DOCKETED	
Docket Number:	99-AFC-01C
Project Title:	Elk Hills Power Project - Compliance
TN #:	231095
Document Title:	Elk Hills Power Plant - 2018 Annual Compliance Report
Description:	2018 Annual Compliance Report for the Elk Hills Power Plant.
Filer:	Mary Dyas
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	12/11/2019 6:32:26 AM
Docketed Date:	12/11/2019

Elk Hills Power

Annual Compliance Report for 2018

Submitted to:

California Energy Commission

2018 - Annual Compliance Report

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BIO-2 The CPM approved Designated Biologist shall perform the following during project construction and operation:
1. Advise the project owners Construction Manager on the implementation of the Biological Resource Conditions of Certification;
2. Supervise or conduct mitigation, monitoring and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as, wetlands and special status species; and
3. Notify the project owner and the CPM of any non-compliance with any Biological Resources Condition of Certification.

Verification: During project construction, the Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report.

Status: The last of the three-project construction post reclamation and revegetation annual record summaries was sent to CEC on December 16, 2005 as part of the Annual Biological Compliance Report, BRMIMP Section 8.5. In 2017 project operation, there were no activities requiring biological monitoring as specified in Section 7 of the BRMIMP.

COMPLETED REQUIREMENT

No activity for the reporting period of 2018

2018 - Annual Compliance Report

HAZ-1 Unless approved in advance by the CPM, other than those identified in Appendix B, the project owner shall not use any hazardous material in reportable quantities--as specified in Title 40, Code Of Federal Regulations, Part 355, Subpart J, section 355.50. The proposed project shall not use anhydrous ammonia, but instead shall use aqueous ammonia with a concentration of less than 20%.

Verification: The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.

Status: Record summaries are provided.

10235623Document Submittal 02072018.

Site Identification

ELK HILLS POWER, LLC
4026 SKYLINE RD
TUPMAN, CA 93276
County
Kern

CERS ID
10235623
EPA ID Number
CAR000108498

Submittal Status

Submitted on 2/7/2018 by *Sonnie Pineda* of ELK HILLS POWER, LLC (TUPMAN, CA)
Submittal was ***Accepted***; Processed on 7/25/2018 by *SAN JUAN, CHAD* for Kern County Environmental Health Services Department

Hazardous Materials

Does your facility have on site (for any purpose) at any one time, hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or is regulated under more restrictive inventory local reporting requirements (shown below if present); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	**Yes**

Underground Storage Tank(s) (UST)

Does your facility own or operate underground storage tanks?	**No**

Hazardous Waste

Is your facility a Hazardous Waste Generator?	**Yes**
Does your facility treat hazardous waste on-site?	**No**
Is your facility's treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	**No**
Does your facility consolidate hazardous waste generated at a remote site?	**No**
Does your facility need to report the closure/removal of a tank that was classified as hazardous waste and cleaned on-site?	**No**
Does your facility generate in any single calendar month 1,000 kilograms (kg) (2,200 pounds) or more of federal RCRA hazardous waste, or generate in any single calendar month, or accumulate at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste; or generate or accumulate at any time more than 100 kg (220 pounds) of spill cleanup materials contaminated with RCRA acute hazardous waste.	**No**
Is your facility a Household Hazardous Waste (HHW) Collection site?	**No**

Excluded and/or Exempted Materials

Does your facility recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?	**No**
Does your facility own or operate ASTs above these thresholds? Store greater than 1,320 gallons of petroleum products (new or used) in aboveground tanks or containers.	**Yes**
Does your facility have Regulated Substances stored onsite in quantities greater than the threshold quantities established by the California Accidental Release prevention Program (CalARP)?	**Yes**

Additional Information

ELk HIlls Power, LLC EPA ID number is CAR000108498

Facility/Site

ELK HILLS POWER, LLC
4026 SKYLINE RD
TUPMAN, CA 93276

CERS ID
10235623

Submittal Status

Submitted on 2/7/2018 by *Sonnie Pineda* of ELK HILLS POWER, LLC (TUPMAN, CA)
Submittal was ***Accepted***; Processed on 7/25/2018 by *SAN JUAN, CHAD* for Kern County Environmental Health Services Department

Identification

ELK HILLS POWER, LLC

Operator Phone	Business Phone	Business Fax
(661) 765-1810	(661) 765-1800	(661) 765-2946

Beginning Date	Ending Date	
Dun & Bradstreet	**SIC Code**	**Primary NAICS**
	4911	

Facility/Site Mailing Address

4026 SKYLINE ROAD
TUPMAN, CA 93276

Primary Emergency Contact

RONALD MIKULS
Title
EMERGENCY RESPONSE SUPERVISOR

Business Phone	24-Hour Phone	Pager Number
(661) 763-6069	(661) 699-0724	

Owner

ELK HILLS POWER
(661) 765-1800
4026 SKYLINE ROAD
TUPMAN, CA 93276

Secondary Emergency Contact

BRANDON MYERS
Title
PLANT MANAGER

Business Phone	24-Hour Phone	Pager Number
(661) 765-1801	(661) 213-8248	

Billing Contact

ELK HILLS POWER LLC
(661) 765-1809
4026 SKYLINE ROAD
TUPMAN, CA 93276

Environmental Contact

Sonnie Pineda
(661) 765-1805 Sonnie.Pineda@crc.com
4026 SKYLINE ROAD
TUPMAN, CA 93276

Name of Signer	Signer Title	Document Preparer
Sonnie Pineda	Sr Environmental Advisor	Sonnie Pineda

Additional Information

Locally-collected Fields

Some or all of the following fields may be required by your local regulator(s).

Property Owner

Phone

Mailing Address

,

Assessor Parcel Number (APN)

Number of Employees

Facility ID

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **AMMONIA STORAGE AREA;SOUTH OF THE FACILITY**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic	**AQUEOUS AMMONIA (19%)** CAS No 1336-21-6 ✔EHS State: Liquid Type: Mixture	**Pounds** Storage Container: Aboveground Tank Days on Site: 365	**40032**	**20016**	40032 Pressue: > Ambient Temperature: Ambient	0 Waste Code	- Physical Flammable - Health Acute Toxicity - Health Skin Corrosion Irritation	AMMONIUM HYDROXIDE Water	19 % 81 %	✔	1336-21-6

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 1 AREA;CT UNIT 1**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CARBON DIOXIDE** CAS No 124-38-9	**Cu. Feet** State Gas Type Pure	**105000** Storage Container Aboveground Tank Days on Site: 365	**105000**	105000 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**COMPRESSED GAS - HELIUM** CAS No 7440-59-7	**Cu. Feet** State Gas Type Pure	**200** Storage Container Cylinder Days on Site: 365	**200**	200 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure				
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**TURBINE OIL** CAS No	**Gallons** State Liquid Type Mixture	**16700** Storage Container Aboveground Tank Days on Site: 365	**6200**	6200 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable	PETROLEUM HYDROCARBONS ADDITIVES	100 % 0 %		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 1 AREA;CT UNIT 1 PECC**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic, Explosive	**LEAD ACID BATTERIES** CAS No NA	**Gallons** State Liquid Type Mixture	**1450** Storage Container Other Days on Site: 365	**25**	1450 Pressue Ambient Temperature Ambient	Waste Code 792	- Physical Explosive - Health Carcinogenicity - Health Acute Toxicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	ELECTROLYTE LEAD POLYPROPYLENE	16 % 77 % 6 % 0 % 0 %	✓ ✓	7664-93-9 7439-92-1 9003-07-0

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 1 AREA;CT UNIT 1 TRANSFORMER**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**DIALA AX OIL** CAS No 64742-53-6	**Gallons** State Liquid Type Mixture	**4133** Storage Container Aboveground Tank Days on Site: 365	**4133**	4133 Pressue Ambient Temperature Ambient	0 Waste Code	- Health Respiratory Skin Sensitization	HIGHLY REFINED OIL	100 %		MIXTURE
								SEV HYDROTREAT LIGHT NAPHTHENIC DISTILLATE	60 %		64742-53-6
								HYDROTREATED MIDDLE DISTILLATE	60 %		64742-46-7

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 1 AREA;UNIT 1 CEMS**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, HIGH RANGE**	**Cu. Feet**	**1440**	**144**	720		- Physical Gas Under Pressure	NITRIC OXIDE	0 %		10102-43-9
	CAS No 7727-37-9	State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code		CARBON MONOXIDE	0 %		630-08-0
		Type: Mixture	Days on Site: 365		Temperature: Ambient			NITROGEN	100 %		7727-37-9
									0 %		
									0 %		
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, LOW RANGE**	**Cu. Feet**	**1440**	**144**	720		- Physical Gas Under Pressure	NITRIC OXIDE	0 %		10102-43-9
	CAS No 7727-37-9	State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code		CARBON MONOXIDE	0 %		630-08-0
		Type: Mixture	Days on Site: 365		Temperature: Ambient			NITROGEN	100 %		7727-37-9
									0 %		
									0 %		
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, ZERO**	**Cu. Feet**	**1440**	**144**	720		- Physical Gas Under Pressure	NITROGEN	79 %		7727-37-9
	CAS No 7727-37-9	State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code		OXYGEN	21 %		7728-44-7
		Type: Mixture	Days on Site: 365		Temperature: Ambient				0 %		
									0 %		
									0 %		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 2 AREA;CT UNIT 2**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CARBON DIOXIDE** CAS No 124-38-9	**Cu. Feet** State Gas Type Pure	**105000** Storage Container Aboveground Tank Days on Site: 365	**105000**	105000 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**COMPRESSED GAS - HELIUM** CAS No 7440-59-7	**Cu. Feet** State Gas Type Pure	**200** Storage Container Cylinder Days on Site: 365	**200**	200 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure				
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**TURBINE OIL** CAS No	**Gallons** State Liquid Type Mixture	**16700** Storage Container Aboveground Tank Days on Site: 365	**6200**	6200 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable	PETROLEUM HYDROCARBONS ADDITIVES	100 % 0 %		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 2 AREA;CT UNIT 2 PECC**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic, Explosive	**LEAD ACID BATTERIES** CAS No NA	**Gallons** State Liquid Type Mixture	**1450** Storage Container Other Days on Site: 365	**25**	1450 Pressue Ambient Temperature Ambient	Waste Code 792	- Physical Explosive - Health Carcinogenicity - Health Acute Toxicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	ELECTROLYTE LEAD POLYPROPYLENE	16 % 77 % 6 % 0 % 0 %	✓ ✓	7664-93-9 7439-92-1 9003-07-0

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 2 AREA;CT UNIT 2 TRANSFORMER**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**DIALA AX OIL**	**Gallons**	**4133**	**4133**	4133		- Health	HIGHLY REFINED OIL	100 %		MIXTURE
	CAS No 64742-53-6	State Liquid	Storage Container Aboveground Tank		Pressue Ambient	Waste Code	Respiratory Skin Sensitization	SEV HYDROTREAT LIGHT NAPHTHENIC DISTILLATE	60 %		64742-53-6
		Type Mixture	Days on Site: 365		Temperature Ambient			HYDROTREATED MIDDLE DISTILLATE	60 %		64742-46-7
									0 %		
									0 %		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COMBUSTION TURBINE 2 AREA;UNIT 2 CEMS**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, HIGH RANGE** CAS No 7727-37-9	**Cu. Feet** State Gas Type Mixture	**1440** Storage Container Cylinder Days on Site: 365	**144**	720 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure	NITRIC OXIDE CARBON MONOXIDE NITROGEN	0 % 0 % 100 % 0 % 0 %		10102-43-9 630-08-0 7727-37-9
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, LOW RANGE** CAS No 7727-37-9	**Cu. Feet** State Gas Type Mixture	**1440** Storage Container Cylinder Days on Site: 365	**144**	720 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure	NITRIC OXIDE CARBON MONOXIDE NITROGEN	0 % 0 % 100 % 0 % 0 %		10102-43-9 630-08-0 7727-37-9
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, ZERO** CAS No 7727-37-9	**Cu. Feet** State Gas Type Mixture	**1440** Storage Container Cylinder Days on Site: 365	**144**	720 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure	NITROGEN OXYGEN	79 % 21 % 0 % 0 % 0 %		7727-37-9 7728-44-7

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **CONTRACTOR GAS STORAGE**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**ARGON COMPRESSED** CAS No 7440-37-1	**Cu. Feet** State: Gas Type: Pure	**1800** Storage Container: Cylinder Days on Site: 365	**335**	1000 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure				
DOT: 2.1 - Flammable Gases Unstable (Reactive), Class 2, Flammable Gas	**COMPRESSED GAS - ACETYLENE** CAS No 74-86-2	**Cu. Feet** State: Gas Type: Pure	**435** Storage Container: Cylinder Days on Site: 365	**144**	288 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure				
DOT: 2.2 - Nonflammable Gases Oxidizing, Class 2	**OXYGEN** CAS No 7782-44-7	**Cu. Feet** State: Gas Type: Pure	**500** Storage Container: Cylinder Days on Site: 365	**250**	250 Pressue: > Ambient Temperature: Ambient	Waste Code	- Physical Oxidizer				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COOLING TOWER CHEMICAL AREA**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**BLEACH (SODIUM HYPOCHLORITE)** CAS No 7681-52-9	**Gallons** State Liquid Type Mixture	**6200** Storage Container Aboveground Tank Days on Site: 365	**6200**	6000 Pressue Ambient Temperature Ambient	0 Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	SODIUM HYPOCHLORITE	13 %		7681-52-9
	NALCO 3D TRASAR 3DT157 CAS No	**Gallons** State Liquid Type Mixture	**400** Storage Container Tote Bin Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code					
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NALCO 3D TRASAR 3DT487** CAS No	**Gallons** State Liquid Type Mixture	**2000** Storage Container Aboveground Tank Days on Site: 365	**2000**	1200 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	Phosphoric Acid	10 %		7664-38-2
DOT: 6.1 - Toxic Substances Toxic, Corrosive	**NALCO 90005 - MICROBIOCIDE** CAS No 5538-94-3	**Gallons** State Liquid Type Mixture	**110** Storage Container Tote Bin Days on Site: 365	**110**	110 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	GLYCEROL DIMETHYL-DIOCTYL-AMMONIUM CHLORIDE	10 % 60 %		56-81-5 5538-94-3
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NALSPERSE 73550 - BIODETERGENT** CAS No	**Gallons** State Liquid Type Mixture	**400** Storage Container Tote Bin Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	NONIONIC ALKYL POLYGLYCOSIDE	60 %		PROPRIETARY
DOT: 9 - Misc. Hazardous Materials	**SODIUM CARBONATE (SODA ASH)** CAS No 497-19-8	**Pounds** State Solid Type Pure	**50** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**50**	50 Pressue Ambient Temperature Ambient	0 Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COOLING TOWER CHEMICAL AREA**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**SULFURIC ACID** CAS No 7664-93-9	**Gallons** State Liquid Type Pure	**6000** Storage Container Aboveground Tank Days on Site: 365	**6000**	6000 Pressue Ambient Temperature Ambient	Waste Code	- Physical Corrosive To Metal - Health Carcinogenicity - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	SULFURIC ACID	93 %		7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **COOLING TOWER CHEMICAL AREA; DEMIN BLDG**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 5.1 - Oxidizing Substances Oxidizing, Class 1, Corrosive	**PURATE** CAS No	**Gallons** State: Liquid Type: Mixture	**1600** Storage Container: Tote Bin Days on Site: 365	**450**	400 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Oxidizer - Health Acute Toxicity - Health Serious Eye Damage Eye Irritation	Sodium Chlorate Hydrogen Peroxide	60 % 10 %		7775-09-9 7722-84-1

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **DEMINERALIZATION AREA;NEUTRALIZATION TANKS**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic	**CAUSTIC (SODIUM HYDROXIDE)** CAS No 1310-73-2	**Gallons** State Liquid Type Mixture	**0** Storage Container Aboveground Tank Days on Site: 0	**6000**	0 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	SODIUM HYDROXIDE	50 %		1310-73-2
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic	**SULFURIC ACID** CAS No 7664-93-9	**Gallons** State Liquid Type Mixture	**0** Storage Container Aboveground Tank Days on Site: 0	**6000**	0 Pressue Ambient Temperature Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	SULFURIC ACID	93 % 0 % 0 % 0 % 0 %		7664-93-9
DOT: 9 - Misc. Hazardous Materials	**WASTE WATER** CAS No	**Gallons** State Liquid Type Mixture	**80000** Storage Container Aboveground Tank Days on Site: 365	**40000**	25000 Pressue Ambient Temperature Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	WASTEWATER	100 %		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **DEMINERALIZATION AREA;WATER TREATMENT BLD**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**HYPERSPERSE MSI410 - ANTISCALANT** CAS No 7647-01-0	**Gallons** State Liquid Type Mixture	**220** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	HYDROCHLORIC ACID	1 %		7647-01-0
DOT: 8 - Corrosives (Liquids and Solids) Toxic	**NALCO 7408/ SODIUM BISULFITE** CAS No 7613-90-5	**Gallons** State Liquid Type Mixture	**400** Storage Container Tote Bin Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity	SODIUM BISULFITE WATER	60 % 40 %		7631-90-5 7732-18-5
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**SHINY-SIDE** CAS No 1310-73-2	**Gallons** State Liquid Type Mixture	**20** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**20**	20 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	SODIUM HYDROXIDE TETRASODIUM ETHYLENEDIAMINETETRAACETATE			1310-73-2
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Water Reactive, Class 1	**SODIUM HYDROXIDE 25%** CAS No 1310-73-2	**Gallons** State Liquid Type Mixture	**55** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**55**	55 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	Sodium Hydroxide	10 %		1310-73-2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	**ELK HILLS POWER, LLC**	Chemical Location	CERS ID **10235623**
Facility Name	**ELK HILLS POWER, LLC** 4026 SKYLINE RD, TUPMAN 93276	**DEMINERLIZATION AREA;WATER TREATMENT BLD;WASTE PAD**	Facility ID Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**SODIUM CARBONATE (SODA ASH)** CAS No 497-19-8	Pounds State Solid Type Pure	**50** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**50**	50 Pressue Ambient Temperature Ambient	0 Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **FIRE PUMP BUILDING**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class III-A, Toxic	**#2 DIESEL FUEL** CAS No 68476-34-6	**Gallons** State Liquid Type Pure	**360** Storage Container Tank Inside Building Days on Site: 365	**360**	360 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable - Health Carcinogenicity - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard	DIESEL FUEL NO. 2 MINERAL OIL MIST	100 % 0 %		68476-34-6 8012-95-1

