	Number	Verification Action	Date Required
		Permits on Site	
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		Unrestricted Access for	
Condition	COM-1	Inspection	As required
General Compliance Condition	COM-2	Project Files	Maintained On-site
General Compliance		Compliance Submittal	
Condition	COM-3	Format	As required
General Compliance		Reporting of Complaints,	
Condition	COM-11	Notices, and Violations	Within 10 days of receipt
General Compliance			12 months prior to start of
Condition	COM-12	Planned Closure	closure activities
General Compliance		Unplanned Permanent	Within 90 days of
Condition	COM-14	Closure	permanent closure
Hazardous Materials Management	HAZ-2	Hazardous Materials On-site	At least 30 days prior to receiving any hazmat on- site
Hazardous Materials		Aqueous Ammonia Delivery	At least 60 days prior to delivery of aqueous
Management	HAZ-5	Trucks	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 Complaint Upgrade	Within 6 months of
Noise and Vibration	NOISE-9	Requirements	receiving a complaint
		Waste Management	Within 10 days of becoming aware of an impending
Waste Management	WASTE-4	Enforcement Action	action

# **Compliance Matrix**

# C. Quarterly Compliance Reporting

Technical	Condition		a Tel se l'in the set
Area	Number	Verification Action	Date Required
		Operational status of SCR and	April 30th, June 30th, September 30th,
Air Quality	AQ-15	oxidation catalyst	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-20	Sulfur content of natural gas	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-21	Start-ups and Shut-downs	and December 31st
		Hourly, daily, and quarterly NOx	April 30th, June 30th, September 30th,
Air Quality	AQ-32	and CO emissions	and December 31st
		Hourly, daily, and quarterly SOx	April 30th, June 30th, September 30th,
Air Quality	AQ-33	emissions	and December 31st
Air Quality	AQ-34	Invalid Data and CEMS Downtime	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-36	Upset Breakdown Reports	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-37	Notices of Non-compliance	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-38	Upset Breakdown Corrections	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-39	CEMS Audits	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-40	CEMS QA Failures	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-41	Excess Emissions Reports	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-47	Emissions Nuisances	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-48	Opacity Violations	and December 31st
		Hourly and 24 hour NH3 Slip	April 30th, June 30th, September 30th,
Air Quality	AQ-51	Concentrations	and December 31st
		NOx and CO Emissions during Start-	April 30th, June 30th, September 30th,
Air Quality	AQ-55	ups and Shut-downs	and December 31st
		LB/HrEmissions except during Start	April 30th, June 30th, September 30th,
Air Quality	AQ-57	ups and Shut-downs	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-59	Daily Emissions Limits	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-60	Quarterly Emissions Limits	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-63	Annual Emissions Limits	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-69	Nuisance Complaints	and December 31st
			April 30th, June 30th, September 30th,
Air Quality	AQ-70	Cooling Tower Emissions	and December 31st

# **Project Operating Status**

The project status is per approved CEC decision. The Roseville Energy Park Steam Turbine Generator was replaced with a like-kind steam turbine generator from the original equipment manufacturer (Siemens) and available for operation on May 11, 2018. The facility was able to operate in simple cycle mode between January 1, 2018 and May 10, 2018.

## **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.

On January 10, 2018 work authorization No. 02 was assigned to West Coast Code Consultants, 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.