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **GAS STORAGE**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CARBON DIOXIDE** CAS No 124-38-9	**Cu. Feet** State Gas Type Pure	**105000** Storage Container Aboveground Tank Days on Site: 365	**105000**	105000 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure				
DOT: 2.1 - Flammable Gases Flammable Gas	**HYDROGEN** CAS No 1333-74-0	**Cu. Feet** State Gas Type Pure	**120000** Storage Container Cylinder, Other Days on Site: 365	**120000**	120000 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **MCC BATTERY ROOM**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**LEAD ACID BATTERIES** CAS No NA	**Gallons** State Liquid Type Mixture	**1500** Storage Container Other Days on Site: 365	**25**	1500 Pressue Ambient Temperature Ambient	Waste Code 792	- Health Skin Corrosion Irritation	ELECTROLYTE LEAD POLYPROPYLENE	16 % 77 % 6 %	✓ ✓	7664-93-9 7439-92-1 9003-07-0

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **O/W SEPARATOR AREA**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 5.1 - Oxidizing Substances Oxidizing, Class 3, Water Reactive, Class 1, Corrosive, 32	**LESLIES POWERPRO PLUS** CAS No 7778-54-3	**Pounds** State Solid Type Pure	**320** Storage Container Can Days on Site: 365	**50**	300 Pressue Ambient Temperature Ambient	0 Waste Code	- Physical Oxidizer - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **OIL STORAGE AREA;FUEL/OIL STORAGE**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class II, Toxic	**#2 DIESEL FUEL** CAS No 68476-34-6	**Gallons** State Liquid Type Pure	**165** Storage Container Steel Drum Days on Site: 365	**55**	55 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable - Health Carcinogenicity - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard	DEISEL FUEL NO. 2 MINERAL OIL MIST	100 % 0 %		68476-34-6 8012-95-1
DOT: 9 - Misc. Hazardous Materials	**ALKALINE DETERGENT-DUO POWER** CAS No 7758-29-4	**Gallons** State Liquid Type Mixture	**30** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**30**	30 Pressue Ambient Temperature Ambient	0 Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	SODIUM TRIPOLYPHOSPHATE SODIUM XYLENE SULFONATE DODECYL BENZENE SULFONATE			7758-29-4 1300-72-7 1886-81-3
DOT: 9 - Misc. Hazardous Materials	**DETERGENT- G9089 SUPER POWER** CAS No 7758-29-4	**Gallons** State Liquid Type Mixture	**55** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**55**	55 Pressue Ambient Temperature Ambient	0 Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	SODIUM TRIPOLYPHOSPHATE SODIUM SILICATE ETHYLENE GLYCOL MONOBUTYL ETHER NONYL PHENOL ETHOXYLATE			1344-09-8 7758-29-4 111-76-2 009016-45-9
DOT: 3 - Flammable and Combustible Liquids	**DTE OIL/LUBE OILS/GEAR OILS** CAS No 64742-53-6	**Gallons** State Liquid Type Mixture	**550** Storage Container Steel Drum, Can Days on Site: 365	**55**	550 Pressue Ambient Temperature Ambient	0 Waste Code	- Physical Flammable	HIGHLY REFINED OIL SEV HYDROTREAT LIGHT NAPHTHENIC DISTILLATE HYDROTREATED MIDDLE DISTILLATE	100 % 60 % 60 %		MIXTURE 64742-53-6 64742-46-7

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **OIL STORAGE AREA;FUEL/OIL STORAGE**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**FIRE RESISTANT HYDRAULIC FLUID** CAS No 25155-23-1	**Gallons** State Liquid Type Mixture	**220** Storage Container Steel Drum Days on Site: 365	**55**	110 Pressue Ambient Temperature Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	TRIXYLYL PHOSPHATE T-BUTYLPHENYL DIPHENYL PHOSPHATE BIS(T-BUTYLPHENYL) PHENYL PHOSPHATE TRIPHENYL PHOSPHATE TRI(T-BUTYLPHENYL) PHOSPHATE	50 % 21 % 21 % 15 % 9 %		25155-23-1 56803-37-3 65652-41-7 115-86-6 78-33-1
DOT: 9 - Misc. Hazardous Materials	**PREMIUM TURBINE FLUID ADDITIVE** CAS No	**Gallons** State Liquid Type Pure	**200** Storage Container Tote Bin Days on Site: 365	**400**	200 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **RO UNIT AREA**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**HYPERSPERSE MSI410 - ANTISCALANT** CAS No 7647-01-0	**Gallons** State Liquid Type Mixture	**440** Storage Container Plastic/Non-metalic Drum Days on Site: 366	**55**	220 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	PHOSPHONIC ACID DERIVATIVE			TSRN 125438 - 6

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **SAMPLE BUILDING**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Toxic, Corrosive	**NALCO 5711 - AMINE** CAS No 2516-34-9	**Gallons** State Liquid Type Mixture	**400** Storage Container Tote Bin Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	AMMONIA MONOETHANOLAMINE	10 % 5 % 0 % 0 % 0 %	✓	7664-41-7 141-43-5
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic	**NALCO BT-4000 - SODIUM HYDROXIDE** CAS No 1310-73-2	**Gallons** State Liquid Type Mixture	**400** Storage Container Tote Bin Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	SODIUM HYDROXIDE	5 %		1310-73-2
DOT: 9 - Misc. Hazardous Materials	**PHOSPHATE** CAS No 7758-29-4	**Gallons** State Liquid Type Mixture	**55** Storage Container Steel Drum Days on Site: 365	**55**	55 Pressue Ambient Temperature Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	SODIUM TRIPOLYPHOSPHATE	5 %		7758-29-4

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC** | Chemical Location | CERS ID **10235623**

Facility Name **ELK HILLS POWER, LLC** | **STEAM TURBINE AREA** | Facility ID

4026 SKYLINE RD, TUPMAN 93276 | Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**COMPRESSED GAS - HELIUM** CAS No 7440-59-7	**Cu. Feet** State Gas Type Pure	**200** Storage Container Cylinder Days on Site: 365	**200**	200 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure				
DOT: 9 - Misc. Hazardous Materials	**FIRE RESISTANT HYDRAULIC FLUID** CAS No 25155-23-1	**Gallons** State Liquid Type Mixture	**135** Storage Container Aboveground Tank Days on Site: 365	**135**	110 Pressue Ambient Temperature Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	TRIXYLYL PHOSPHATE T-BUTYLPHENYL DIPHENYL PHOSPHATE BIS(T-BUTYLPHENYL) PHENYL PHOSPHATE TRIPHENYL PHOSPHATE TRI(T-BUTYLPHENYL) PHOSPHATE	50 % 21 % 21 % 15 % 9 %		25155-23-1 56803-37-3 65652-41-7 115-86-6 78-33-1
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**TURBINE OIL** CAS No	**Gallons** State Liquid Type Mixture	**16700** Storage Container Aboveground Tank Days on Site: 365	**6200**	6200 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable	PETROLEUM HYDROCARBONS ADDITIVES	100 % 0 %		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **STEAM TURBINE AREA;ST TRANSFORMER**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**DIALA AX OIL** CAS No 64742-53-6	**Gallons** State Liquid Type Mixture	**4133** Storage Container Aboveground Tank Days on Site: 365	**4133**	4133 Pressue Ambient Temperature Ambient	Waste Code	- Health Respiratory Skin Sensitization	HIGHLY REFINED OIL	100 %		MIXTURE
								SEV HYDROTREAT LIGHT NAPHTHENIC DISTILLATE	60 %		64742-53-6
								HYDDROTREATED MIDDLE DISTILLATE	60 %		64742-46-7
									0 %		
									0 %		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **SWITCH YARD**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**SULFUR HEXAFLUORIDE** CAS No 2551-62-4	**Cu. Feet** State Gas Type Pure	**400** Storage Container Cylinder Days on Site: 365	**200**	400 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant	Sulfur Hexafluoride	100 %		2551-62-4

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **SWITCHYARD BLDG**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic, Explosive	**LEAD ACID BATTERIES** CAS No NA	**Gallons** State Liquid Type Mixture	**600** Storage Container Other Days on Site: 365	**15**	600 Pressue Ambient Temperature Ambient	Waste Code 792	- Physical Explosive - Health Carcinogenicity - Health Acute Toxicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	ELECTROLYTE LEAD POLYPROPYLENE	16 % 77 % 6 % 0 % 0 %	✓ ✓	7664-93-9 7439-92-1 9003-07-0

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **WAREHOUSE EAST YARD**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, HIGH RANGE** CAS No 7727-37-9	**Cu. Feet**	**1440**	**144**	720	0	- Physical Gas Under Pressure	NITRIC OXIDE CARBON MONOXIDE NITROGEN	0 % 0 % 100 %		10102-43-9 630-08-0 7727-37-9
		State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code			0 %		
		Type: Mixture	Days on Site: 365		Temperature: Ambient				0 %		
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, LOW RANGE** CAS No 7727-37-9	**Cu. Feet**	**1440**	**144**	720	0	- Physical Gas Under Pressure	NITRIC OXIDE CARBON MONOXIDE NITROGEN	0 % 0 % 100 %		10102-43-9 630-08-0 7727-37-9
		State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code			0 %		
		Type: Mixture	Days on Site: 365		Temperature: Ambient				0 %		
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS, ZERO** CAS No 7727-37-9	**Cu. Feet**	**1440**	**144**	720	0	- Physical Gas Under Pressure	NITROGEN OXYGEN	79 % 21 %		7727-37-9 7728-44-7
		State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code			0 %		
		Type: Mixture	Days on Site: 365		Temperature: Ambient				0 %		
DOT: 2.1 - Flammable Gases Unstable (Reactive), Class 2, Flammable Gas	**COMPRESSED GAS - ACETYLENE** CAS No 74-86-2	**Cu. Feet**	**300**	**144**	144		- Physical Flammable - Physical Gas Under Pressure				
		State: Gas	Storage Container: Cylinder		Pressue: Ambient	Waste Code					
		Type: Pure	Days on Site: 365		Temperature: Ambient						
DOT: 2.1 - Flammable Gases Flammable Gas	**COMPRESSED GAS - CARBON MONOXIDE** CAS No 630-08-0	**Cu. Feet**	**200**	**100**	200		- Physical Gas Under Pressure - Health Acute Toxicity - Health Reproductive Toxicity - Health Specific Target Organ Toxicity - Health Simple Asphyxiant				
		State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code					
		Type: Pure	Days on Site: 365		Temperature: Ambient						
DOT: 2.2 - Nonflammable Gases	**COMPRESSED GAS - HELIUM** CAS No 7440-59-7	**Cu. Feet**	**3000**	**400**	2000		- Physical Gas Under Pressure				
		State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code					
		Type: Pure	Days on Site: 365		Temperature: Ambient						
DOT: 2.1 - Flammable Gases Flammable Gas	**COMPRESSED GAS - HYDROGEN** CAS No 1333-74-0	**Cu. Feet**	**400**	**200**	300		- Physical Flammable - Physical Gas Under Pressure				
		State: Gas	Storage Container: Cylinder		Pressue: > Ambient	Waste Code					
		Type: Pure	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **WAREHOUSE EAST YARD**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**COMPRESSED GAS - NITROGEN** CAS No 7727-37-9	**Cu. Feet** State Gas Type Pure	**2000** Storage Container Cylinder Days on Site: 365	**200**	1000 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure				
DOT: 2.2 - Nonflammable Gases Oxidizing, Class 2	**OXYGEN** CAS No 7782-44-7	**Cu. Feet** State Gas Type Pure	**1000** Storage Container Cylinder Days on Site: 365	**250**	250 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Oxidizer				
DOT: 2.1 - Flammable Gases Flammable Gas	**PROPANE - LIQUEFIED PETROLEUM GAS** CAS No 74-98-6	**Cu. Feet** State Gas Type Pure	**1200** Storage Container Cylinder Days on Site: 365	**150**	900 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure	Liquefied Petroleum Gas (lpg)	100 %		74-98-6

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **ELK HILLS POWER, LLC**
Facility Name **ELK HILLS POWER, LLC**
4026 SKYLINE RD, TUPMAN 93276

Chemical Location **WAREHOUSE EAST YARD; WELDING CART**

CERS ID **10235623**
Facility ID
Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.1 - Flammable Gases Flammable Gas	**COMPRESSED GAS - ACETYLENE** CAS No 74-86-2	**Cu. Feet** State: Gas Type: Pure	**1440** Storage Container: Cylinder Days on Site: 365	**1440**	1440 Pressue: > Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure				
DOT: 5.1 - Oxidizing Substances	**COMPRESSED GAS - OXYGEN** CAS No 7782-44-7	**Cu. Feet** State: Gas Type: Pure	**1440** Storage Container: Cylinder Days on Site: 365	**1440**	1440 Pressue: > Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure				

Hazardous Materials And Wastes Inventory Matrix Report

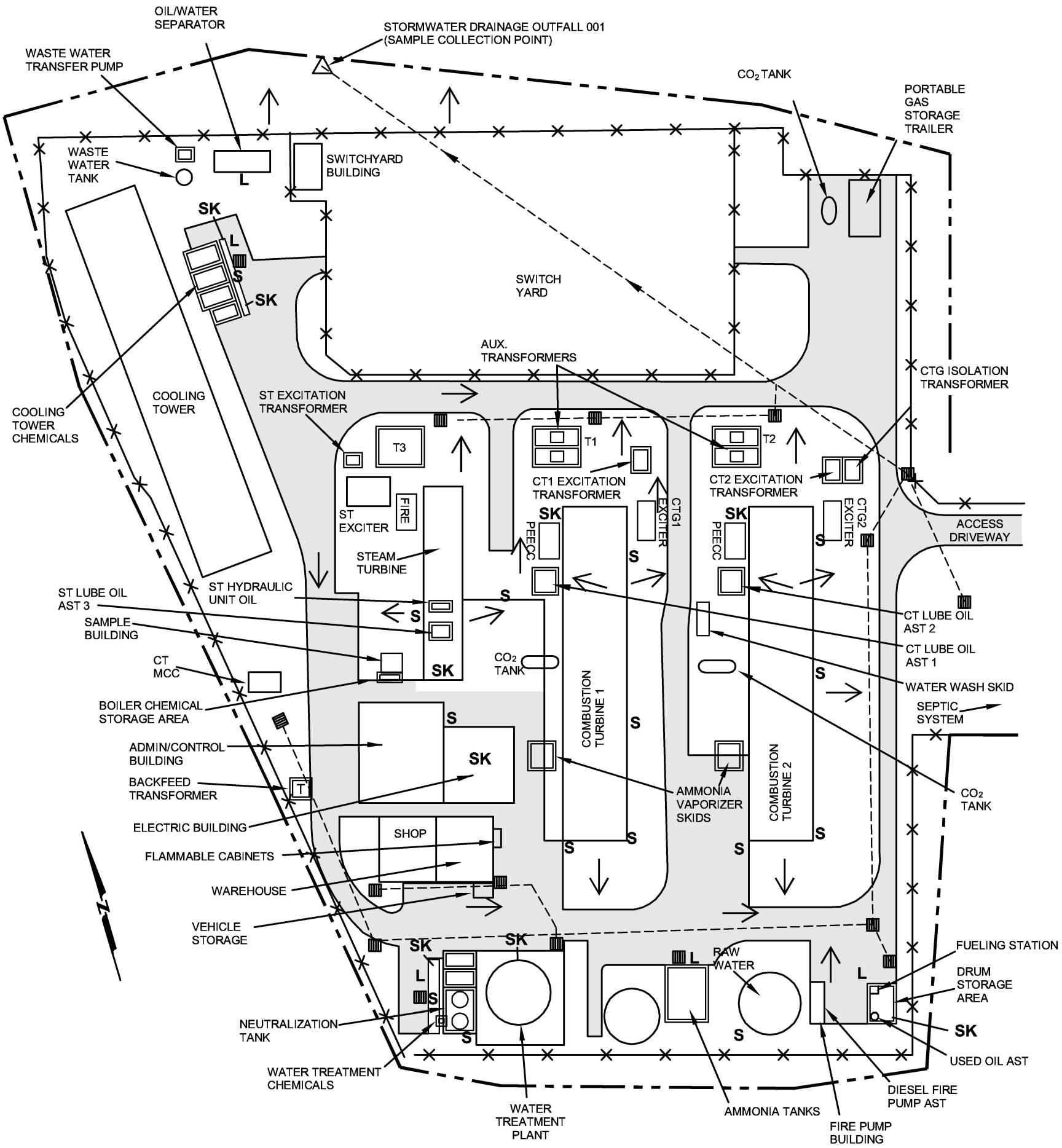
CERS Business/Org. **ELK HILLS POWER, LLC** | Chemical Location | CERS ID **10235623**

Facility Name **ELK HILLS POWER, LLC** | **WASTE PAD AREA** | Facility ID

4026 SKYLINE RD, TUPMAN 93276 | Status **Submitted** on 2/7/2018 1:35 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**MIXED AEROSOLS** CAS No	**Pounds**	**220**	**55**	55	220	- Physical Flammable	MIXED AEROSOLS	100 %		
		State: Solid	Storage Container: Steel Drum		Pressue: Ambient	Waste Code					
		Type: Waste	Days on Site: 365		Temperature: Ambient						
DOT: 9 - Misc. Hazardous Materials	**MIXED LAMPS** CAS No	**Pounds**	**500**	**200**	100		- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	FLUORESCENT	50 %		
		State: Solid	Storage Container: Box		Pressue: Ambient	Waste Code		HIGH PRESSURE SODIUM	50 %		
		Type: Waste	Days on Site: 365		Temperature: Ambient						
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**USED OIL** CAS No 64742-53-6	**Gallons**	**550**	**550**	100	550	- Physical Flammable	HIGHLY REFINED OIL	100 %		MIXTURE
		State: Liquid	Storage Container: Aboveground Tank, Steel Drum		Pressue: Ambient	Waste Code		SEV HYDROTREAT LIGHT NAPHTHENIC DISTILLATE	60 %		64742-53-6
		Type: Waste	Days on Site: 365		Temperature: Ambient			HYDROTREATED MIDDLE DISTILLATE	60 %		64742-46-7
DOT: 4.1 - Flammable Solids Flammable Solid	**USED OIL FILTERS** CAS No NA	**Pounds**	**1400**	**350**	350	1100	- Physical Flammable	Waste Petroleum Hydrocarbons	100 %		Mixture
		State: Solid	Storage Container: Steel Drum		Pressue: Ambient	Waste Code					
		Type: Waste	Days on Site: 365		Temperature: Ambient						
DOT: 9 - Misc. Hazardous Materials Flammable Solid	**WASTE MIXED OILY SOLIDS** CAS No 64742-53-6	**Pounds**	**2500**	**2000**	500	2000	- Physical Flammable - Health Hazard Not Otherwise Classified	OILY SOLIDS	100 %		MIXTURE
		State: Solid	Storage Container: Box		Pressue: Ambient	Waste Code					
		Type: Waste	Days on Site: 365		Temperature: Ambient						

FILENAME: J:\2009 Projects\06205 – Sempra\EHP SWPPP Updates\siteplan–revised.dwg



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- STORMWATER PIPING
- STORMWATER CATCHBASIN
- T — TRANSFORMER
- SURFACE DRAINAGE FLOW
- **S** — SUMP
- **L** — LOADING/UNLOADING TRANSFER AREA
- **SK** — SPILL KIT
- SECONDARY CONTAINMENT
- PAVED AREA

0 50' 100' 200'

SCALE IN FEET

SHEET NUMBER:	FIGURE NUMBER:
X	2

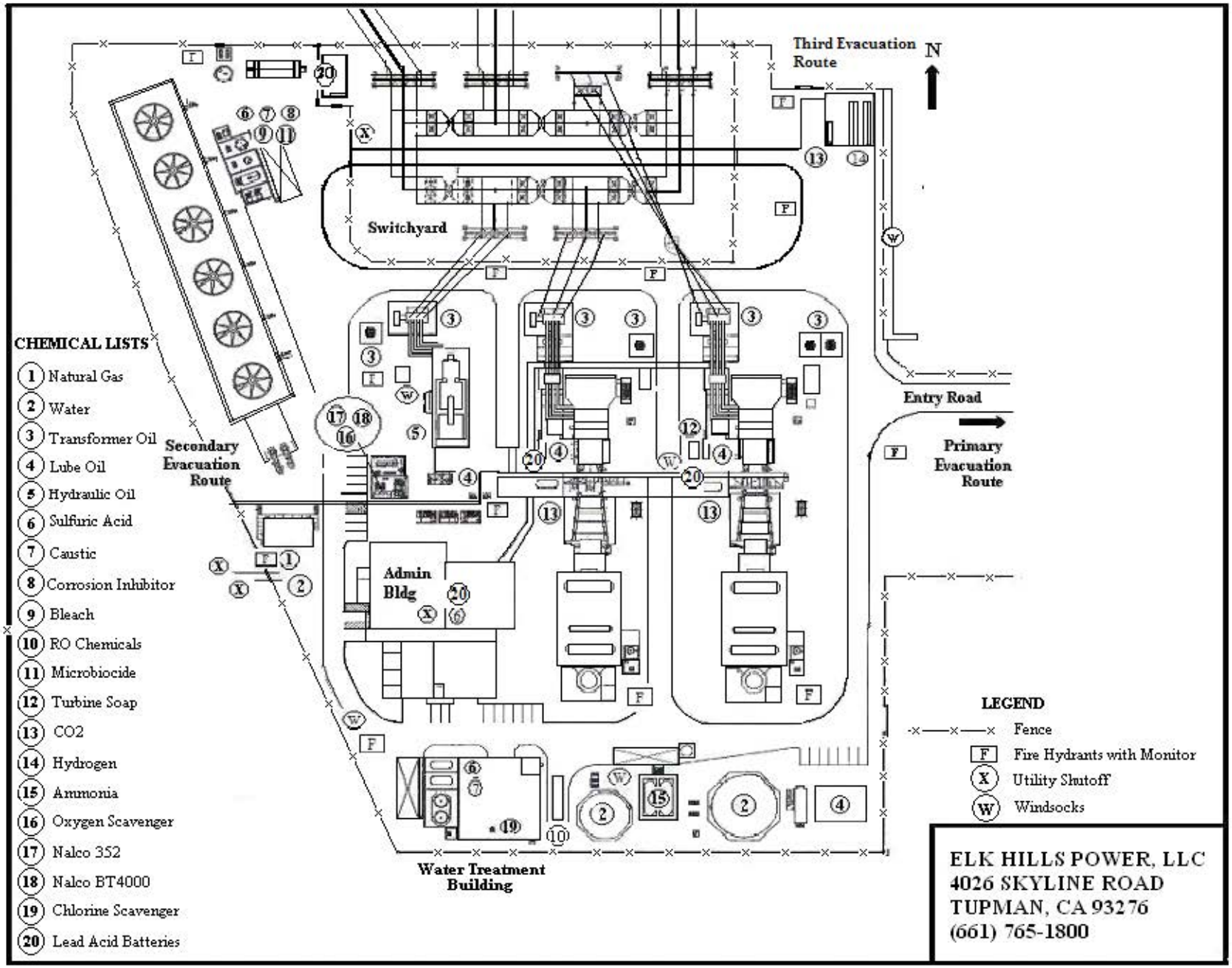
SITE PLAN

Elk Hills Power, LLC
4026 Skyline Road
Tupman, California 93276

SCALE:	DATE:	PROJECT NUMBER:
1" = 100'	2/22/2010	60144421-1

AECOM
1220 AVENIDA ACASO
CAMARILLO, CALIFORNIA 93012
PHONE: (805) 388-3775
FAX: (805) 388-3577

DESIGNED BY:	REVISIONS			
T. Couture	NO.:	DESCRIPTION:	DATE:	BY:
DRAWN BY:				
M. Scop				
CHECKED BY:				
T. Couture				
APPROVED BY:				
T. Couture				


Third Evacuation Route
N
Switchyard
Entry Road
Primary Evacuation Route
Secondary Evacuation Route
Admin Bldg
Water Treatment Building
CHEMICAL LISTS
1 Natural Gas
2 Water
3 Transformer Oil
4 Lube Oil
5 Hydraulic Oil
6 Sulfuric Acid
7 Caustic
8 Corrosion Inhubitor
9 Bleach
10 RO Chemicals
11 Microbiocide
12 Turbine Soap
13 CO2
14 Hydrogen
15 Ammonia
16 Oxygen Scavenger
17 Nalco 352
18 Nalco BT4000
19 Chlorine Scavenger
20 Lead Acid Batteries
LEGEND
Fence
F Fire Hydrants with Monitor
X Utility Shutoff
W Windsocks
ELK HILLS POWER, LLC
4026 SKYLINE ROAD
TUPMAN, CA 93276
(661) 765-1800

Traffic
Map
Elk Hills Rd

2018 - Annual Compliance Report

SOIL&WATER-4: The Project shall employ water conservation measures to limit water use to a maximum of 3,000 acre-feet per year.

Verification: The project owner shall summarize the water use of the project during the previous year in the Annual Compliance Report. Records substantiating such use shall be provided to the CPM within ten (10) days of a request by the CPM.

Status: Record summaries are provided below and on the quarterly report.

Total Water Usage at the end of 2018: 3056.9 Acre-Ft. WKWD Meter **vs** 2,912 Acre-Ft EHPP Meter

	WKWD Invoice	**EHP Meter Data**
2018	acre-ft	acre-ft
Jan	216	239
Feb	209	233
Mar	236	251
Apr	184	203
May	271	252
Jun	300	270
Jul	306	292
Aug	374	294
Sep	275	271
Oct	249	221
Nov	253	221
Dec	183	166

WKWD - EHP Check Meter Data.pdf

The water usage from the WKWD invoice for 2018 is over by 56.9 Acre-Ft (18,540,946.19 gallons); however, the August 2018 WKWD meter is reading higher than the EHP meter. The graph shows an unexplainable increase of water meter reading from WKWD, while the EHP water meter reading is not showing a high reading, see above comparison. On the EHP water meter, the total usage for 2018 is 2,912 Acre-ft which is below the permit limit of 3,000 acre-ft. The WKWD meter is 20 ft away from EHP meter.

After further investigation and discussion with WKWD, the cause of increase on the WKWD meter reading is determined to be the multiple leaking events of the backflow preventer in between the WKWD meter and EHP meter. The leaking events were reported to the EHP control room and were repaired. The 56.9 Acre-Ft excess is not an actual EHP water usage.

2018 - Annual Compliance Report

SOIL&WATER-5: The Project shall fund the acquisition of water or water rights for the purpose of water conservation or environmental enhancement. Such funding shall result in at least 1000 acre feet per year of water conservation or environmental enhancement over the life of the Project, except that such funding shall total no more than an annual payment of $100,000 with 3.5 percent per year added thereafter. The first payment shall be made when commercial operation begins, and a payment shall be made each year thereafter for the life of the Project. The measure(s) will be selected by mutual agreement of the Developer and CURE. Examples of such measures include, but are not limited to, the following:
a. Contribution to the CalFed Environmental Water account, which is the option preferred by the Parties;
b. Acquisition of water from Berenda Mesa Water District that could be applied to environmental enhancement purposes in the Delta or otherwise managed to promote water conservation.

Verification: Within sixty (60) days after commercial operation of the project and thereafter in the Annual Compliance Report, the project owner shall submit evidence of payment as required by the above condition for water conservation or environmental enhancement to the CalFed Water Account, or to such other recipient as may be mutually agreed upon by the project owner and California Unions for Reliable Energy (CURE). Project owner shall also provide a letter from CURE identifying the mutually agreed upon recipient.

Status: Record summaries are provided.

EHP TNC 2018-19 agreement_SOW_Fi

TNC_EHP_Status_Report_2017-2018_FIN

Payment Process.pdf

The Nature Conservancy

CONFLICT OF INTEREST DISCLOSURE FORM

It is the policy of The Nature Conservancy ("TNC") to identify actual, potential or perceived conflicts of interest in any situation in which TNC has a significant business interest. To assist TNC in complying with this policy, we request that all individuals and/or organizations that will be involved in a proposed transaction with TNC complete this form.

TRANSACTION

For **Real Estate transactions**, describe the property, its size and the type of deal (e.g., purchase or sale, gift, fee, easement, or other).

For **all other transactions**, describe the type of agreement (e.g., service contract, grant from TNC to grantee, etc.).

Elk Hills Power, LLC. Funding agreement for 2018-2019

Total dollar value of transaction: $ 167,534.88

[For cashless barter transactions, provide the value of the benefits being provided each party.]

STEP 1: ORGANIZATION TYPE

Please check the box to indicate the type of party for which this form is being completed, list all individuals and/or organizations that will be involved in this transaction. An "organization" includes a for profit corporation, partnership, trust, estate, joint venture, limited liability corporation, professional corporation or unincorporated entity of any kind, a foundation, public board, commission, and a 501(c)(3) or other charitable organization.

☐ **Individuals (list all, then complete Section 1):** _____

☒ **For Profit Organizations (list all, then complete Section 2):** Elk Hills Power, LLC.

☐ **Not for Profit Organizations (list all, then complete Section 3):** _____

STEP 2: QUESTIONS

Complete the applicable section of questions below. Individuals complete Section 1. For Profit Organizations complete Section 2. Not for Profit Organizations complete Section 3. **Note:** Please refer to the attached list of TNC key employees and current and prior members of TNC's Board of Directors when completing the rest of this form.

~~**Section 1. INDIVIDUALS: Please check all that apply and attach an explanation for any "Yes" answers.**~~

	~~Yes~~	~~No~~
a. ~~Are you now, or have you been at any time since July 1, 2013, a **TNC "key employee"** or a **member of the TNC Board of Directors** as identified on the attached list?~~		
b. ~~Are you now or have you been in the last 12 months a **TNC employee** (other than a key employee), a **Chapter Trustee** or member of a **Country Program Advisory Council**?~~		
c. ~~Have you **contributed to TNC** U.S. $5 million or more during the current fiscal year (July 1 – June 30), or U.S. $25 million or more, cumulatively, in the current fiscal year and the prior four fiscal years?~~		
d. ~~To your knowledge, are you a **Family Member** of any individual identified in paragraph a, b or c above? (For these purposes, the term "Family Member" includes the individual's spouse, ancestors, brothers and sisters (whether whole or half-blood), children (whether natural or adopted), grandchildren, great-grandchildren, and spouses of brothers, sisters, children, grandchildren, and great-grandchildren; and any person with whom the covered person shares living quarters under circumstances that closely resemble a marital relationship or who is financially dependent upon the covered person.)~~		

Section 2. FOR PROFIT ORGANIZATIONS:
Please check all that apply and attach an explanation for any "Yes" answers.

	Yes	No
a. Has the organization made total aggregate contributions to TNC (i) U.S. 5 million or more during the current fiscal year (July 1 – June 30), or (ii) U.S. $25 million or more, cumulatively, during the current fiscal year and the prior four fiscal years?		X
b. Now or at the time of the proposed transaction, does or will any **Substantial Contributor** (as defined in 1.c.); **TNC employee (includes former TNC employee who left within the last 12 months); member of TNC's Board of Directors or key employees (see list attached); or TNC Chapter Trustee or Advisory Council member (includes former ones who served within the last 12 months)**, individually or collectively with other such persons (including **Family Members** of such persons; see Section 1(d) above for definition of Family Members), **own more than 35% of the stock or value of the organization** (directly or indirectly), or have the legal or *de facto* **power to exercise a controlling influence over the organization's management or policies**, e.g., as an officer, key management employee, board member or partner?		X
c. Now, or at the time of the proposed transaction, have or will any members of **TNC's current Executive Team or Board of Directors** (see attached list) serve as: • an officer, director, trustee, key employee, or partner; or • if the entity is a limited liability corporation, a member; or • if the entity is a professional corporation, a shareholder?		X

~~**Section 3. NOT FOR PROFIT ORGANIZATIONS**~~
~~**Please check all that apply and attach an explanation for any "Yes" Answers.**~~

	~~Yes~~	~~No~~
~~a. Now or at the time of the proposed transaction, have or will any **Substantial Contributor** (as defined in 1.c.); **TNC employee (includes former TNC employee who left within the last 12 months); member of TNC's Board of Directors or key employees (see list attached); Chapter Trustee or Advisory Council member (includes former ones who served within the last 12 months),** or **Family Members** of any of these, individually or collectively, **have the ability to control management of the entity**? See Section 1(d) above for definition of Family Members.~~		

STEP 3: COMMENTS

Please explain any "Yes" answers checked above.

Individuals who in the current fiscal year (FY19) are or during the preceding five fiscal years have been a Conservancy "key employee" or a member of the Board of Directors:

Key Employees
Current Executive Team
Justin Adams
Kacky Andrews
James Asp
David Banks
Charles Bedford
Giulio Boccaletti
Mark Burget
Maria Damanaki
Santiago Gowland
Wisla Heneghan
Joe Keenan
Marianne Kleiberg
Richard Loomis
Joyce Ma
Brian McPeek
Pascal Mittermaier
Hugh Possingham
Glenn Prickett
Aurelio Ramos
Lynn Scarlett
Heather Tallis
Mark Tercek
Michael Tetreault
Marc Touitou
Peter Wheeler
Leonard Williams
Heather Wishik
Heather Zichal

Other/Former Key Employees
Karen Berky
Rebecca Bowen
John Cook
Mario D'Amico
Addison Dana
William Ginn
Steve Howell
Peter Kareiva
Michelle Lakly
Robert McKim
Catherine Nardone
Lois Quam
Geof Rochester
Angela Sosdian
Michael Sweeney
Philip Tabas
Janine Wilkin

Current Board of Directors (FY '18)
Shona L. Brown
Gretchen C. Daily
Laurence Fink
Joseph H. Gleberman
William Frist
Harry Hagey
Sally Jewell
Andrew Liveris
Jack Ma
Claudia Madrazo
Craig McCaw
Thomas J. Meredith
Ana M. Parma
Douglas Petno
Stephen Polasky
James E. Rogers
Vincent Ryan
Rajiv Shah
Brenda Shapiro
Mark Tercek
Thomas J. Tierney
Moses Tsang
Frances A. Ulmer
Margaret C. Whitman
Ying Wu

Prior Board Members (FYs '14-'18)
Teresa Beck
David Blood
Steven A. Denning
Jeremy Grantham
Frank E. Loy
Jane Lubchenco
Thomas Middleton
James C. Morgan
Roberto Hernández Ramirez
Muneer A. Satter
P. Roy Vagelos

STEP 4: SIGNATURES

The undersigned certifies that the information in the disclosure form is true and correct to the best of his/her knowledge.

Signatures for Organizations:

Name of Organization: Elk Hills Power, LLC

Signature: John Hegeman

Printed name of person: John Hegeman

Title: Operations Leader

Date: 11/14/18

The Nature Conservancy
Protecting nature. Preserving life.

201 Mission Street
Fourth Floor
San Francisco, CA 94105

tel 415-777-0487
nature.org
nature.org/california

November 2, 2018

Sonnie T. Pineda
Sr. Environmental Advisor, Elk Hills Power, LLC
California Resources Corporation
4026 Skyline Road
Tupman, CA 93276

Dear Mr. Pineda:

This letter documents an agreement between The Nature Conservancy ("the Conservancy"), a District of Columbia nonprofit corporation, and Elk Hills Power, LLC ("EHP"), a subsidiary of California Resources Corporation, for September 1, 2018 thru September 30, 2019. Pursuant to this grant agreement, EHP will provide funding to assist the Conservancy in acquiring conservation water and planning for groundwater recharge.

The specific tasks and activities that the Conservancy proposes to undertake pursuant to this agreement are described in Exhibit A.

The Conservancy understands that EHP, in entering into this agreement, desires to implement the "environmental enhancement" condition of the Elk Hills Power CEC License, under the Condition of Certification for Soil and Water – 5.

The Conservancy has proposed, and by counter-signature of this letter EHP accepts, a program structured as follows:

1. Upon receipt of funding from EHP, the Conservancy will take undertake the tasks described in Exhibit A, attached hereto.
2. Subject to the conditions set forth herein, EHP will provide funding to the Conservancy as follows: $167,534.88 will be delivered to the Conservancy by EHP promptly following execution of this agreement (the "EHP Funding"). The Conservancy understands that EHP intends for the EHP Funding to meet EHP's obligations as set forth in the Elk Hills Power CEC License. EHP will remain solely responsible for complying with any and all of the obligations of EHP set forth in the Elk Hills Power CEC License.
3. The Conservancy will provide to EHP a written report by August 30, 2019 summarizing the work accomplished by the Conservancy using past grants from EHP (see Task 1 of Exhibit A).
4. The Conservancy will provide a final report for the 2018-2019 funding agreement by October 31, 2019.