# **Submittal Deadline Resolutions**

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

## **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 2018.

## **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 2018.

# Appendix: Specific Conditions Operating Data a. AQ-42

Tons 12 Month Rolling Summary	2 Month T2 Combin	Rolli ned	ng Sum	mary							ROSI
From: Generated:	01/01/2018 00:00 05/13/2019 15:03		To: 12/31/2018 23:59	/2018 23:5	9 Facility Name: Location:	ty Name: on:	ROSEVILLE ENERGY Roseville, CA	ENERGY CA			CALIF
<pre>* = Excess Emission</pre>	3										
	units CLT & CLT	12	units cri & cri	.72	units CT1 & CT2	72	units CLI & CLJ	72	units CT1 & CT2	ฎ	
Date	CO, TON 1 Day(s) Sume Rol	Ton /(s) Rolling Sum	NOx, Ton 1 Day(s) Sum Rol <sup>-</sup>	Ton /(5) Rolling Sum	PM10, Ton 1 Day(s) Sum Rol	Ton y(s) Rolling Sum	SO2, Ton 1 Day(s) Sum Rol	ron ty(s) Rolling Sum	VOC, Ton 1 Day(s) Sum Rolling Sum	lling sum	
Jan 2018	0.0000 5.3990	5.3990	0.0000 1.2376	1.2376	0,0000 0.1605	0.1605	0.0000 0.0803	0.0803	0.0000 0.2675	0.2675	
Feb 2018	0.0000	5.3990	0.0517	1.2893	0.0024	0.1629	0.0011	0.0814	0.0039	0.2714	
Mar 2018	0.0000	4.2949	0.0000 1.2363	÷	0.0000	0.1583	0.0000	0.0792	0.0000 0.2637	0.2637	
Apr 2018	0.0000	4.2949	0.0000	1.2363	0.0000	0.1583	0.0000	0.0792	0.0000 0.2637	0.2637	
May 2018	0.3707	4.5315	0.2067	1.4261	0.0287	0.1851	0.0144	0.0926	0.0478	0.3083	
	0.0843	2.0092		1.2690	0.0125	0.1678	0.0062	0.0839	0.0207	0.2792	
Jul 2018	0.4302	2.2289	1.1766	2.3420	0.2432	0.3978	0.1215	0.1987	0.4054 0.6625	0.6625	
Aug 2018	0.4091	2.1593	1.7527	3.7953	0.3207	0.6771	0.1603	0.3383	0.5349 1.1284	1.1284	
Sep 2018	0.0000	1.6738 0.0000	0.0000	3.4860	0.0000	0.6313	0.0000	0.3154	0.0000	1.0523	
Oct 2018	0.5355	1.8845	1.4082	4.7155	0.2624	0.8727	0.1313	0.4362	0.4372	1.4546	
Nov 2018	0.6490	2.4788	0.7296	5.4182	0.1257	0.9956	0.0629	0.4977	0.2093	1.6592	
Dec 2018	0.4459	2.9247	1.3374	6.7556	0.2542	1.2498	0.1271	0.6248	0.4238	2.0830	
Sun/Avg	2,9247	-	6.7556		1.2498		0.6248		2.0830		
Limit Value											

ALL\_Tons\_12MonthRollingSummary

μ



Global Technology

Customer Analytical Services Laboratory

P731015	Project:	W-20180223-007
Roseville Electric	Date Authorized:	01-Mar-2018
Rosevile CA	Submitter:	Jamie Doran
US 00000	Submitter ID:	A408412
	RD Program/LWR:	351182 WRC18-0658

		System ID:	COC	LING
		e Number:	610734	610735
		mple Date:	22-Feb-2018	22-Feb-2018
		ple Name:		Tower
Analysis	San Analyte	nple Point: Units	Cooling Make Up	Cooling Towe
Alkalinity, M & P	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	28.6	20.3
	нq		6.4	6.4
Anions	Chloride (as Cl)	mg/L	34.3	226.0
	Sulfate (as SO4)	mg/L	21.8	141.0
onductivity	Conductivity.	µS/cm	1102.0	1319.0
lements (Acid)	Aluminum, Total (as Al)	mg/L	0.3	0.2
	Calcium, Total (as CaCO3)	mg/L	74.7	80.8
	Copper, Total (as Cu)	mg/L	< 0.05	< 0.05
	Hardness, Total (Acidified as CaCO3)	mg/L	93.3	100.9
	Iron, Total (as Fe)	mg/L	4.58	0.17
	Magnesium, Total (as CaCO3)	mg/L	18.6	20.1
	Manganese, Total (as Mn)	mg/L	0.10	< 0.01
	Metals Poured		Yes	Yes
	Zinc, Total (as Zn)	mg/L	0.1	0.1
lements (Sol)	Hardness - Calcium, Soluble (as CaCO3)	mg/L	72.2	80.5
	Hardness - Magnesium, Soluble (as CaCO	mg/L	18.6	20.1
	Hardness - Total , Soluble (as CaCO3)	mg/L	90.8	100.6
	Silicon, Soluble (as SiO2)	mg/L	18.0	19.9
	Sodium, Soluble (as Na)	mg/L	137.8	179.7
hosphorus	Organic Phosphorus, Soluble (as PO4)	mg/L	0.4	0.7
	Orthophosphate, Soluble (as PO4)	mg/L	4.3	5.2
	Polyphosphate, Soluble (as PO4)	mg/L	0.4	< 0.1
	Total Inorganic Phosphorus, Sol (as PO4)	mg/L	4.7	5.2
	Total Phosphorus, Soluble (as PO4)	mg/L	5.1	5.9