We appreciate and value our ongoing relationship with Elk Hills Power, LLC. As we move forward, we encourage you to communicate to us any concerns or suggestions regarding our proposed program direction.

To indicate your concurrence with this proposal, please counter-sign this letter where indicated and return one copy to us.

Sincerely,
THE NATURE CONSERVANCY,
a District of Columbia nonprofit corporation

By: DocuSigned by: Brian Stranko
A533E0F470C640F...
Brian Stranko
Water Program Director
The Nature Conservancy in California

AGREED AND ACCEPTED:
ELK HILLS POWER, LLC,
a limited liability company

By: _____
Name: J. ZIKER
Title: ASSISTANT TREASURER

EXHIBIT A: ACTIVITIES PROPOSED FOR 2018–2019

The Nature Conservancy ("the Conservancy") proposes to apply the funds provided by Elk Hills Power, LLC, toward work in three tasks between September 1, 2018 and September 30, 2019.

CALIFORNIA WATER CONSERVATION

The California Water Conservation activities, collectively, are intended to 1) provide a retrospective analysis of past funding and their conservation outcomes, 2) conserve water for environmental enhancement in Tulare and Siskiyou counties, and 3) analyze and prepare for sustainable groundwater management in the Cosumnes River corridor in southern Sacramento County. The proposed work program for 2018-2019 is summarized in Table 1:

Table 1. Summary of tasks to be completed in the 2018-2019 funding cycle.

Task	Task name	Objective	Direct Costs	Indirect Costs*	Total
1	Historical grant expenditure analysis	Quantify ecological conservation outcomes of past expenditures.	$8,523.53	$2,301.35	$10,824.88
2	Environmental water acquisition	Acquire water for environmental purposes.	$117,933.07	$9,566.93	$127,500
3	Cosumnes watershed groundwater recharge planning	Lay the foundation for the Cosumnes Coalition and local GSAs to conduct groundwater recharge projects in the near future.	$23,000	$6,210	$29,210
			$149,456.60	$18,078.28	$167,534.88

*Indirect costs are calculated at 27%. Indirect costs include TNC's general and administrative costs which have been incurred for common or joint objectives and cannot be readily identified with a particular final cost objective. For example, all projects are supported by the Payroll Department, but it would be nearly impossible to determine how much of each payroll person's salary should be charged to specific projects. Other examples of indirect expenses include accounting, general legal services, and information systems. Federal OMB Circulars require non-profits to be consistent in the treatment of costs as direct or indirect, and states that a cost may not be allocated to an award as an indirect cost if any other cost incurred for the same purpose, in like circumstances, has been assigned to an award as a direct cost. This is a control to ensure that non-profits do not "double-dip" in the recovery of costs. For more information, please refer to OMB Circular A-122: Cost Principles for Non-Profit Organizations.

To accomplish these tasks, the Conservancy will use the Elk Hills Power funds and allocate them to internal staff (Task 1), acquire conservation water in Tulare and Siskiyou counties (Task 2), and provide a grant to a partner organization (Task 3) working in the Cosumnes River watershed in Sacramento County. The funds will be shifted between tasks as needed if necessary. The tasks outlined in Table 1 are described below.

Task 1. Conduct a retrospective analysis on past TNC expenditures
The Conservancy will summarize work accomplished using past grants received from Elk Hills Power, LLC. The Conservancy's work at the Cosumnes River Preserve and in the surrounding watershed have focused on habitat restoration, floodplain modifications for flood damage control and groundwater recharge, and planning activities related to a suite of conservation outcomes.

Task 1 Deliverable
A report summarizing past expenditures and their related conservation outcomes, including the amount of water conserved with the funds provided from Elk Hills Power LLC to TNC will be delivered on or before August 30, 2019.

Task 2. Conservation water acquisition
TNC will acquire water in key locations for the purposes of environmental enhancement. Examples of such acquisitions may include, but are not limited to:

a. Tulare County. Jointly acquire 850 acre-feet of water from a northern CA water district via a San Joaquin Valley water district who is participating in a cross-Delta transfer program and convey the water to the Kern National Wildlife Refuge (the Refuge) in the Tulare Basin, a refuge that perpetually struggles to secure sufficient water for wetland habitat benefitting waterfowl and groundwater dependent ecosystems.

b. Siskiyou County. Use funds to acquire conservation water on the Shasta River in Siskiyou County. This water is critical to the adult migration of Fall Chinook salmon into the system due to low flows and poor water quality that exists due to upstream agricultural diversions. For 10 years the Conservancy has been working with the agricultural community in the Shasta River Watershed to enhance flows for the fall migration of Fall Chinook Salmon. In fall 2018, the Conservancy secured over 1,000 acre-feet of instream water which benefited 8,000 adult salmon.

Task 2 Deliverable

a. The transaction will be completed in fall 2018 and result in partially acquiring 850-acre feet of water to create approximately 200 acres of new wetland habitat on the Kern River National Wildlife Refuge between December 2018 and March 2019.

b. Acquire approximately 177-acre feet of conservation water on the Shasta River to enhance environmental conditions for migrating salmonids.

Task 3. Support groundwater planning efforts in the Central and South Sacramento County groundwater basins

The Conservancy will provide funds to the Cosumnes Coalition (comprised of the Fishery Foundation, Trout Unlimited, American River Conservancy, Cosumnes Culture and WaterWays, and Landmark Environmental). The Cosumnes Coalition will also work with the Sacramento Valley Conservancy and The Conservation Fund. The proposed work is in line with The Cosumnes Preserve Partners' *2008 Cosumnes Preserve Management Plan*, the Cosumnes Coalition's *2016 Cosumnes Watershed Assessment & Stewardship Plan,* and the *Cosumnes 2.0 Situation Analysis and Action Plan.* The *Situation Analysis and Action Plan* was developed by The Nature Conservancy, Sacramento Valley Conservancy, Cosumnes Coalition, and The Conservation Fund.

The Cosumnes Coalition will focus on groundwater recharge planning efforts that will include four general activities: 1) prepare a project description and supporting documents for the Cosumnes River pre-wetting project CEQA and NEPA compliance categorical exemption, 2) identify properties between highways 16 and 99 for future habitat restoration and groundwater recharge activities, 3) support Sacramento Area Flood Control Agency's multi benefit flood control/groundwater recharge project progress by coordinating activities with landowners and the local groundwater sustainability agencies, and 4) identify properties suitable for Swainson's Hawk easements that could be used for winter flooding and groundwater recharge.

Task 3 Deliverables
Activity 1) prepare a project description and supporting documents necessary for environmental compliance; Activities 2-4) prepare a project report that identifies a list of candidate properties--sortable by conservation value (including a map), the type of land tenure needed, whether there is a willing seller, the status of the outreach process, and recommended next step for each property.

PROPOSAL – FOR FINALIZATION

EXHIBIT A: ACTIVITIES PROPOSED FOR 2018–2019

The Nature Conservancy ("the Conservancy") proposes to apply the funds provided by Elk Hills Power, LLC, toward work to five tasks between November 1, 2018 and September 30, 2019.

COSUMNES RIVER WATERSHED GROUNDWATER MANAGEMENT

The Cosumnes River watershed groundwater management activities, collectively, are intended to analyze and prepare for sustainable groundwater management in the Cosumnes River corridor in southern Sacramento County. Understanding the state of groundwater and preparing for future actions such as groundwater augmentation will be the focus of our activities in the 2018-2019 funding cycle. Accordingly, our proposed work program for the Cosumnes River watershed for 2018-2019 is summarized in Table 1:

Table 1. Summary of tasks to be completed in the 2018-2019 funding cycle.

Task	Task name	Objective	Budget
1	Historical grant expenditure analysis	Quantify ecological conservation outcomes of past expenditures.	$5,000
2	Groundwater monitoring well installation	Monitor groundwater levels within the Cosumnes River Preserve.	$20,000
3	Restoration effects on groundwater dependent ecosystem (GDE) development	Demonstrate relationship between restoration actions and GDE development.	$47,534.88
4	GDE pulse	Develop online tool to show the relationship between GDE health and groundwater levels to improve local groundwater management.	$70,000
5	Cosumnes watershed groundwater recharge planning	Lay the foundation for the Cosumnes Coalition and local GSAs to conduct groundwater recharge projects in the near future.	$25,000
		Total budget	$167,534.88

To accomplish these tasks, the Conservancy will use the Elk Hills Power funds and allocate them to internal staff, engage appropriate contractors, and provide grants to partner organizations working in the Cosumnes River watershed. The funds will be shifted in between task as needed. The tasks outlined in Table 1 are described below.

Task 1. Conduct a retrospective analysis on past TNC expenditures
The Conservancy will summarize work accomplished using past grants received from Elk Hills Power, LLC. The Conservancy's work at the Cosumnes River Preserve and in the surrounding watershed have focused on habitat restoration, floodplain modifications for flood damage control and groundwater recharge, and planning activities related to a suite of conservation outcomes.

Task 1 Deliverable
A report summarizing past expenditures and their related conservation outcomes, including the amount of water conserved with the funds provided from Elk Hills Power LLC to TNC will be delivered on or before August ~~October~~ 30, 2019.

Task 2. Groundwater monitoring
The Conservancy will install 1 to 2 groundwater monitoring wells within the Cosumnes River Preserve boundary. The purpose of this work will be to monitor fluctuations in the water table over time. Monitoring groundwater within riparian forests is essential for understanding what groundwater levels are necessary to maintain, restore, and enhance health conditions in the forest. TNC will work with local groundwater sustainability agencies to coordinate long-term monitoring of the groundwater monitoring wells.

Task 2 Deliverable
Installation of 1 to 2 groundwater monitoring wells within the Cosumnes River Preserve.

Task 3. Restoration effects on development of groundwater dependent ecosystems.
The Conservancy will continue to monitor development of the vegetation community on the restoration project that we implemented to restore floodplain habitat and enhance groundwater recharge (see Task 2 from the 2017-2018 agreement). The overall project's large size (~600 ac) allows ecologically meaningful scale while retaining a manageable experimental area. Within the site, we also have unusually large replication units (>20ac) in which we applied different restoration planting treatments. Development of the vegetation is a direct indicator for a large variety of outcomes, such as whether observed increases in groundwater lead to desired GDE benefits. Another outcome indicated by vegetation is the suitability of the area for fish at different phases of their lives. Measurement of the vegetation in areas that differ based on planting treatment, groundwater depth, and surface connection informs restoration practitioners about the best practices for different ecological goals and the state of groundwater management in an area.

We will track the trajectory of the vegetation community across the restoration site to learn about factors that influence the achievement of various restoration goals. The effort expended on Task 3 will be flexible, depending on the effort invested in Task 4.

Task 3 Deliverable
A summary of work describing sampling protocol and observed trends in development of the vegetation community, with implications for restoration practice throughout the Cosumnes River watershed.

Task 4. GDE Pulse
Thousands of acres of California's wetlands and lush riparian forest require groundwater in order to provide habitat year-round. These important ecosystems, called groundwater dependent ecosystems, or GDEs, are included in California's new Sustainable Groundwater Management Act (SGMA). However, their response to varying groundwater levels is often poorly understood by groundwater managers. Members of groundwater sustainability agencies (GSAs) usually have few resources to devote to detecting degradation of GDE health. The goal of the GDE Pulse project is to develop easily accessible proxies for GDE health, so that agencies and conservation organizations can identify emerging threats and enable sustainable groundwater management.

Satellite imagery provides inexpensive and broadly available data that covers vast tracts of land. To develop proxies highly correlated with GDE health, more in-depth monitoring must be conducted at certain sites, so that candidate proxy metrics can be tested against direct measurements. The Conservancy will use the Cosumnes River Preserve as one of the sites to assess the usefulness of satellite imagery in sensing riparian floodplain health. We will collect ground-based vegetation monitoring data from mature and early-successional stands of riparian forest and floodplains at the Cosumnes River Preserve. This data will allow us to compare the information from satellite data to actual data on ecosystem health. We can then use the satellite data to present a metric of GDE health to groundwater managers in the Cosumnes River watershed and elsewhere throughout the state.

Task 4 Deliverable
A summary of work describing sampling protocol and comparing the correlations of different metrics derived from remote sensing to the health of riparian forest & floodplain. We will also generate an online mapping and charting tool that will allow groundwater managers to see the correlation between groundwater levels and satellite derived vegetation indices to help them to better conserve and manage groundwater in the Cosumnes basin.

Task 5. Support groundwater planning efforts in the Central and South Sacramento County groundwater basins
The Conservancy will provide funds to the Cosumnes Coalition (comprised of the Fishery Foundation, Trout Unlimited, American River Conservancy, Cosumnes Culture and WaterWays, and Landmark Environmental). The Cosumnes Coalition will also work with the Sacramento Valley Conservancy and The Conservation Fund. The proposed work is in line with The

Cosumnes Preserve Partners' *2008 Cosumnes Preserve Management Plan*, the Cosumnes Coalition's *2016 Cosumnes Watershed Assessment & Stewardship Plan,* and the *Cosumnes 2.0 Situation Analysis and Action Plan.* The *Situation Analysis and Action Plan* was developed by The Nature Conservancy, Sacramento Valley Conservancy, Cosumnes Coalition, and The Conservation Fund.

The Cosumnes Coalition will focus on groundwater recharge planning efforts that will include four general activities: 1) prepare a project description and supporting documents for the Cosumnes River pre-wetting project CEQA and NEPA compliance categorical exemption, 2) identify properties between highways 16 and 99 for future habitat restoration and groundwater recharge activities, 3) support Sacramento Area Flood Control Agency's multi benefit flood control/groundwater recharge project progress by coordinating activities with landowners and the local groundwater sustainability agencies, and 4) identify properties suitable for Swainson's Hawk easements that could be used for winter flooding and groundwater recharge.

Task 5 Deliverables
Activity 1) prepare a project description and supporting documents necessary for environmental compliance; Activities 2-4) prepare a project report that identifies a list of candidate properties--sortable by conservation value (including a map), the type of land tenure needed, whether there is a willing seller, the status of the outreach process, and recommended next step for each property.

FY 2017 Expenses (July 1, 2016 - June 30, 2017)

Elk Hills 2017 Tasks	**Total**
Reservoir Re-operation and Conjunctive Use Project	0.00
Cosumnes River Fall Flow Augmentation	0.00
Sacramento County Groundwater Planning	0.00
Modeling and Research	43,271.44
Monitoring and Habitat Restoration for Giant Garter Snake	28,313.40
Lower Cosumnes River Floodplain Restoration	79,449.59
Translation of Cosumnes Exp. into Regional & Statewide Practice	8,073.52
Grand Total	***$ 159,107.96***

* The agreement between Elk Hills Power and The Nature Conservancy has historically not required tracking of expenses at the task level, only at the Agreement level. As such, the task level itemization shown here is merely an estimated breakdown of total Agreement level expenses. Beginning FY19 and on, expenses will be officially tracked and reported at the task level by The Nature Conservancy in the financial system of record.

Pineda, Sonnie T

From: Williams, Maria E
Sent: Tuesday, December 4, 2018 7:42 AM
To: Pineda, Sonnie T
Subject: FW: The Nature Conservancy

FYI

Maria

From: AP Check Requests Bakersfield
Sent: Monday, December 3, 2018 10:04 AM
To: Williams, Maria E <Maria.Williams@crc.com>
Subject: RE: The Nature Conservancy

Your check request has been processed. Thank you

From: Williams, Maria E
Sent: Wednesday, November 28, 2018 2:19 PM
To: AP Check Requests Bakersfield <APBAK@crc.com>
Cc: Pineda, Sonnie T <Sonnie.Pineda@crc.com>; Myers, Brandon M <Brandon.Myers@crc.com>
Subject: The Nature Conservancy

<< File: [Untitled].pdf >>

AP,
Please find the attached check request and process it for payment. Make it payable to The Nature Conservancy in the amount of $167,534.88
Please include the attached sheets to include the signature page with the payment. The approvers are: Anthony Ziobro and Brandon Myers

Thank you,

Maria Elvira Williams
Administrative Assistant V
CRC – Elk Hills Power
O: 661-765-1809
C: 661-865-0064

Ask me about: WIN-Community Outreach & STEM-Lead
<< OLE Object: Picture (Device Independent Bitmap) >>

Revsied 5/18/2015

CRC CHECK/ACH REQUEST FORM

BNA #:

Vendor #

SPECIAL CHECK HANDLING INSTRUCTIONS (SH)	
X	Yes. Special Handling Form Attached.
	No. Special Handling Not Required.

PAYMENT METHOD	
	CHECK PAYMENT
	ACH PAYMENT (Enter Banking Information below)

CHECK REQUEST DATE: 11/28/2018 (Please note payment terms will be calculated from date AP receives check request)

USD DOLLAR AMOUNT: $167,531.88

DATE CHECK NEEDED: 12/4/2018 (Important!! Date you need the check to be in the mail. Must be a working day)
(Calendar Date Required)

PAYABLE TO: The Nature Conservancy
201 Mission Street 4th Floor
San Francisco, CA 94105

TAX ID # OR SS#:
(COMPLETE ADDRESS AND ZIP CODE MUST BE SHOWN)

BANKING INFORMATION:
BANK NAME:
ABA NUMBER:
ACCOUNT NUMBER:
ACCOUNT NAME:

IN PAYMENT OF: 2018 TNC

Are these charges related to a project? (POET)	YES	NO
	X	

POET (Poet Definition - Project can be a CAPEX, OPEX, AFE, Cost Center or a group of defined accounts and cost center specific to a journal entry of business process.)

Project 7 DIGIT #	Expenditure Organization 6 DIGIT #	Expenditure Type 4 DIGIT #	Task 2-12 DIGIT #	PO # (11 Digits) (If Applicable)	PROD Date (OEMI)	AMOUNT DEBIT$	AMOUNT CREDIT$
2005662	048377	8901	0101			$167,534.88	

Company 6 DIGIT #	Cost Center 8 DIGIT #	Account 6 DIGIT #	Element 4 DIGIT #	Intercompany 6 DIGIT #	Future 4 DIGIT #	DEBIT$	CREDIT$

APPROVER MUST COMPLETE REQUEST FOR PAYMENT:

Approval document supporting request is on file in Elk Hills Power, LLC (DEPARTMENT)

Located in Tupman, CA (CITY & STATE) Contact Maria E. Williams (INDIVIDUAL'S NAME)

REQUESTED BY: Sonnie Pineda

APPROVED:

11/28/18
DATE

APPROVED:

TREASURY USE: **BANK #:** **WIRE #:** **WIRE DATE:**

ORACLE VOUCHER #: _____

Special Handling Form

One form for each payment request.