Page 1 of 1

Date Printed: 02-Mar-2018

## 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
- Restoring Habitats and Connective Corridors to Support Species Recovery in the Natomas Basin, Sacramento, CA. The Western Soction 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 Expriranz 2000,
- CA, Fobruary 2009. The Effects of Land Management Practices on Reptile Populations: How Grazing Regimesis 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 (FMCP) 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 bern.

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 Attomey 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.



Kelly Fitzgerald-Holland Page 4

#### 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 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. 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 Wildemess: A Natural History of Education. B.A. Thesis. Santa Cruz, CA: University of California, Santa Cruz.





### 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 /	Hazardous Materials And Wastes Inventory Matrix Report	inventory	/ Matrix F	Report		and the second se
CERS Business/Org. Ci	CERS Business/Org. City of Roseville, Roseville Electric			Chemical Location	tion	and the second	State of the second	CERS ID	10207330
Facility Name R	Roseville Energy Park			Closed Co	<b>Closed Cooling Water System</b>	System		Facility ID	1
	5120 Phillip Rd, Roseville 95747							Status	Submitted on 5/10/2018 3:25 PM
						Annual			Hazardous Components
				Quantities		Waste	Federal Hazard		(For mixture only)
DOT Code/Fire Haz. Class	s Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name	% Wt EHS CAS No.
DOT: 3 - Flammable and	nd AntiFreeze	Gallons	800	400	300		- Acute Health		
Combustible Liquids	CAS No		Storage Container	1	Pressue	. Waste forle			
Combustible Liquid, Class III-B,	lass III-B, 57-55-6	Liquid Other	ner		Ambient				
Other Health Hazard, Irritant	Irritant	Type Mixture Day	Type Mixture Days on Site: 365		Temperature Ambient				

and the second		Hazardou	Hazardous Materials And Wastes Inventory Matrix Report	And Waste:	s Inventory	/ Matrix R	leport	A Start	Str. of Stands
CERS Business/Org. Cit	CERS Business/Org. City of Roseville, Roseville Electric	100	and the second	Chemical Location	tion	1. N.		CERS I	CERS ID 10207330
Facility Name Ro	Roseville Energy Park			Aqueous /	<b>Aqueous Ammonia Storage Area</b>	orage Are	2	Facility ID	ty iD
51	5120 Phillip Rd, Roseville 95747							Status	Status Submitted on 5/10/2018 3:25 PM
						Annuał			Hazardous Components
				Quantities		Waste	Federal Hazard		(For mixture only)
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily Largest Cont.	Largest Cont.	Avg. Daily Amount		Categories	Component Name	% Wt EHS CAS No.
DOT: 8 - Corrosives (Lic	DOT: 8 - Corrosives (Liquids and Ammonium Hydroxide	Gallons	9000	10000	5000		- Fire	Ammonia	28 %
Solids)	CAS No	State St	Storage Container		Pressue		- Reactive		20 55
	1336-21-6		Aboveground Tank			Waste Code - Pressure	- Pressure	Water	12 %
Corrosive, Toxic		Type			Temperature	- Acute	- Acute Health		
			IVIIATORE Days OIL SILE, 303				- Chronic health		

Type. Pure Day	ent State Liquid	Dispersant - Cooling water Gallons	DOT Code/Fire Haz. Class Common Name Unit -		secury varme NOSEVILLE ELLER P For A S120 Phillip Rd, Roseville 95747	/Org.	Hazardous
Days on Site: 365	Storage Container Aboveground Tank	800 400	Max. Daily Largest Cont.	Quantities		Chemic	Materials And W
Temperature Ambient	Ambient Waste Code	400	Avg. Daily Amount	Annual Waste	ing rowci	Chemical Location	Hazardous Materials And Wastes Inventory Matrix Report
	Acrylic copolymer 10 % MIXTURE	Phosphonobutane Tricarboxylic 10 % 37971-36-1	Categories Component Name % Wt EHS CAS No.	Federal Hazard (For mixture only)	Status Submitted on 5/10/2018 3:25 PM	CERSID 10207330	ort

CERS ID 10207330 Facility ID Status Submitted on 5/10/2018 3:25 PM Hazardous Components (For mixture only) Component Name Wtt EHS CAS No.	Federal Hazard	Amount	Ave Daily	Quantities	May Daily	Imit	Common Namo	
CERS ID Facility ID Status Ha	Federal Haz	Waste		Quantities				
		Annual						
A State and a state of the stat	69	al Buildin	Chemical Location Electrical/Mechanical Building	Chemical Location Electrical/Mu			City of Roseville, Roseville Electric Roseville Energy Park 5120 Phillip Rd, Roseville 95747	CERS Business/Org. City of Facility Name Rosevi 5120 Phi
	x Report	y Matrix	s Inventor	And Waste	Hazardous Materials And Wastes Inventory Matrix Report	Hazardou		
			Temperature Ambient		Days on Site: 365	Pure D		כטוווטעצעטוב בוקטוע, כופצי וו
health	Waste Code - Chronic health	Waste Cor	Ambient	~ 1	Aboveground Tank	<u>State</u> Liquid A	CAS No 68476-34-6	
	- Fire - Acute Health		1500	1500	1500	Gallons	Diesel Fuel No. 2	DOT: 3 - Flammable and
Carbon Dioxide 20 % 124-38-9 Nitrogen 7727-37-9		1.4	Temperature Ambient			Type Mixture		
Oxygen 21 %	Waste Code Neicase - Acute Health	Waste Co.	Pressue > Ambient		Storage Container Cylinder	Gas C	CAS No	
	- Pressure		7500	250	20000	Cu. Feet	<b>Calibration Gases</b>	
Component Name % Wt EHS CAS No.	Categories	Amount	Avg. Daily	Largest Cont.	Max. Daily	Unit	Common Name	DOT Code/Fire Haz. Class
Hazardous Components (For mixture only)	Federal Hazard	Annual Waste		Quantities			• •	
Status Submitted on 5/10/2018 3:25 PM					14. 17. 18. 18		5120 Phillip Rd, Roseville 95747	5120 Phi
Facility ID			ä	<b>HRSG</b> Area			Roseville Energy Park	Facility Name Rosevil
CERS 10 10207330			ation	Chemical Location			City of Roseville, Roseville Electric	CERS Business/Org. City of

	Hazardo	Hazardous Materials And Wastes Inventory Matrix Report	And Waste:	s Inventory	Matrix R	eport			
CERS Business/Org. City of Roseville, Roseville Electric			Chemical Location	tion			CERS ID	CERS ID 10207330	
			Electrical/	<b>Electrical/Mechanical Building</b>	Building		Facility ID	0	
							Status	Submitted on 5/10/2018 3:25 PM	2018 3:25 PM
					Annual			Hazardous Components	
			Quantities		Waste	Federal Hazard		(For mixture only)	
DOT Code/Fire Haz. Class Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name	% WE E	EHS CAS No.
Nalco Elimin-Ox Oxygen	n Gallons	s 400	400	280		- Acute Health	Carbohydrazid		497-18-7
Scavenger	State	Storage Container	I	Pressue	Waste Code				
	Liquid	Aboveground Tank	×	Ambient					
A STATE AND A	Type Mixture	Type Mixture Days on Site: 365		Temperature Ambient					
Corrosion Inhibitor	Gallons	s 400	400	280		- Acute Health	Cyclohexylamine	5 %	108-91-8
CAS No	State	Storage Container Aboveground Tank	~ (	Pressue	Waste Code		Methoxypropylamine	20 %	5332-73-0
	Type Mixture			Temperature					
Trisodium phosphate	Gallons	s 400	400	300		- Acute Health	Trisodium Phosphate	n R	7601-54-9
CAS No 7601-54-9	State	Storage Container Aboveground Tank	*	Pressue	Waste Code		soaium Hyaroxide	0% C	7-01-01
	Type Mixture	Type Mixture Davs on Site: 365		Temperature					