(Staple attachment directly to this form. Items not attached will not be included with check)

Sonnie Pineda	The Nature Conservancy	$167,534.88
Requested By	**Remit To (Vendor Name)**	**Amount**

ADDRESS INSTRUCTIONS (IF NECESSARY)

Send to address, if different from Vendor Remit to Address:

(Allowed for Brokers, Permits, Legal Dept., Tax Dept. and Street Address for FedEx only)

_____

_____

_____

_____

Reason for different address: (Proper Approval May Be Required)

_____

ATTACHMENT INSTRUCTIONS (IF NECESSARY)

Attachments included: [X] **YES** [ ] **NO**

If yes, attachment contains how many pages? 2

Original attachment(s) to be sent? [X] **YES**

For questions, please e-mail Payment Administrator @ payment_admin@crc.com

MAILING INSTRUCTIONS

Below are the options that can be used for mailing the check to the vendor. Please choose from the following:

*****If no selection is checked, payment will be mailed through the US Post Office*** **REGULAR MAIL**

PLEASE select one of the following for via Federal Express:

NOTE: FedEx DOES NOT DELIVER TO PO BOX

[ ] FedEx Priority Overnight (next day a.m. delivery)

[ ] FedEx Standard Overnight (next day p.m. delivery)

[X] FedEx Standard 2-Day Delivery

[ ] FedEx International

***Federal Express Charges are the responsibility of the requestor.
Please provide coding or Federal Express account number to be billed:

Federal Express Acct # 285981255 or POET# _____

[ ] **CERTIFIED MAIL**

***Complete Green return address card & receipt. Include with payment request.

[ ] **PRIORITY MAIL EXPRESS (Approximate 1-2-Days Delivery) based on zip code**

[ ] **PRIORITY MAIL (Approximate 2-4Days Delivery) based on zip code**

[ ] **Other (please specify) :**

_____

*****Copy of attachments will not be kept on file with the A/P Department.**

REVISED 0517

The Nature Conservancy
Protecting nature. Preserving life.

201 Mission Street
Fourth Floor
San Francisco, CA 94105

tel 415-777-0487
nature.org
nature.org/california

November 2, 2018

Sonnie T. Pineda
Sr. Environmental Advisor, Elk Hills Power, LLC
California Resources Corporation
4026 Skyline Road
Tupman, CA 93276

Dear Mr. Pineda:

This letter documents an agreement between The Nature Conservancy ("the Conservancy"), a District of Columbia nonprofit corporation, and Elk Hills Power, LLC ("EHP"), a subsidiary of California Resources Corporation, for September 1, 2018 thru September 30, 2019. Pursuant to this grant agreement, EHP will provide funding to assist the Conservancy in acquiring conservation water and planning for groundwater recharge.

The specific tasks and activities that the Conservancy proposes to undertake pursuant to this agreement are described in Exhibit A.

The Conservancy understands that EHP, in entering into this agreement, desires to implement the "environmental enhancement" condition of the Elk Hills Power CEC License, under the Condition of Certification for Soil and Water – 5.

The Conservancy has proposed, and by counter-signature of this letter EHP accepts, a program structured as follows:

1. Upon receipt of funding from EHP, the Conservancy will take undertake the tasks described in Exhibit A, attached hereto.
2. Subject to the conditions set forth herein, EHP will provide funding to the Conservancy as follows: $167,534.88 will be delivered to the Conservancy by EHP promptly following execution of this agreement (the "EHP Funding"). The Conservancy understands that EHP intends for the EHP Funding to meet EHP's obligations as set forth in the Elk Hills Power CEC License. EHP will remain solely responsible for complying with any and all of the obligations of EHP set forth in the Elk Hills Power CEC License.
3. The Conservancy will provide to EHP a written report by August 30, 2019 summarizing the work accomplished by the Conservancy using past grants from EHP (see Task 1 of Exhibit A).
4. The Conservancy will provide a final report for the 2018-2019 funding agreement by October 31, 2019.

We appreciate and value our ongoing relationship with Elk Hills Power, LLC. As we move forward, we encourage you to communicate to us any concerns or suggestions regarding our proposed program direction.

To indicate your concurrence with this proposal, please counter-sign this letter where indicated and return one copy to us.

Sincerely,
THE NATURE CONSERVANCY,
a District of Columbia nonprofit corporation

By: _____
Brian Stranko
Water Program Director
The Nature Conservancy in California

AGREED AND ACCEPTED:
ELK HILLS POWER, LLC,
a limited liability company

By: _____
Name: Anthony J. Zucco
Title: Assistant Treasurer

Cosumnes River Status Report

A Progress Report on The Nature Conservancy's Efforts to Understand and Restore Water-Dependent Ecosystems of the Cosumnes River Corridor

Flooded restoration plots at the Lower Cosumnes River Floodplain Restoration Project, March 2018.
© Judah Grossman/The Nature Conservancy

2017 – 2018 ANNUAL UPDATE

PREPARED FOR ELK HILLS POWER, LLC

The Nature Conservancy
Protecting nature. Preserving life.

Introduction

This report provides a summary of work conducted between August 2017 and August 2018 by The Nature Conservancy (the Conservancy) to restore and protect the Cosumnes River and freshwater-dependent ecosystems along the river corridor in southern Sacramento County, California. Attachment 1 is a summary of expenditures by 2017-2018 tasks. This progress report emphasizes the efforts that have been supported in part by contributions from Elk Hills Power, LLC. These contributions have greatly strengthened the Conservancy's effectiveness in understanding and addressing the water conditions in the Cosumnes River area and our associated efforts to translate the knowledge and experience we have gained into more intelligent and environmentally functional water management throughout California.

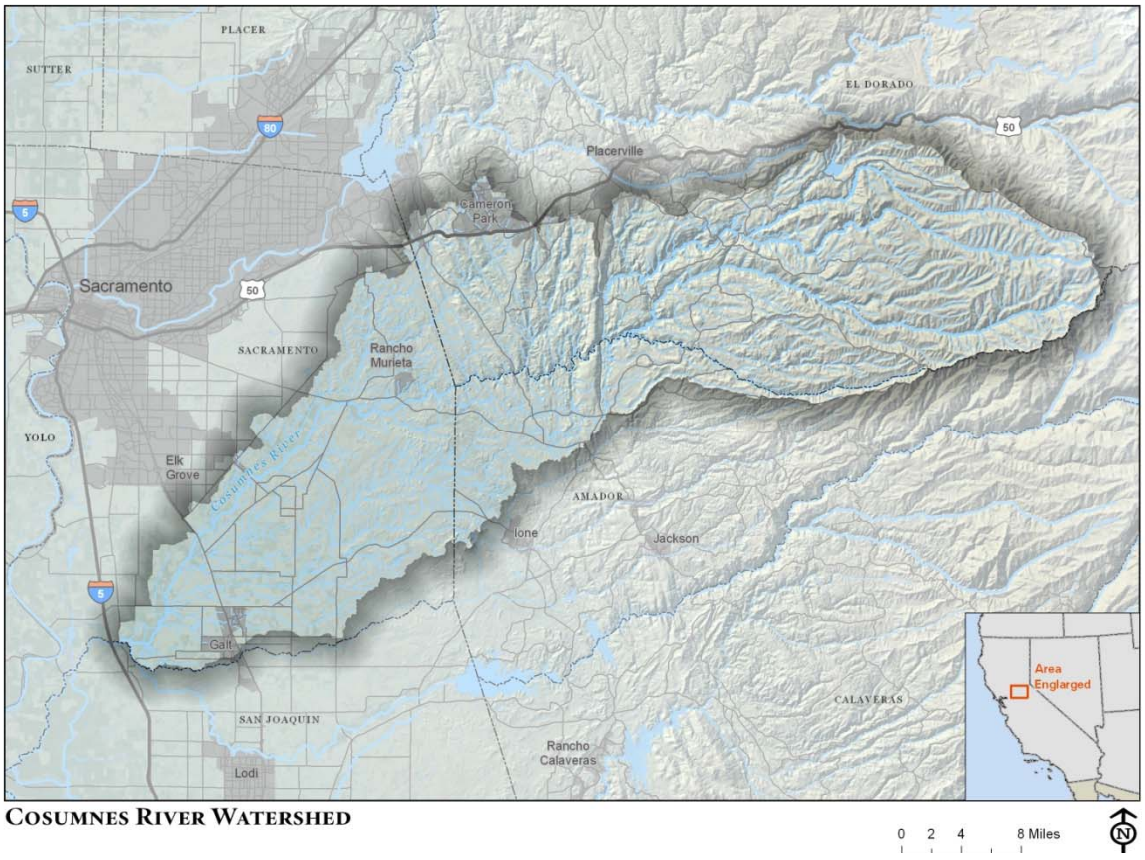


Figure 1. The Cosumnes River watershed spans Sacramento, El Dorado, and Amador counties in California's Central Valley.

Cosumnes River Conservation Setting

The Cosumnes River drains approximately 1,300 square miles of the west slope of the Sierra Nevada Mountains and flows into the Mokelumne River on the eastern edge of the Sacramento–San Joaquin Delta in southern Sacramento County (Figure 1). The Cosumnes River is one of the only rivers of significant size in California's Central Valley with relatively natural, unregulated stream flows. The lower reaches of the Cosumnes River flow through one of the Central Valley's biologically richest regions. The lower Cosumnes River corridor also hosts some of the largest

intact stretches of the riparian and floodplain forests that once covered large areas along many rivers in the Central Valley. In addition to the critical habitat of the Cosumnes River corridor, the Cosumnes River also supports a varied fishery, including a naturally reproducing population of fall-run Chinook salmon, which are a Species of Concern under the federal Endangered Species Act.

In its lower reaches, the Cosumnes River flows across the floor of the Central Valley and is underlain by a highly productive aquifer that is an important water source for municipal and agricultural users in Sacramento County. Extensive pumping of wells in the region has severely lowered groundwater levels, directly affecting flows in the river and compromising the sustainability of the unique aquatic and riparian ecosystems of the Cosumnes River corridor. Other threats to the Cosumnes River include habitat loss and fragmentation from continued urbanization and agricultural conversion, invasive species, and levees which disrupt the natural floodplain-river connectivity that supports the floodplain forests and wetlands.

To protect the Cosumnes River, critical stands of valley oak riparian communities, and wetlands that flank the stream and its tributaries, the Conservancy and partners (California Department of Fish and Wildlife, U.S. Bureau of Land Management, Sacramento County, California Department of Water Resources, Ducks Unlimited, Galt Unified School District, the California State Lands Commission, Sacramento Valley Conservancy, and the U.S. Natural Resources Conservation Service) established the Cosumnes River Preserve. To date, more than 50,000 acres of wildlife habitat and agricultural land have been protected by fee title and conservation easement acquisitions. The Cosumnes River Preserve partners are working tirelessly to abate multiple threats to the river and its associated floodplain and wetland habitats.

Work on this project has become even more important with the passage and implementation of the Sustainable Groundwater Management Act (SGMA). As this new legislation drives innovation around improving groundwater-dependent ecosystems, the types of projects developed through Elk Hills Power, LLC, funding have become more visible and significant.

History of the Cosumnes River Flow Improvement Efforts

While the land preservation and habitat restoration efforts on the Cosumnes River Preserve continue, considerable effort has focused recently on the need to ensure a reliable water supply for the river and the adjacent riparian and marsh habitats that are at increased risk due to the lowered groundwater levels. Since 2004, Elk Hills Power, LLC, has contributed to the Conservancy's Cosumnes River flow improvement efforts, which are intended to help restore and sustain key ecological functions for riparian and aquatic ecosystems in and adjacent to the Cosumnes River. The activities we have undertaken generally fall into the following categories:

1. Investigations to enhance the understanding of groundwater and groundwater-surface water interactions in the Cosumnes River corridor;
2. Policy engagements to improve groundwater management in southern Sacramento County;
3. Experiments and activities to augment the Cosumnes River flows and improve nearby groundwater conditions; and
4. Demonstration of the value and potential for conjunctive use projects — combined with other management strategies such as reservoir re-operation — to provide more reliable

water supplies for wildlife and for people in the Cosumnes River area of Sacramento County.

The Conservancy's efforts have contributed to a number of significant milestones, including:

- Completion of the Central Sacramento Groundwater Management Plan, which provides a planning tool to assist overlying water providers in maintaining a safe, sustainable, and high-quality groundwater resource in the region[1];
- Establishment of the South County Water Management Council;
- The 2005 test of fall augmentation of Cosumnes River flows to improve opportunities for fall Chinook salmon passage and improve understanding of the groundwater-surface water connection;
- Completion in 2011 of an innovative analysis of reservoir re-operation and conjunctive use to improve water conditions for ecosystems;
- Implementation in 2012 and 2013 of a comprehensive water monitoring program at Snake Marsh on the Cosumnes River Preserve, home to one of only 11 remaining populations of the federally threatened giant garter snake;
- Application of knowledge from the monitoring conducted at Snake Marsh to implement an emergency habitat assistance program for giant garter snake in 2014;
- Completion of planning, permitting, and construction in 2014 for the Lower Cosumnes River Floodplain Restoration Project; and
- Establishment of native plantings at the Lower Cosumnes River Floodplain Restoration Project starting in 2016.

The following sections provide details on other recent activities and accomplishments of the Cosumnes River flow improvement efforts.

Recent Activities

The following describes the most recent water conservation and environmental enhancement-related activities that The Nature Conservancy pursued in the Cosumnes River system. In 2017-2018, conservation activities focused on floodplain restoration and ways to integrate lessons learned from the Cosumnes River system to inform the statewide implementation of the Sustainable Groundwater Management Act.

The funding provided by Elk Hills Power, LLC, has supported, in whole or in part, these major activities. While the activities are discussed individually here for the sake of clarity, these individual efforts collectively support a single broad goal of ensuring a reliable water supply to sustain the riparian and aquatic ecosystems of the Cosumnes River watershed and adjacent lands.

1. Scientific studies to optimize groundwater recharge for ecosystem benefits

The Conservancy developed data and analytics to quantify ecosystem benefits and identify target levels for groundwater conditions by comparing long-term vegetation data to observed and modeled groundwater levels. In the summer of 2016, the Conservancy designed a study and

implemented data collection to compare long-term vegetation data in riparian forests with observed groundwater levels. The aim was to develop field techniques to aid Groundwater Sustainability Agencies (GSAs) in assessing whether groundwater pumping has impacted the groundwater-dependent ecosystems (GDEs) within their boundaries. Unlike most other GDEs, riparian vegetation usually does not have water visible above the ground surface, unless temporarily flooded. For this reason, assessing baseline groundwater levels directly requires expensive equipment and advanced subject expertise for both data collection and analysis. Certain vegetation growth patterns may be offer a cost-effective proxy to infer GW conditions over large areas. Assessing GW levels directly also does not completely satisfy the requirement in the Sustainable Groundwater Management Act (SGMA) to consider impacts to the GDE. Therefore, a system is needed to measure riparian vegetation health and link it to GW conditions.

The Conservancy collected field data to characterize both the health of the riparian vegetation along the Cosumnes River as well as the soil moisture conditions associated with each of three major forest stands. The stands spanned from two miles south of Twin Cities Rd to Highway 99. The monitoring protocol was the same as that described below for the Lower Cosumnes River Floodplain Restoration project. In order to characterize, infer, and spatially compare health conditions between forest stands in this study, six indicators were derived from 2016 vegetation survey data. These indicators were growth, species diversity, regeneration, structure, native plant dominance, and survivorship. All indicators ranged between 0 and 100%; higher values denoted greater health in all cases. Mean values for each vegetation health indicator were compared across forests using a modified ANOVA statistical test, which was chosen for its robustness and ability to work with unbalanced group sizes, non-normality, and heteroscedasticity.

Groundwater monitoring wells are often used to measure GW depth, but they have disadvantages that sometimes favor the electrical resistivity method. Monitoring wells only provide a value for a point location, which is fairly permanent. It is difficult to install monitoring wells in a healthy riparian forest due to the dense undergrowth. Electrical resistivity, however, provides a two-dimensional image of soil moisture over a transect ~100m long, and can be implemented in the same or different locations as need dictates. A disadvantage of electrical resistivity, however, is that it measures a correlate of saturation, and this correlate is also influenced by soil particle type. Clay soil is more conductive for any given saturation level than sandy soil at the same saturation.

Electrical resistivity tomography (ERT) is a geophysical technique for imaging subsurface environments by transmitting electrical pulses (current) from the surface into the ground through metal stakes (electrodes) along a profile. The change in the potential voltage as the current travels through the ground is measured at other adjacent electrode pairs along the profile. A multi-channel ERT data collection system permits fast, dense data sets to be acquired over short time periods by taking multiple measurements at the same time at different electrode pairs. The Conservancy collected ERT data using a Multi-Phase Technologies (MPT) eight-channel resistivity system with 128 electrodes and either 1-m (September) or 1.5-m (October) electrode spacing. A maximum current of 2000 milliamps (mA) and 400 volts (V) was set during data acquisition, but the system automatically adjusts the current amount injected if less is needed; on average 42 mA and 140 V was injected during each measurement using a dipole-dipole configuration with 100% reciprocals. The ERT data were inverted using the BERT inversion code, which is based on a finite-element model that discretizes the subsurface as a tetrahedral mesh with a grid cell spacing equal to ½ the electrode spacing. ERT data of low quality, defined

as a measured potential less than 2 mV, were removed from each data set along with reciprocal errors greater than 5%, which resulted in less than 10% of data removal from each data set. Model convergence resulted in a mean absolute difference between the measured and modeled data of less than 6% for all ERT profiles. The Conservancy ground-truthed the ERT data by running a transect through each of two different existing monitoring wells.

The ERT results successfully resolved below-ground differences in resistivity that are most likely due to variation in soil moisture, but which also likely have some component due to soil texture (clay vs sand). The upstream forest, along a reach of the river that dries completely every summer, had the most resistive soil (Figure 2). The intermediate forest and the downstream forest were surprisingly similar, given that the intermediate forest is also along a reach of the river that dries in the summer, while the downstream forest is in the tidal zone (Figures 2 and 3).