					-					
seville, Roseville Electric			Chemical Loca	tion			CERS ID Facility II			
Rd, Roseville 95747							Status	Submitted on 5/10/2018 3:25 PM	2018 3:25 PM	
			D		Annual	Endowed Unroad		Hazardous Components (For mixture only)		
Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name	1 1	EHS CAS No.	
Waste Oil	Gallons	110	55	30	1000	- Fire				
CAS No	Liquid	Storage Container Steel Drum	**	Pressue Ambient	Waste Lode	model model				
	Type Waste	Davs on Site: 365		Temperature Ambient	L					
Fuel Gas Drains	Gallons	350	250	150	95	- Fire	Natural Gas Condens		68919-39-1	
CAS No	State	Storage Container Aboveground Tan	~ 1	Pressue	Waste Code 213	- Acute nealth - Chronic health	Delizerie	1	11-10-2	
68919-39-1	Type	- more		Temperature						
	Waste	Days on Site: 365								
scavilla Bosovilla Electric			Chemical Loca	tion			CERS ID	10207330		
Energy Park			Various				Facility I			
Rd, Roseville 95747							Status	Submitted on 5/10/2018 3:25 PM	2018 3:25 PM	
			Ovantities		Annual Waste	Federal Hazard		Hazardous Components (For mixture only)		
Соттоп Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name	% Wt E	EHS CAS No.	
<b>Equipment Lubricating Oil</b>	Gallons	15000	3170		Water Cade	- Fire				
CAS No	Liquid	Other	1	Ambient	200300 0000					
	Type Mixture			Temperature Ambient						
Transformer Insulating Oil	Gallon	\$ 29000	7000			- Fire				
CAS No	<u>State</u> Liquid	Storage Container Other	1	Pressue Ambient	Waste Lode	1				
	Type	Days on Site: 365		Temperature Ambient				e.		
Hydraulic Oil	Gallon	\$ 250	150	150		- Fire				
CAS No	State	Storage Container Other	1	Pressue Ambient	Waste Code	1.				
	Type Mixture	Davs on Site: 365		Temperature Ambient	1					
Liquefied Petroleum Gas (lpg)	Cu. Fee	t 1000	67.7	250		- Fire	Propane	97 % 97 %	74-98-6	
CAS No	State	Storage Container Other	1	Pressue > Ambient	Waste Code	Release	Butanes	3%	106-97-8	
/4-98-6	Type			Temperature			Sulphur	1%	//04-34-9	
	City of Roseville, Roseville Electric Roseville Energy Park S120 Phillip Rd, Roseville 95747 Fuel Gas Drains Cas No. 68919-39-1 Fuel Gas Drains City of Roseville, Roseville Electric Roseville Energy Park S120 Phillip Rd, Roseville Electric Roseville 95747 S120 Phillip Rd, Roseville Electric Roseville 95747 Transformer Insulating Oil CAS No. Hydraulic Oil CAS No. Hydraulic Oil CAS No. CAS No. CA	s (lpg)	33 (1) 33		Si (jgdi)	Chernical location; Power Plant;           Noter Plant;           Init         Max, Daily         Largest Cont. Arge, Daily         Arge, Daily           Gallons         Storage Container Type.         Storage Container Bays on Site: 365         Pressue Ambient           Unit         Storage Container Type.         Storage Container Bays on Site: 365         250         150           State         Storage Container Days on Site: 365         Contential Location Pressue         Temperature           Type.         Max, Daily         Largest Cont. Arge, Daily         Arge, Daily         Arge, Daily           Unit         Max, Daily         Largest Cont. Arge, Daily         Arge, Daily         Arge, Daily           Unit         Max, Daily         Constites         Pressue         Arge Daily           Unit         Max, Daily         Largest Cont. Argest Cont.         Arge, Daily           Unit         Max, Daily         Largest Cont. Argest Cont.         Arge, Daily           Oli         Gallons         23000         3170         Pressue Ambient           Unit         Max, Daily         Largest Cont.         Arge, Daily           Oli         Gallons         2500         7000         Pressue Ambient           Storage Container Biquid	Chemical Jocation power Plant           Jower Plant           Jower Plant           Gallons         Storage Container Storage Container Liquid         Storage Container Storage Container Days on Site: 365         Ang. Daily Type Type Days on Site: 365         Ang. Daily Type Type Type Days on Site: 365         Ang. Daily Type Tensperature Type Days on Site: 365         Ang. Daily Type Tensperature Tensper	Controlationation         Controlationation         Controlation         Contreleasin         Controlation         <	Contract location         Contract location <th co<="" td=""></th>	