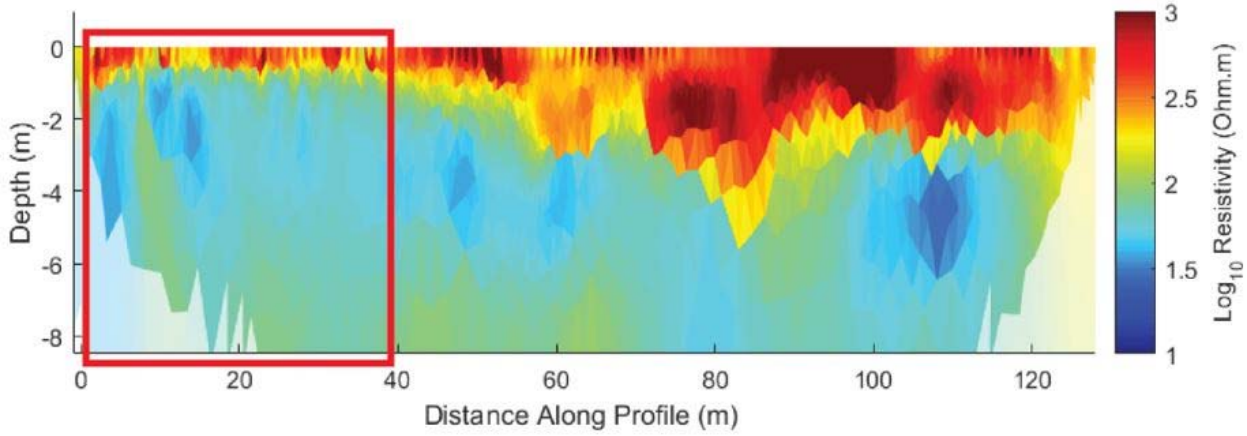


Figure 2: Resistivity profile for the upstream forest stand. Red box denotes area lacking tree canopy cover. Warmer colors indicate drier & sandier soil conditions.

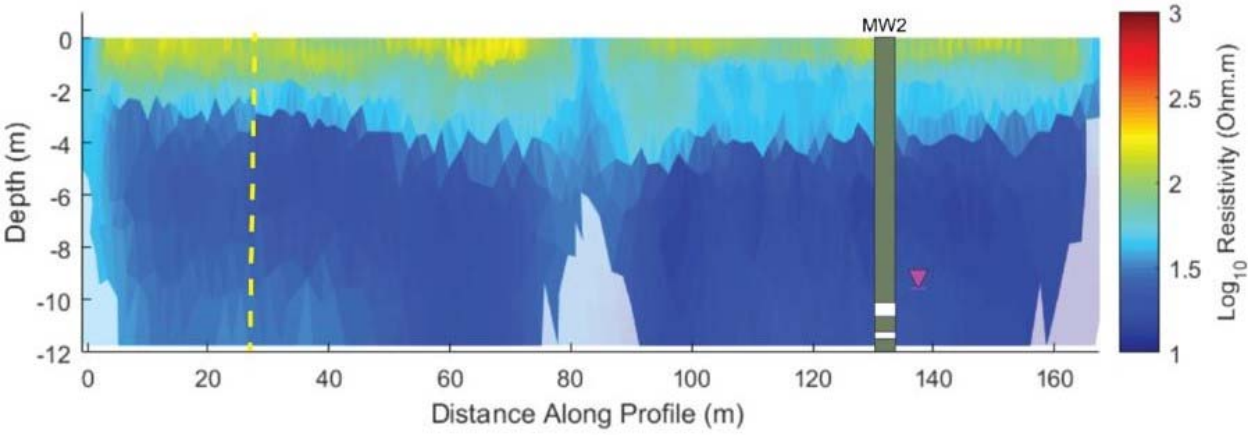


Figure 3: Resistivity profile for the intermediate forest stand. MW = monitoring well. Gray fill = clays & silts from MW bore log. White fill = sand from MW bore log. Inverted pink triangle = groundwater level on the day of ERT measurement.

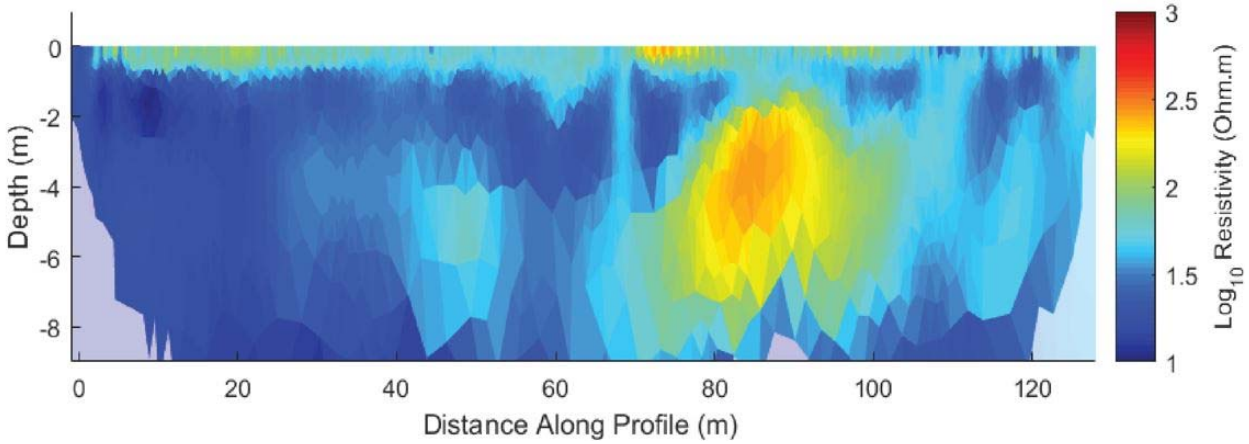


Figure 4: Resistivity profile for the downstream forest stand.

All six of the vegetation health indices follow the pattern expected based on the ERT measurements. The upstream forest stand had lower index values than the intermediate and downstream stands, which were similar. The upstream forest stand showed signs of inadequate groundwater, such as a complete lack of young valley oak trees and crown dieback of mature oaks. The intermediate and downstream stands seemed to have adequate groundwater, as shown by young trees of several species, maintenance of crown canopy, and high native species diversity.

Unfortunately, the transects paired with groundwater monitoring wells showed that we could not identify the exact depth to groundwater using ERT. As shown in Figure 4, groundwater levels as measured by the monitoring wells did not correspond to a change in resistivity. Also, the resistivity value at the measured groundwater level was different for the three transects with wells.

Data collected by the Conservancy suggest that a riparian forest stand dominated by valley oak trees may require a log10 resistivity value of no larger than about 1.7 within two meters of the ground surface. This number might not be applicable to other rivers or locations with steeper slopes. Data collection on vegetation, groundwater depth, and soil moisture at different sites throughout California is necessary to determine how broadly such a generalization may be valid.

Implement restoration of floodplains on the Cosumnes River Preserve

The Conservancy continued its work to restore and maintain the 600-acre floodplain restoration project on the lower Cosumnes River to improve riparian habitat and enhance natural groundwater recharge and river processes. Activities included maintenance (e.g., irrigation and weed management) and monitoring (e.g., plant community composition) to evaluate project effects.

Plant Monitoring

Plant monitoring took two forms: 1) survivorship of installed plants to inform the success of the horticultural restoration activities, and 2) vegetation throughout the site to compare the response of the plant community to various factors.

Survivorship

Survivorship was only measured on plants installed by the Conservancy (e.g., nursery stock, cuttings, or acorns), not natural recruits/volunteer plants. The Conservancy actively installed plans in the "High" (~95 ac) and "Medium" (~113 ac) restoration treatment fields. The Conservancy assessed survivorship for ~1,000 installed plants in each of the eight fields (four High and four Medium; Tables 1a and 1b). In each field, ten rows were sampled. The actual number of plants assessed varied because not all planting rows were long enough to contain 100 plants.

Table 1a: Number of planting sites and plants sampled in Medium treatment fields in 2017.

Field #	2		5		8		12	
Irrigation	Irrigated	Not Irrig.	Irrigated	Not Irrig.	Irrigated	Not Irrig.	Irrigated	Not Irrig.
# Sites	200	800	223	786	115	625	200	797
# Plants	200	800	223	786	115	625	200	797

Table 1b: Number of planting sites and plants sampled in High treatment plots in 2017.

Field #	3		6		9		11	
Irrigation	Irrigated	Not Irrig.	Irrigated	Not Irrig.	Irrigated	Not Irrig.	Irrigated	Not Irrig.
# Sites	500	50	500	50	500	50	500	50
# Plants	1000	100	1000	100	1000	100	1000	100

Survivorship of installed plants in the High treatment averaged 43.9%, while survivorship of those installed in the Medium treatment averaged 32.4% if unirrigated and 49.5% if irrigated. Of the trees and shrubs planted in both treatments, the best survivorship was shown by Oregon ash,

black willow, and sandbar willow; poor survivorship was shown by dogwood, snowberry, and cottonwood. Oregon ash and the willow species were the ones used for the limited replanting done in the High treatment fields, so some live individuals of these species are now taking the place of other trees that had poor survivorship from the beginning (e.g., cottonwoods). Black willow had 170% survivorship in Field 6; this is likely due to using the species as a replacement plant for dead cuttings. Some species, such as mulefat in Field 2 and Oregon ash in Field 8, had over 100% survivorship. Replanting was not conducted in these Medium treatment fields, so the extra plants must be due to substitutions made at the time of planting. Of the companion plants installed in the High treatment, Santa Barbara sedge and slender sedge had the highest survivorship, while pipevine, clematis, and stinging nettle had survivorship of near zero.

The restoration treatment that included irrigation performed as anticipated, with one twist. As expected, plants installed in the summer in the High treatment fields did not survive without irrigation. Averaged over all four Medium treatment fields, irrigated rows showed higher survivorship than the unirrigated ones. However, this pattern was driven by only two of the four fields. Fields 8 & 12 showed the unexpected result of similar survivorship regardless of irrigation. Despite similar survivorship, irrigated plants in all four Medium fields were typically taller and stouter than unirrigated ones.

Vegetation

The Conservancy has two primary research objectives for vegetation on the floodplain restoration study site. The first is to describe patterns of vegetation diversity over the whole site. To do this, the Conservancy compared data from different years as well as different basins (East, where levee removal enhanced fluvial process, vs. the West, where the recent hydrologic conditions were not altered). The second research objective is to experimentally compare different levels of restoration effort. Data collection for this comparison was conducted in 2017, but data analysis would be premature because the native grass seeding in the High treatment did not take place until after the 2017 monitoring.

The methods for vegetation sampling used plots of 20 m by 20 m. These were initially placed according to a grid pattern over the site, and a subset of them were randomly selected for permanent installation. Within each macroplot, every vascular plant species observed was recorded along with its life form (Table 2) and absolute percent cover (visually estimated & recorded as one of seven classes given in Table 3). Cover was also estimated for bare ground, litter (defined as all dead vegetative matter from previous years except for wood), dead wood (greater than 3/8” diameter), and the total cover of each life form. For tree species only, we recorded diameter at breast height (DBH) of every individual 135 cm tall or taller, and recorded number of individuals by species for those taller than 50 cm but shorter than 135 cm. Sampling took place from late June through mid-September.

Table 2: Life form categories used in vegetation sampling

Symbol	Description
H	Any herbaceous plant regardless of height
S2	Shrub shorter than 2 m tall
S1	Shrub taller than 2 m
T3	Tree shorter than 50 cm
T2	Tree between 50 cm and 10 m tall
T1	Tree taller than 10 m
V	Vines with the potential to cross height boundaries of other life forms

Table 3: Modified Daubenmire cover classes used in vegetation sampling.

Class	Range
1	less than 1%
2	1% to <5%
3	5% to <25%
4	25% to <50%
5	50% to <75%
6	75% to <95%
7	95% to 100%

Results showed a positive influence of river processes on native plants and the desired negative influence on introduced plants. The number of native plant species and their total percent cover was higher in the East Basin vs the West. Although the number of introduced species was also higher in the East Basin, the percent cover was lower. These patterns were present to some extent before the levee removal, although time constraints prevented completion of monitoring. On reflection, this is not surprising, because informal observation and quantitative modeling both showed pre-existing hydrological differences between the two basins.

Natural recruitment of trees is one subset of the positive influence of river processes on native plants. The Conservancy observed young native trees on the sand splays that resulted from the levee removal. The species observed included cottonwood, Oregon ash, sandbar willow, black willow, and valley oak. After the wet spring of 2017, the Conservnacy also observed thousands of young cottonwoods in Field 12, which have survived and grown through summer 2018. These were not restricted to soil deposition as a result of river processes, but it is possible that our engineered changes to topography, along with the wet spring in 2017, led to higher groundwater necessary for cottonwood survival.

Restore and manage perched groundwater and perennial wetlands

The Conservancy pursued restoration and management of perched groundwater and associated perennial wetlands by monitoring important indicator species (e.g., giant garter snake) at the Cosumnes River Preserve. To advance this conservation priority, the Conservancy investigated "environmental DNA" (eDNA) to detect giant garter snake (GGS, a protected species); eDNA results showed several "positives" (indicating GGS presence) spread throughout the north and south forks of Badger Creek (tributaries of the Cosumnes River). Negative controls and positive controls both yielded the expected results. Analysis yielded 28 detections of GGS out of 94 samples. These positives were spread throughout the geographic sampling range.

Partner organizations have used separate funding sources to do mark-recapture trapping of GGS in some areas covered by the eDNA testing. No GGS individuals were trapped through several weeks of trapping. Partner staff and volunteers have also conducted walking transects looking for snakes, and although they saw snakes of different species, no GGS were detected in those surveys either.

The primary benefit of eDNA is that it can detect presence of a species at very low population densities. In addition to likely having a low population density east of Highway 99, GGS can potentially evade traps by going around, over, or (for aquatic traps) under them. GGS also usually exhibits more cautious behavior than other snakes, fleeing for cover much sooner, which could account for lack of detection in walking transects. The initial lack of specificity of the eDNA test leaves some amount of uncertainty in the results. However, given the large number of positive detections even after the method was refined to exclude mountain garter snakes, it is likely that at least one (and probably more) GGS individuals were present in June 2017 west of Highway 99.

Acquisition of water for the Cosumnes River Flow Augmentation Project

The Conservancy has identified possible water supplies that might serve as reliable sources for the Cosumnes River Flow Augmentation Project but did not conduct additional, substantive work on this task in the 2017-2018 reporting period.

Groundwater planning Central and South Sacramento County groundwater basins

The Conservancy has communicated with stakeholders regarding a water accounting framework for the Central Sacramento groundwater basin but did not conduct additional, substantive work on this task in the 2017-2018 reporting period.

Conclusion

The Nature Conservancy is grateful for the continued support of Elk Hills Power, LLC for water conservation and environmental enhancement in the Cosumnes River system. With your support, we have completed important conservation work in that system (e.g., completion of riparian restoration project) and shared findings with other stakeholders and decision makers to better inform practices and legislation that affect our water resources (e.g., implementation of the Sustainable Groundwater Management Act). We look forward to our continued collaboration with Elk Hills Power to restore water-dependent ecosystems and protect rivers for the benefit of people and nature.

Attachment 1

2017-2018 Financial Summary

Expenses from August 2017 through August 2018

2017-2018 Tasks	Total
1. Scientific studies to optimize groundwater recharge for ecosystem benefits	$ 29,227
2. Implement restoration of floodplains on the Cosumnes River Preserve	$ 286,347
3. Restore and manage perched groundwater and perennial wetlands	$ 1,645
4. Pursue acquisition of water for the Cosumnes River Flow Augmentation Project	$ 0
5. Groundwater planning Central and South Sacramento County groundwater basins	$ 0
Grant total	**$ 317,219**

2018 - Annual Compliance Report

TRANS-3 The project owner shall ensure that all federal and state regulations for the transport of hazardous materials are observed during both construction and operation of the facility.

Verification: The project owner shall provide, in their Monthly Compliance Reports during construction and in the Annual Compliance Reports during operation, to the CPM, copies of all permits and licenses of the haulers contracted to transport hazardous substances.

Status: The copies of permits and licenses of haulers contracted to transport hazardous substances is provided below.


Coles Environmental


Nalco Multi Year (2017-2020).pdf


AirGas.pdf


Argo.pdf


PraxAir.pdf

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

HAZARDOUS MATERIALS TRANSPORTATION LICENSE

CHP 360H (REV. 1/00) OPI 062

CONTROL NUMBER	LICENSE NUMBER	ISSUE DATE	EFFECTIVE DATE	EXPIRATION DATE
229537	140215	5/17/2018	6/1/2018	5/31/2019

CHP CARRIER NUMBER	LOCATION		
CA 421654	999	☐ Duplicate	☐ Replacement
		☐ Initial	☑ Renewal

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

AIRGAS USA LLC
31 N PEORIA AVENUE
TULSA OK, US 74120

LICENSEE NAME AND MAILING ADDRESS

Attention: FRANK OPEKA
AIRGAS USA LLC
6790 FLORIN PERKINS ROAD 300
SACRAMENTO CA, US 95828

PROPERTY OF THE CALIFORNIA HIGHWAY PATROL (CHP)

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

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

- ☐ **(HMX) Explosives subject to Division 14, California Vehicle Code (CVC).**
- ☐ **(HMPH) Poison Inhalation Hazard materials in bulk packages subject to Division 14.3, CVC.**
- ☐ **(HMRCQ) Highway Route Controlled Quantity radioactive materials subject to Division 14.5, 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)

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

HAZARDOUS MATERIALS TRANSPORTATION LICENSE

CHP 360H (REV. 1/00) OPI 062

CONTROL NUMBER	LICENSE NUMBER	ISSUE DATE	EFFECTIVE DATE	EXPIRATION DATE
229108	89253	4/10/2018	6/1/2018	5/31/2019

CHP CARRIER NUMBER	LOCATION		
CA 7068	420	☐ Duplicate	☐ Replacement
		☐ Initial	☑ Renewal

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

ARGO CHEMICAL INC
30933 IMPERIAL ST
SHAFTER CA, US 93263

	LICENSEE NAME AND MAILING ADDRESS
	ARGO CHEMICAL INC **30933 IMPERIAL ST** **SHAFTER CA, US 93263**

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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

HAZARDOUS MATERIALS TRANSPORTATION LICENSE

CHP 360H (REV. 1/00) OPI 062

CONTROL NUMBER	LICENSE NUMBER	ISSUE DATE	EFFECTIVE DATE	EXPIRATION DATE
228862	225268	3/22/2018	5/1/2018	4/30/2019

CHP CARRIER NUMBER	LOCATION		
CA 260951	420	☐ Duplicate	☐ Replacement
		☐ Initial	☑ Renewal

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

COLES SERVICES INC
COLES ENVIRONMENTAL
1620 E BRUNDAGE LN
BAKERSFIELD CA, US 93307

	LICENSEE NAME AND MAILING ADDRESS
	COLES SERVICES INC **COLES ENVIRONMENTAL** **P O BOX 10764** **BAKERSFIELD CA, US 93389**

PROPERTY OF THE CALIFORNIA HIGHWAY PATROL (CHP)

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SPARE

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

HAZARDOUS MATERIALS CERTIFICATE OF REGISTRATION FOR REGISTRATION YEAR(S) 2017-2020

Registrant: NALCO COMPANY
Attn: ROBERT FISHER
1601 WEST DIEHL ROAD
NAPERVILLE, IL 60563-1198

This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this document.