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CERS Business/Org. City of	City of Roseville, Roseville Electric			Chemical Location	ation			CERS ID	10207330	
	Roseville Energy Park			Cooling T	<b>Cooling Tower Chemical Enclosure</b>	ical Enclos	ure	Facility ID		
	5120 Phillip Rd, Roseville 95747							Status	Submitted on 5/10/2018 3:25 PM	/2018 3:25 PM
				Quantities		Annual Waste	Federal Hazard	т	Hazardous Components (For mixture only)	
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name		EHS CAS No.
	Corrosion Inhibitor	Gallons	800	1500	400					
	CAS No	State	Storage Container Tank Inside Building		Pressue	Waste Code				
	64665-57-2			c						
		Mixture	Type Mixture Days on Site: 365		Temperature Ambient					
	Corrosion Inhibitor	Gallons	55	55	55		- Acute Health	Sodium Hydroxide		1310-73-2
	CAS NO	State	Storage Container		Pressue	Waste Code		Sodium Molybdate		7631-95-0
		Liquid	Other		Ambient			Sodium Netshorste		7775-10-1
		Mixture	Type Mixture Davs on Site: 365		Ambient			Sodium Nitrite		7631-99-4
DOT: 8 - Corrosives (Liquids and	Ind Sulfuric Acid	Gallons	6000	6000	4000		- Reactive	Sulfuric Acid	% 56	7664-93-9
Solids)	LAC NO	State	Storage Container		Pressue		- Acute Health			
Corrosive, Water Reactive, Class	ass 7664-93-9	_	Aboveground Tank	¥	Ambient	Waste Lode	Waste Lode - Unronic nealth	water	1 %	
2, Toxic, Oxidizing, Class 1		Type			Temperature	1				
	Sodium Hypochlorite >5% - 12.5% Gallons	2.5% Gallons	8000	8000	5000		- Acute Health	SODIUM HYPOCHLORITE	TE 12 %	7681-52-9
		State	Storage Container		Pressue	Waste Code		WATER	88 %	7732-18-5
Corrosive, Irritant	7681-52-9		Aboveground Tank	×	Ambient					
		Type	Type Mixture Doug on Cito, 265		Temperature Amhient					

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7 %	Water	Waste Code	ature			Liquid Type Mixture	7664-93-9	Corrosive, Water Reactive, Class 2, Toxic, Oxidizing, Class 1
93 % 7664-93-9	Sulfuric Acid	- Reactive - Acute Health	4000 Pressue	6000	IS 6000 Storage Container	Gallons State		DOT: 8 - Corrosives (Liquids and Solids)
			t		100	Liquid Type Mixture	FC2386	
40 % 60 %	Alkoxylated Alcohol Water	- Chronic health Waste Code	280 Pressue Wa	400	IS 1600 Storage Container	Gallons State	AntiFoam	
			Ambient Temperature Ambient		Bag Days on Site: 365	Solid Type Pure	<u>CAS No</u> 497-19-8	
		- Acute Health Waste Code	0	3000	ls 3000	Pounds	Soda Ash 100%	
			Temperature Ambient		Type Mixture Days on Site: 365	Type Mixture		
		Waste Code	Pressue Wa Ambient		Storage Container Tote Bin	<u>State</u> Liquid	CAS No	×
			280	400	1S 800	Gallons	Anti-Scalant	
			Temperature Ambient		Days on Site: 365	Type Mixture		
		Waste Code	Pressue Wa Ambient		Storage Container Tote Bin	<u>State</u> Liquid	CAS No	
			280	400	S 800	Gallons	Coagulant	
			<u>Temperature</u> Ambient		Days on Site: 365	<u>Type</u> Mixture		Corrosive, Irritant
	Water	Waste Code	Pressue Ambient Wa		Storage Container Tote Bin	State Liquid	CAS No 7631-90-5	Solids)
7631-90-5	Sodium Bisulfite	- Acute Health	280	400	008 SI	Gallons	Sodium Bisulfite	DOT: 8 - Corrosives (Liquids and
			Temperature Ambient		Days on Site: 365	Type Mixture		
60 % 64741-44-2	Strait Run Middle Distillate	Waste Code	Pressue Wa Ambient		Storage Container Tote Bin	<u>State</u> Liquid	CAS No	
		- Acute Health	280	200	1s 1600	Gallons	AntiFoam	
			Temperature Ambient		Days on Site: 365	Type Mixture	CAS NO	
		Waste Code	Pressue Wa Ambient	Drum	Storage Container Plastic/Non-metalic Drum	<u>State</u> Liquid	Cleaner	
			55	55	IS 110	Gallons	Conntect 6000 Compressor	
ponents ≥ only) % Wt EHS CAS No.	Hazardous Components (For mixture only) Component Name % Wt	Annual Waste Federal Hazard Amount Categories	An Wa Avg. Daily An	Quantities Largest Cont.	Max. Daily	Unit	Common Name	DOT Code/Fire Haz. Class
Submitted on 5/10/2018 3:25 PM	Facility ID Status Submitted			ZLD Area			<b>Roseville Energy Park</b> 5120 Phillip Rd, Roseville 95747	Facility Name Roseville 5120 Phillip
0	CERS ID 10207330		ation	<b>Chemical Location</b>			<b>City of Roseville, Roseville Electric</b>	CERS Business/Org. City of Ro
		atrix Report	s Inventory M	nd Waste	Hazardous Materials And Wastes Inventory Matrix Report	Hazard		ないのである

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	Hazardou	Hazardous Materials And Wastes Inventory Matrix Report	And Waste:	s Inventor	/ Matrix	Report			
CERS Business/Org. City of Roseville, Roseville Electric	S. S. Marine	Survey Party	Chemical Location	ition	at the	Station Station	CERS ID	CERS ID 10207330	
Facility Name Roseville Energy Park			<b>ZLD</b> Area				Facility ID	D	
							Status	Status Submitted on 5/10/2018 3:25 PM	10/2018 3:25 PM
					Annual			Hazardous Components	t's
			Quantities		Waste	Federal Hazard		(For mixture only)	
DOT Code/Fire Haz. Class Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily Amount	Amount	Categories	Component Name	3M %	
quids and	Gallons	3000	3000	2500		- Reactive	Sodium Hydroxide	50 %	1310-73-2
Solids) CAS No		Storage Container	-1	Pressue	Waste Code	- Acute Health	Water	50 %	
ive, Toxic, Water Reactive,	Type	Upove5i onitio Tatin	7	Temperature			Sodium Chloride	1%	7647-14-5
1000	Mixture	Mixture Days on Site: 365		Ambient					

and the second		Hazardou	Hazardous Materials And Wastes Inventory Matrix Report	und Waste	s Inventor	y Matrix R	leport		
CERS Business/Org. City of Ro	CERS Business/Ore. City of Roseville, Roseville Electric			Chemical Location	tion	1	10 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	CERS ID	CERS ID 10207330
Facility Name Roseville	Roseville Energy Park			Recycled V	<b>Recycled Water Tank Area</b>	Area		Facility ID	D
	5120 Phillip Rd. Roseville 95747							Status	Status Submitted on 5/10/2018 3:25 PM
						Annual			Hazardous Components
				Quantities			Federal Hazard		(For mixture only)
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily Amount		Categories	Component Name	% Wt EHS CAS No.
DOT: 3 - Flammable and	Diesel Fuel No. 2	Gallons	290	290	290		- Fire		
Combustible Liquids	CAS No	State S	Storage Container Aboveground Tank		Ambient	Waste Code	Waste Code - Chronic health		
Combustible Liquid, Class II	0041/0-34-0		Days on Site: 365		Temperature	I			

### h. SOIL & WATER-7

	RECYCLE	POTABLE
	GALLONS	GALLONS
JANUARY	0	6732
FEBRUARY	303688	8976
MARCH	80784	6732
APRIL	95744	9724
ΜΑΥ	2282896	14960
JUNE	1133968	28424
JULY	15540448	86768
AUGUST	23128908	67320
SEPTEMBER	124916	29920
OCTOBER	14636116	18700
NOVEMBER	6167260	11220
DECEMBER	12796784	10472

MONTHLY	RECYCLE	POTABLE
MINIMUM	80784	6732
MAXIMUM	14636116	86768
AVERAGE	11737155	46145

GALLONS GALLONS

### ANNUAL TOTALS

	RECYCLE	POTABLE
GALLONS	76291512	299948
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
2018	76291512	299948	11737155	46145	14555332	80036

### i. SOIL & WATER -8

### Zero Liquid Discharge Operational Status Report

- Disruptions
  - Replaced vapor compressor B
  - Installed new demin pumps
  - Crystallizer B distillate heater
  - Replaced UF Membranes
  - ZLD belt press three way valve repair
  - ZLD PP-036 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 163 tons of solid waste in 2018
  - 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.