Reg. No: 052517 551 086ZB **Effective: 07/01/2017** **Expires: 06/30/2020**

HM Company ID: 040463

Record Keeping Requirements for the Registration Program

The following must be maintained at the principal place of business for a period of three years from the date of issuance of this Certificate of Registration:

(1) A copy of the registration statement filed with PHMSA; and
(2) This Certificate of Registration

Each person subject to the registration requirement must furnish that person's Certificate of Registration (or a copy) and all other records and information pertaining to the information contained in the registration statement to an authorized representative or special agent of the U. S. Department of Transportation upon request.

Each motor carrier (private or for-hire) and each vessel operator subject to the registration requirement must keep a copy of the current Certificate of Registration or another document bearing the registration number identified as the "U.S. DOT Hazmat Reg. No." in each truck and truck tractor or vessel (trailers and semi-trailers not included) used to transport hazardous materials subject to the registration requirement. The Certificate of Registration or document bearing the registration number must be made available, upon request, to enforcement personnel.

For information, contact the Hazardous Materials Registration Manager, PHH-52, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, telephone (202) 366-4109.

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

HAZARDOUS MATERIALS TRANSPORTATION LICENSE

CHP 360H (REV. 1/00) OPI 062

CONTROL NUMBER	LICENSE NUMBER	ISSUE DATE	EFFECTIVE DATE	EXPIRATION DATE
229122	102719	4/12/2018	6/1/2018	5/31/2019

CHP CARRIER NUMBER	LOCATION		
CA 50277	999	☐ Duplicate	☐ Replacement
		☐ Initial	☑ Renewal

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

PRAXAIR INC
175 EAST PARK DRIVE
TONAWANDA NY, US 14150-7844

	LICENSEE NAME AND MAILING ADDRESS
	Attention: MARY EMMA LUZAK **PRAXAIR INC** **175 EAST PARK DRIVE** **TONAWANDA NY, US 14150-7844**

PROPERTY OF THE CALIFORNIA HIGHWAY PATROL (CHP)

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2018 - Annual Compliance Report

TRANS-9 The project owner shall develop and implement a safety management plan for delivery of ammonia. The plan shall include procedures, protective equipment requirements, training, a checklist, and the specification of delivery routes.

Verification: 30 days prior to the first delivery of ammonia to the project site, the project owner shall submit an ammonia transportation safety management plan to the CPM for review and approval. The project owner shall include in the monthly compliance report during construction and in the annual compliance reports during operation, a summary of actions taken in compliance with the safety management plan.

Status: The safety management plan for the Ammonia delivery has been implemented and EHP operators received the material handling training.

Training records for actions taken in compliance with safety management plan for ammonia delivery is provided along with a summary of ammonia deliveries to EHP.

2018 Ammonia Offloading.pdf

VIS-1 Prior to the start of commercial operation, the project owner shall treat the project structures, buildings, towers, substation, tanks and transmission poles visible to the public in a non-reflective color to blend with the surroundings. The project owner shall treat the cooling towers with a heat-resistant color that minimizes contrast and harmonizes with the surrounding environment.

Protocol: The project owner shall submit a treatment plan for the project to the California Energy Commission Compliance Project Manager (CPM) for review and approval. The treatment plan shall include:

1. Specification, and 11 x 17 color simulations, of the treatment proposed for use on project structures, including structures treated during manufacture;
2. A detailed schedule for completion of the treatment; and, a procedure to ensure proper treatment maintenance for the life of the project.

If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall submit to the CPM a revised plan.

After approval of the plan by the CPM, the project owner shall implement the plan according to the schedule and shall ensure that the treatment is properly maintained for the life of the project.

For any structures that are treated during manufacture, the project owner shall not specify the treatment of such structures to the vendors until the project owner receives notification of approval of the treatment plan by the CPM.

The project owner shall not perform the final treatment on any structures until the project owner receives notification of approval of the treatment plan from the CPM.

The project owner shall notify the CPM within one week after all pre-colored structures have been erected and all structures to be treated in the field have been treated and the structures are ready for inspection.

Verification: Not later than 30 days prior to ordering the first structures that are color treated during manufacture, the project owner shall submit its proposed plan to the CPM for review and approval. If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan.

Verification: Not less than 30 days prior to the start of commercial operation, the project owner shall notify the CPM that all structures treated during manufacture and all structures treated in the field are ready for inspection.

2018 - Annual Compliance Report

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

Status: The color treatment maintenance is on the “as-needed” basis. Currently a color treatment maintenance was performed on cooling tower pumps, circulating water pipe and closed cycle cooling water pipe. The total amount of paint used was 65 gallons. See attached excel file. A visual inspection of other main structure has been performed and the plant is satisfactory.

Elk Hills Power Facility 2019.pdf

EHPP Paint Amount Used 2018.xlsx

EHPP Paint	Macropoxy 646 (gallons)	Hi-Solids Polyurethane (gallons)	Picture
Circulating Pump Station	10	7	
Circulating Water Pipe	10	10	
Close Cycle Cooling Water Pipe	16	15	

Cooling Tower

Steam Turbine and Condenser

Warehouse Building with Unit 1 and Unit 2

Unit 1

Unit 2

Raw Water Tank

Raw Water Tank, Demin Water Tank and Demin Building

Protective & Marine Coatings

HI-SOLIDS POLYURETHANE 100

PART A	B65-625	GLOSS
PART A	B65-630	SEMI-GLOSS
PART B	B65V625	HARDENER

Revised: October 24, 2016

PRODUCT INFORMATION

5.28

PRODUCT DESCRIPTION

HI-SOLIDS POLYURETHANE 100 is a two-component, less than 100 g/l VOC, aliphatic, acrylic polyurethane enamel. It is designed for high performance protection with outstanding exterior gloss and color retention.

- Good/excellent resistance to corrosion and weathering
- Outstanding color and gloss retention
- Chemical resistant
- HAPS Free
- Resists film attack by mildew (MR White Tint Base only, B65WW625)

PRODUCT CHARACTERISTICS

Finish:	Gloss or Semi-gloss
Color:	Wide range of colors possible
Volume Solids:	83% ± 2%, mixed, may vary by color
Weight Solids:	87% ± 2%, mixed, may vary by color
VOC (EPA Method 24): mixed	Unreduced: <100 g/L; 0.83 lb/gal May vary by color
Mix Ratio:	3:1 by volume

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.6** (90)	**4.8** (120)
Dry mils (microns)	**3.0** (75)	**4.0** (100)
~Coverage sq ft/gal (m^2/L)	**332** (8.1)	**464** (11.4)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1328** (32.5)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	8 hours	4 hours	2 hours
To handle:	24 hours	14 hours	6 hours
To recoat:			
minimum:	36 hours	24 hours	12 hours
maximum:	14 days	14 days	10 days
To cure:	14 days	10 days	7 days
Pot Life:	4 hours	2 hours	1 hour

If maximum recoat time is exceeded, abrade surface before recoating.

Drying time is temperature, humidity, and film thickness dependent.

Sweat-in-Time: None required

Shelf Life:	Part A: 24 months, unopened Part B: 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	109°F (43°C), PMCC, mixed
Reducer/Clean Up:	Reducer #111, R7K111, Oxsol 100

RECOMMENDED USES

- For use over prepared substrates in industrial environments
- Heavy duty interior and exterior structural coating
- A chemical and abrasion resistant equipment and machinery finish
- A gloss and color retentive heavy duty maintenance coating for use in "high visibility" areas
- Exterior surfaces of steel tanks
- Chemical processing equipment
- Exterior metal siding and trim
- Marine Applications
- Oil Field Machinery
- Refineries
- Handrails
- Rolling stock
- Power plants
- Offshore structures
- Clean rooms
- Conveyors
- Paper mills
- Suitable for use in USDA inspected facilities
- Conforms to AWWA D102 OCS #5 & #6.
- Acceptable for use in high performance architectural applications.
- Suitable for use in USDA inspected facilities
- Approved for FIRETEX hydrocarbon finish coats
- Acceptable for use in Canadian Food Processing facilities categories: D1, D3 (Confirm acceptance of specific part numbers/rexes with your SW Sales Representative)

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP6

System Tested*:

1 ct. Corothane I Galvapac @ 3.0 mils (75 microns) dft
1 ct. Hi-Solids Polyurethane 100 @ 4.0 mils (100 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	130 mg loss
Accelerated Weathering / SSPC Paint No. 36, Level 3	ASTM D4587, QUVA, 2000 hours, >70% gloss retention	Passes
Adhesion	ASTM D4541	1050 psi
Corrosion Weathering	ASTM D5894, 5 cycles, 1680 hours	Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 for rusting
Direct Impact Resistance	ASTM D2794	160 in. lbs.
Dry Heat Resistance	ASTM D2485	200°F (93°C)
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Pencil Hardness	ASTM D3363	HB
Salt Fog Resistance	ASTM B117, 2000 hours	Rating 10 per ASTM D714 for blistering; Rating 9 per ASTM D610 for rusting
Thermal Shock	ASTM D2246, 15 cycles	Excellent

Meets the requirements of SSPC Paint No. 36, Level 3 for white and light colors. Dark colors may require a clear coat.

continued on back

Protective & Marine Coatings

HI-SOLIDS POLYURETHANE 100

PART A	B65-625	GLOSS
PART A	B65-630	SEMI-GLOSS
PART B	B65V625	HARDENER

Revised: October 24, 2016

PRODUCT INFORMATION

5.28

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel: Epoxy Primer			
1 ct.	Recoatable Epoxy Primer Low VOC	4.0-6.0	(100-150)
1-2 cts.	Hi-Solids Polyurethane 100	3.0-4.0	(75-100)
Steel: Zinc Rich Primer			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1 ct.	Macropoxy 646-100	5.0-10.0	(125-250)
1-2 cts.	Hi-Solids Polyurethane 100	3.0-4.0	(75-100)
Steel: Epoxy Mastic Primer			
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1-2 cts.	Hi-Solids Polyurethane 100	3.0-4.0	(75-100)
Steel: Universal Primer			
1 ct.	ProCryl Universal Primer	2.0-4.0	(50-100)
1-2 cts.	Hi-Solids Polyurethane 100	3.0-4.0	(75-100)
Concrete Smooth:			
1 ct.	Macropoxy 646-100	5.0-10.0	(125-250)
1-2 cts.	Hi-Solids Polyurethane 100	3.0-4.0	(75-100)
Galvanized Metal:			
1 ct.	Recoatable Epoxy Primer Low VOC	4.0-6.0	(100-150)
1-2 cts.	Hi-Solids Polyurethane 100	3.0-4.0	(75-100)

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

* Iron & Steel: SSPC-SP6/NACE 3, 2 mil (50 micron) profile
* Galvanizing: SSPC-SP1
* Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3

* Primer Required

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	SSPC	NACE
White Metal		Sa 3	SP 5	1
Near White Metal		Sa 2.5	SP 10	2
Commercial Blast		Sa 2	SP 6	3
Brush-Off Blast		Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	SP 2	-
	Pitted & Rusted	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	SP 3	-
	Pitted & Rusted	D St 3	SP 3	-

TINTING

Tint with Maxitoner Colorants only into Part A at 100% tint strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature: 40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 2 components premeasured 1 gallon / 3.78 liter mixes, and 4 gallon / 15.1 liter mixes A and B components ordered separately

Weight: 12.35 ± 0.2 lb/gal ; 1.5 Kg/L mixed, may vary with color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

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Protective & Marine Coatings

HI-SOLIDS POLYURETHANE 100

PART A	B65-625	GLOSS
PART A	B65-630	SEMI-GLOSS
PART B	B65V625	HARDENER

Revised: October 24, 2016

APPLICATION BULLETIN

5.28

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Galvanized Steel
Allow to weather a minimum of six months prior to coating. Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned. Primer required.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2R Concrete Surface Preparation.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	SSPC	NACE
White Metal		Sa 3	SP 5	1
Near White Metal		Sa 2.5	SP 10	2
Commercial Blast		Sa 2	SP 6	3
Brush-Off Blast		Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	SP 2	-
	Pitted & Rusted	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	SP 3	-
	Pitted & Rusted	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up: .....Reducer #111, R7K111, or Oxsol 100

Airless Spray
Pressure.....2500 - 2800 psi
Hose.....3/8" ID
Tip .....013" - .017"
Filter .....none
Reduction.....As needed up to 10% by volume

Conventional Spray
Gun .....Binks 95
Fluid Nozzle .....63 B
Atomization Pressure ....50 - 70 psi
Fluid Pressure.....20 - 25 psi
Reduction.....As needed up to 15% by volume

Brush
Brush.....Natural bristle
Reduction.....As needed up to 15% by volume

Roller
Cover .....3/8" woven with solvent resistant core
Reduction.....as needed up to 15% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

continued on back

Protective & Marine Coatings

HI-SOLIDS POLYURETHANE 100

PART A	B65-625	GLOSS
PART A	B65-630	SEMI-GLOSS
PART B	B65V625	HARDENER

Revised: October 24, 2016

APPLICATION BULLETIN

5.28

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine 3 parts by volume of Part A with 1 part by volume of Part B. Thoroughly agitate the mixture with power agitation.

If reducer solvent is used, add only after both components have been thoroughly mixed.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.6** (90)	**4.8** (120)
Dry mils (microns)	**3.0** (75)	**4.0** (100)
~Coverage sq ft/gal (m^2/L)	**332** (8.1)	**464** (11.4)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1328** (32.5)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	8 hours	4 hours	2 hours
To handle:	24 hours	14 hours	6 hours
To recoat:			
minimum:	36 hours	24 hours	12 hours
maximum:	14 days	14 days	10 days
To cure:	14 days	10 days	7 days

If maximum recoat time is exceeded, abrade surface before recoating.

Drying time is temperature, humidity, and film thickness dependent.

Pot Life:	4 hours	2 hours	1 hour
Sweat-in-Time:		None required	

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #111, R7K111. Clean tools immediately after use with Reducer #111, R7K111. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

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PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #58.

Mixed coating is sensitive to water. Use water traps in all air lines. Moisture contact can reduce pot life and affect gloss and color.

Oxsol 100 Reducer can be used to improve the brush and roll charactersitics when applying this product by brush or roller.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

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Protective & Marine Coatings
PRODUCT DATA SHEET

MACROPOXY® 646
FAST CURE EPOXY

Revised: January, 2018

PRODUCT DESCRIPTION

MACROPOXY 646 FAST CURE EPOXY a high solids, high build, fast drying, polyamide epoxy designed to protect steel and concrete in industrial exposures. Ideal for maintenance painting and fabrication shop applications. The high solids content ensures adequate protection of sharp edges, corners, and welds. This product can be applied directly to marginally prepared steel surfaces.

INTENDED USES

- Recommended for marine applications, refineries, offshore platforms, fabrication shops, chemical plants, tank exteriors, power plants, water treatment plants, and mining and minerals industry
- Mill White and Black are acceptable for immersion use for salt water and fresh water, not acceptable for potable water

PRODUCT DATA

Volume Solids: 72% ± 2%, mixed, Mill White

VOC (mixed): Unreduced: <250 g/L; 2.08 lb/gal
Reduced 10%: <300 g/L; 2.50 lb/gal

Finish: Semi-Gloss

Colors: Mill White, Black and a wide range of colors available through tinting

Typical Thickness:

Recommended Spreading Rate Per Coat

	Minimum	Maximum
Wet mils (microns)	7.0 (175)	13.5 (338)
Dry mils (microns)	5.0* (125)	10.0 (250)
~Coverage sq ft/gal (m2/L)	115 (2.9)	230 (5.8)
Theoretical coverage sq ft/gal (m2/L) @ 1 mil (25 microns) dft	1152 (28.2)	

*May be applied at 3.0-10.0 mils (75-250 microns) dft in a multicoat system.
NOTE: *Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.*

Mix Ratio: 1:1 by volume

Reducer/Clean Up: Reducer R7K15 or R7K58
(California) Reducer R7K111 or Oxsol 100

Flash Point: 91°F (33°C), TCC, mixed

Packaging:
Part A: 1 gallon (3.78L) and 5 gallon (18.9L) containers
Part B: 1 gallon (3.78L) and 5 gallon (18.9L) containers

Average Drying Times @ 7.0 mils wet (175 microns):

	35°F (17°C)	77°F (25°C) *50% RH*	100°F (38°C)
Touch	4-5 hours	2 hours	1.5 hours
Handle	48 hours	8 hours	4.5 hours
Recoat			
- Minimum	48 hours	8 hours	4.5 hours
- Maximum	1 year	1 year	1 year
Cure to Service			
- Atmospheric	10 days	7 days	4.5 hours
- Immersion	14 days	7 days	4 days

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature humidity, and film thickness dependent. Paint temperature must be at least 40°F (4.5°C) minimum.