The second second second	STATE-OF-CALEPORNIA DEPARTMENT OF CALEFORNIA HIGHWAY PATROL	224518	135386	3/3/2017	4/1/2017	SIGNATION DATE	
	HAZARDOUS MATERIALS	CHP CARRIER NUMBER CA 274461	LOCATION 365	Duptie	inta 🚺	Replacement	
	CHP 360H (REV. 1/00) OPI 062 LICENSEE NAME AND PHYSICAL STATION ADDRESS (If different than below) FREMOUW ENVIRONMENTAL SERVICES, INC. 6940 TREMONT ROAD DIXON CA, US 95620	PROPERTY OF THE CALLFORNIA HIGHWAY PATROL (CHP) The original values because our table solid table interaction black of basics as indicated on the literace and a legible copy must be ceried in any value black or carbination transporter hazardowa material must be presented to any CHP originate upon request. This because 34:04:14045FE0A8L and must control of the literated activity shall require a new locess. This because a request per memory by an application and appropriate leve to the CHP. Persons values the memory be removed by sub-titing an application and appropriate leve to the CHP. Persons values from the transport person of the second activity shall require a new locess. This because any the memory by sub-titing an application and appropriate leve to CHP. Persons values from the transport persons. The transmission of the second strate the activity requires a locess. This literate is (100 July 35 sco This carrier is on the upopial read strate activity person making lasts as indicated below.					
	LICENSEE NAME AND MAILING ADDRESS FREMOUW ENVIRONMENTAL SERVICES, INC. 6940 TREMONT ROAD DIXON CA, US 95620	(HAKK) Explosives subject to Division 14, California Vahidre Code (CVC).     (HAKH) Poison Inhalation Hearni materials in buik packages subject to Division     14,3,CVC:     (HAKRCO) Highway Route Controlled Quantity ratifactive materials subject to     Division 14,5,CVC:     Any parsen who downs subject to access the release of hearnow materials subject to     Division 14,5,CVC:     Any parsen who downs subject to access the release of hearnow materials analyted to     Division 14,5,CVC:					
	STATE OF CASEGORIAN DEPARTMENT OF CALEFORNIA HIGHWAY PATROL HAZARDOUS MATERIALS TRANSPORTATION LICENSE CHP 360H (REV. 1/00) OPI 062		LICENSE HEIHBER 135386 LOCATION 365 OF THE CALL		GHWAY PA	3/31/2019 Replacement Renewal ROL (CHP)	
	LICENSEE NAME AND PHYSICAL STATION ADDRESS (if different than below) FREMOUW ENVIRONMENTAL SERVICES, INC. 6940 TREMONT ROAD DIXON CA, US 95620	In all organital, enzy of nation activities in any vehicles or combination transporting hauszubus motionsta must be presented to any CHP of the cryptometry of the combination transporting hauszubus motionsta by competendent to the CHP upon demand or as tagained by law. A majority change in ownership or openal of the Discard activity that traggies a new learners. This features any be renewed by submitti, an opplication and appropriate like to the CHP. Persons whose learners have apprinted a are offeware law calls and appropriate like to the CHP. Persons whose learners have apprinted are of deware relevant of the Discard activity that beats the activity relevant as the test of the CHP. PERIOD, Fax learning information contact CHP. Commercial Vehicle Service at (1916) 913 942.9 This conter is on the special routing/sale stopping place multing lists as indicated below.					
	LICENSEE NAME AND MAILING ADDRESS FREMOUW ENVIRONMENTAL SERVICES, INC. 6940 TREMONT ROAD DIXON CA, US 95620	The cartler is on in Brydest Roung-set septemp pade mining und as inductive section  (MKX) Explorates subject to Division 14, California Vahicle Code (CVC).  (MKX) Explorates subject to Division 14, California Vahicle Code (CVC).  (MKX) Explorates a subject to Division 14, California Vahicle Code (CVC).  (MKX) MARC() Michael Control (MKC) and Michael Control (MKC) Michael Set (MKC) Michael Control (MKC) Michael Con					

### 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.

### I. 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 the 2017-2018 timeline 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.