Pot Life	10 hours	4 hours	2 hours
Sweat-in-time	30 minutes	30 minutes	15 minutes

Weight: 12.9 ± 0.2 lb/gal ; 1.55 Kg/L mixed, may vary by color

Shelf Life: 36 months, unopened Store indoors at 40°F 4.5°C) to 110°F (43°C)

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Minimum recommended surface preparation:

Iron & Steel: Atmospheric: SSPC-SP2/3/ ISO8501-1:2007 St 2 or SSPC-SP WJ-3 / NACE WJ-3L
Immersion: SSPC-SP10 / NACE 2/ ISO8501-1:2007 Sa 2.5, 2-3 mil (50-75 micron) profile or SSPC-SP WJ-2/NACE WJ-2L

Aluminum & Galvanizing: SSPC-SP1

Concrete & Masonry: Atmospheric: SSPC-SP13 / NACE 6, or ICRI No. 310.2R, CSP 1-3
Immersion: SSPC-SP13 / NACE 6-4.3.1

MACROPOXY® 646
FAST CURE EPOXY

APPLICATION

Airless Spray*
Pump..... 30:1
Pressure ..... 2800 - 3000 psi (193 – 206 bar)
Hose..... 1/4" ID (6.3 mm)
Tip ..... .017" - .023" (0.43 – 0.58 mm)
Filter..... 60 mesh
Reduction..... As needed up to 10% by volume

Conventional Spray*
Gun ..... DeVilbiss MBC-510
Fluid Tip ..... E
Air Nozzle..... 704
Atomization Pressure .... 60 - 65 psi (4.1 – 4.5 bar)
Fluid Pressure..... 10 - 20 psi (0.7 – 1.4 bar)

Brush*
Brush..... Nylon/Polyester or Natural Bristle

Roller*
Cover ..... 3/8" woven with solvent resistant core

Plural Component Spray.....Acceptable

***Reduction**..... *As needed up to 10% by volume*

RECOMMENDED SYSTEMS

Dry Film Thickness / ct.		Mils	(Microns)
Steel, Immersion & Atmospheric			
1 Ct.	Macropoxy 646	5.0-10.0	(125-250)
Steel, Organic Zinc Primer, Atmospheric			
1 Ct.	Zinc Clad IV (85)	3.0-5.0	(75-125)
1 Ct.	Macropoxy 646	5.0-10.0	(125-250)
Steel, Inorganic Zinc Primer, Atmospheric:			
1 Ct.	Zinc Clad II (85)	2.0-4.0	(50-100)
1 Ct.	Macropoxy 646	5.0-10.0	(125-250)
Steel, Organic Zinc/Epoxy/Urethane Topcoat			
1 Ct.	Zinc Clad IV (85)	3.0-5.0	(75-125)
1 Ct.	Macropoxy 646	5.0-10.0	(125-250)
1 Ct.	Acrolon 7300	2.0-4.0	(50-100)
Steel, Inorganic Zinc/Epoxy/Urethane Topcoat			
1 Ct.	Zinc Clad II (85)	2.0-4.0	(50-100)
1 Ct.	Macropoxy 646	5.0-10.0	(125-250)
1 Ct.	Acrolon 7300	2.0-4.0	(50-100)
Steel, Organic Zinc/Epoxy/Polysiloxane Topcoat, Atmospheric			
1 Ct.	Zinc Clad IV (85)	3.0-5.0	(75-125)
1 Ct.	Macropoxy 646	5.0-10.0	(125-250)
1-2 Cts.	Sher-Loxane 800	2.0-4.0	(50-100)
Concrete/Masonry, Smooth, Immersion & Atmospheric			
1 Ct.	Macropoxy 646	5.0-10.0	(125-250)

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APPLICATION CONDITIONS

Temperature:
Air : 35°F (1.7°C) minimum, 120°F (49°C) maximum
Surface: 35°F (1.7°C) minimum, 250°F (120°C) maximum
Material: 40°F (4.5°C) minimum
At least 5°F (2.8°C) above dew point
Relative humidity: 85% maximum

APPROVALS

- Suitable for use in USDA inspected facilities
- Acceptable for use in Canadian Food Processing facilities, categories: D1, D2, D3 (Confirm acceptance of specific part numbers/rexes with your SW Sales Representative)
- Conforms to AWWA D102 OCS #5
- Conforms to MPI # 108
- This product meets specific design requirements for non-safety related nuclear plant applications in Level II, III and Balance of Plant, and DOE nuclear facilities*

* Nuclear qualifications are NRC license specific to the facility

ADDITIONAL NOTES

Tint Part A with Maxitoners at 150% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Tinting is not recommended for immersion service.

Quik-Kick Epoxy Accelerator is acceptable for use. See data page 4.99 for details.

Acceptable for Concrete Floors.

When spraying above 120°F, reduce material 10% with R7K100. Spray apply only. Product will produce an orange peel appearance when applied at elevated temperatures.

HEALTH AND SAFETY

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2018 - Annual Compliance Report

WASTE-3 Prior to the start of both construction and operation, the project owner shall prepare and submit to the CPM, for review and comment, a waste management plan for all wastes generated during construction and operation of the facility, respectively.

The plans shall contain, at a minimum, the following:

- A description of all waste streams, including projections of frequency, amounts generated and hazard classifications,
- Methods of managing each waste, including treatment methods and companies contracted with for treatment services,
- Waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and
- Recycling and waste minimization/reduction plans.

Verification: No less than sixty (60) days prior to the start of construction, the project owner shall submit the construction waste management plan to the CPM for review. The operation waste management plan shall be submitted no less than 60 days prior to the start of project operation. The project owner shall submit any required revisions within thirty (30) days of notification by the CPM (or mutually agreed upon date). In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to planned management methods.

Status: Record summaries are provided.

Waste Document.pdf

Elk Hills Power

Waste Document

Type of Waste: ***Hazardous Waste - Liquids***

No.	Date	Name of Waste	Qty	Unit (Wt/Vol)	Profile No	Manifest No	TSDF	Handling Codes
1	2/2/2018	UN1987, Alcohol	55	Gal	106730	018497520JJK	Crosby & Overton Long Beach CA 90813	H141
2	4/26/2018	Exhaust Stack Debris	160	Lbs	CH618808	011129110JJK	Clean Harbors Buttonwillow Buttonwillow CA 93206	H132
3	5/15/2018	Oily Debris (Rag/Pad/Abs)	100	Lbs	022414-05-BTI	018497262JJK	Bakersfield Transfer Inc Bakersfield CA 93307	H141
4	5/15/2018	Used Oil Filters	250	Lbs	022417-04-BTI	018497262JJK	Bakersfield Transfer Inc Bakersfield CA 93307	H141
5	5/15/2018	Capacitors/mini-Transformer	40	Lbs	051118-01-CSI	86566	CSI- Coles Environmental Bakersfield CA 93307	Recycled
6	12/20/2018	Oily Debris/Rags	800	Lbs	121418-05-BTI	020055062JJK	Bakersfield Transfer Inc Bakersfield CA 93307	H141

No.	Date	Name of Waste	Qty	Unit (Wt/Vol)	Profile No	Manifest No	TSDF	Handling Codes
7	12/20/2018	Used Oil Filters	400	Lbs	121418-04-BTI	020055062JJK	Bakersfield Transfer Inc Bakersfield CA 93307	H141
8	12/20/2018	Used Batteries	25	Lbs	121418-06-BTI	88860	Bakersfield Transfer Inc Bakersfield CA 93307	Recycled

2018 - Annual Compliance Report

ANNUAL CEC COMPLIANCE MATRIX

Annual Compliance Matrix.pdf

Annual Compliance Matrix

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
Category: *Biological Resources*					
BIO-2	The CPM approved Designated Biologist shall perform the following during project construction and operation: 1. Advise the project owner s Construction Manager on the implementation of the Biological Resource Conditions of Certification; 2. Supervise or conduct mitigation, monitoring and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as, wetlands and special status species; and 3. Notify the project owner and the CPM of any non-compliance with any Biological Resources Condition of Certification.	2/28/2019		In Progress	During project construction, the Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report.
BIO-2	The CPM approved Designated Biologist shall perform the following during project construction and operation: 1. Advise the project owner s Construction Manager on the implementation of the Biological Resource Conditions of Certification; 2. Supervise or conduct mitigation, monitoring and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as, wetlands and special status species; and 3. Notify the project owner and the CPM of any non-compliance with any Biological Resources Condition of Certification.	2/28/2018	2/21/2018	Complete	During project construction, the Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report.

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
Category: *Hazardous Materials Management*					
HAZ-01	Unless approved in advance by the CPM, other than those identified The project owner shall not use any hazardous material in reportable quantities, as specified in Title 40, Code Of Federal Regulations, Part 355, Subpart J, section 355.50, that are not identified in Appendix B unless approved in advance by the Compliance Project Manager (CPM).	2/28/2019		In Progress	The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.
HAZ-01	Unless approved in advance by the CPM, other than those identified The project owner shall not use any hazardous material in reportable quantities, as specified in Title 40, Code Of Federal Regulations, Part 355, Subpart J, section 355.50, that are not identified in Appendix B unless approved in advance by the Compliance Project Manager (CPM).	2/28/2018	2/21/2018	Complete	The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
Category: *Soil & Water Resources*					
S & W-04	The project shall employ water conservation measures to limit water use to a maximum of 3,000 acre-feet per year.	2/28/2019		In Progress	The project owner shall summarize the water use of the project during the previous year in the Annual Compliance Report. Reports substantiating such use shall be provided to the CPM within ten (10) days of a request by the CPM.
S & W-04	The project shall employ water conservation measures to limit water use to a maximum of 3,000 acre-feet per year.	2/28/2018	2/21/2018	Complete	The project owner shall summarize the water use of the project during the previous year in the Annual Compliance Report. Reports substantiating such use shall be provided to the CPM within ten (10) days of a request by the CPM.

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
S & W-05	The project owner shall fund the acquisition of water and water rights for the prurpose of water conservation or environmental enhansement. Such funding shall result in at least 1,000 acre feet of per year of water conservation or environmental enhansement over the life of the project, except that such funding shall total no more than an annual amount of $100,000 with 3.5 percent per year added thereafter. The first payment shall be made when commercial operation begins, and a payment shall be made each year thereafter for the life of the project. The measure(s) will be selected by mutual agreement of the Developer and CURE. Examples of such measures include, but are not limited to, the following: a. Contribution to the CalFed Environmental Water account, which is the option preferred by the parties; b. Acquisition of water from Berenda Mesa Water District that could be applied to environmental enhansement purposes in the Delta or otherwise managed to promote water conservation.	2/28/2019		In Progress	Within sixty (60) days after commercial operation of the project and thereafter in the Annual Compliance Report, the project owner shall submit evidence of payment as required by the above condition for water conservation or environmental enhancement to the CalFed Water Account, or to such other recipient as may be mutually agreed upon by the project owner and the California Unions for Reliable Energy (CURE). Project owner shall also provide a letter from CURE identifying the mutually agreed upon recipient.

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
S & W-05	The project owner shall fund the acquisition of water and water rights for the prurpose of water conservation or environmental enhansement. Such funding shall result in at least 1,000 acre feet of per year of water conservation or environmental enhansement over the life of the project, except that such funding shall total no more than an annual amount of $100,000 with 3.5 percent per year added thereafter. The first payment shall be made when commercial operation begins, and a payment shall be made each year thereafter for the life of the project. The measure(s) will be selected by mutual agreement of the Developer and CURE. Examples of such measures include, but are not limited to, the following: a. Contribution to the CalFed Environmental Water account, which is the option preferred by the parties; b. Acquisition of water from Berenda Mesa Water District that could be applied to environmental enhansement purposes in the Delta or otherwise managed to promote water conservation.	2/28/2018	2/21/2018	Complete	Within sixty (60) days after commercial operation of the project and thereafter in the Annual Compliance Report, the project owner shall submit evidence of payment as required by the above condition for water conservation or environmental enhancement to the CalFed Water Account, or to such other recipient as may be mutually agreed upon by the project owner and the California Unions for Reliable Energy (CURE). Project owner shall also provide a letter from CURE identifying the mutually agreed upon recipient.

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
Category: *Traffic and Transportation*					
TRANS-03	The project owner shall ensure that all federal and state regulations for the transport of hazardous materials are observed during both construction and operation of the facility.	2/28/2019		In Progress	The project owner shall provide, in the Annual Compliance Reports during operation, to the CPM, copies of all permits and licenses of the haulers contracted to transport hazardous substances.
TRANS-03	The project owner shall ensure that all federal and state regulations for the transport of hazardous materials are observed during both construction and operation of the facility.	2/28/2018	2/21/2018	Complete	The project owner shall provide, in the Annual Compliance Reports during operation, to the CPM, copies of all permits and licenses of the haulers contracted to transport hazardous substances.
TRANS-09	The project owner shall develop and implement a Safety Management Plan for delivery of ammonia. The plan shall include procedures, protective equipment requirements, training, a checklist, and the specification of delivery routes. The plan shall also specify that only Department of Transportation certified MC-307or CPM approved equivalent vehicles can be used to transport ammonia to the site.	2/28/2019		In Progress	The project owner shall include in the monthly compliance report during construction, and in the annual compliance report during operation, a summary of actions taken in compliance with the safety management plan.
TRANS-09	The project owner shall develop and implement a Safety Management Plan for delivery of ammonia. The plan shall include procedures, protective equipment requirements, training, a checklist, and the specification of delivery routes. The plan shall also specify that only Department of Transportation certified MC-307or CPM approved equivalent vehicles can be used to transport ammonia to the site.	2/28/2018	2/21/2018	Complete	The project owner shall include in the monthly compliance report during construction, and in the annual compliance report during operation, a summary of actions taken in compliance with the safety management plan.

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
Category: *Visual Resources*					
VIS-01	Not less than thirty days prior to the start of commercial operation, the project owner shall notify the CPM that all structures treated during manufacture and all structures treated in the field are ready for inspection.	2/28/2019		In Progress	The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.
VIS-01	Not less than thirty days prior to the start of commercial operation, the project owner shall notify the CPM that all structures treated during manufacture and all structures treated in the field are ready for inspection.	2/28/2018	2/21/2018	Complete	The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

CondNo	Condition	DueDate	DateSubmitted	Status	Verification
Category: *Waste Management*					
WASTE-03	The plans shall contain, at a minimum, the following: a description of all waste streams, including projections of frequency, amounts generated and hazard classifications; and methods of managing each waste, including treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.	2/28/2019		In Progress	In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to planned management methods.
WASTE-03	The plans shall contain, at a minimum, the following: a description of all waste streams, including projections of frequency, amounts generated and hazard classifications; and methods of managing each waste, including treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.	2/28/2018	2/21/2018	Complete	In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to planned management methods.

2018 - Annual Compliance Report

ATTACHMENT 1 – Summary of Operation Status Per CEC Annual Compliance Reporting Requirement Item 2 page 31.

- A summary of the current project operating status and an explanation of any significant changes to facility operations during the year (e.g., total hours of operation, scheduled and unscheduled maintenance and any major repairs);

2018 Monthly Operations Summar

Attached are the financial and performance reports for the month of January.

Operations

- No Safety or Environmental incidents during the month of January.
- Produced energy was 342,971 MWhrs.
- Reliability for the month was 100%.
- Plant availability for the month was 100%.
- Purpa Steam export for the Month was 4.50% .
- Water usage for the Month and Year to date was 216 acre feet.

Attached are the performance reports for the month of February.

Operations

- No Safety or Environmental incidents during the month of February.
- Produced energy was 312,925 MWhrs.
- Reliability for the month was 100%.
- Plant availability for the month was 100%.
- Purpa Steam export for the month was 3.70% . Year to date export is 4.1%.
- Water usage for the Month and Year to date was 209 and 425 acre feet, respectively.

Attached are the Financial and Performance reports for the month of March.

Operations

- No Safety or Environmental incidents during the month of March at the Power Plant .
- Produced energy was 344,412 MWhrs.
- Reliability for the month was 100%.
- Plant availability for the month was 100%.
- Purpa Steam export for the month was 3.70% . Year to date export is 4.0%.
- Water usage for the Month and Year to date was 236 and 661 acre feet, respectively.

Attached are the Financial and Performance reports for the month of April.

Operations

- No Safety incidents during the month April.
- No Environmental incidents for EHP Power Plant. CPG1 was issued a NOV on April 04th due to discovery of fugitive Leaks >50,000 PPM.
- Produced energy was 255,157 MWhrs.
- Reliability for the month was 99.4%.
- Plant availability for the month was 81.9% due to planned outage activity during the month to both turbines.
- Purpa Steam export for the month was 4.80% . Year to date export is 4.2%.
- Water usage for the Month and Year to date was 183.6 and 845 acre feet, respectively.

Attached are the Financial and Performance reports for the month of May.

Operations

- No Safety incidents during the month May.
- No Environmental incidents for EHP Power Plant or CPG1.
- Produced energy was 311,983 MWhrs.
- Reliability for the month was 95.6% and 99% year to date. EHP had an unplanned outage May 15th – 17th where PG&E issued an unintentional Remedial Action Scheme (RAS) transfer trip signal.
- Plant availability for the month was 95.6% due to unplanned event.
- Purpa Steam export for the month was 3.8% . Year to date export is 4.1%.
- Water usage for the Month and Year to date was 272 and 1,117acre feet, respectively.

Attached are the Financial and Performance reports for the month of June .

Operations

- No Safety incidents during the month June.
- No Environmental incidents for EHP Power Plant. CPG1 issued NOV on June 5th due to leak on flanges and threaded connections greater than >50k ppmv.
- Produced energy was 309,992 MWhrs.
- Reliability for the month was 98.3% and 98.9% year to date. EHP had a unplanned outage June 13th due to faulty flame detector and on June 21st due to a boiler feed pump over heating issue.
- Plant availability for the month was 98.3% due to the unplanned event.
- Purpa Steam export for the month was 3.3% . Year to date export is 4.0%.

Water usage for the Month and Year to date was 300 and 1,417acre feet, respectively. Attached are the

Attached are the Financial and Performance reports for the month of July .

Operations

- No Safety incidents during the month July.
- No Environmental incidents for EHP Power Plant or CPG1.
- Produced energy was 327,824 MWhrs.
- Reliability for the month was 100% and 99% year to date.
- Plant availability for the month was 100% .
- Purpa Steam export for the month was 3.3% . Year to date export is 3.9%.
- Water usage for the Month and Year to date was 306 and 1,723 acre feet, respectively.

Attached are the Financial and Performance reports for the month of August .

Operations

- No Safety incidents during the month August.
- No Environmental incidents for EHP Power Plant or CPG1.
- Produced energy was 341,599 MWhrs.
- Reliability for the month was 100% and 99.1% year to date.
- Plant availability for the month was 100% .
- Purpa Steam export for the month was 3.3% . Year to date export is 3.8%.
- Water usage for the Month and Year to date was 374 and 2,097 acre feet, respectively.

Attached are the Financial and Performance reports for the month of September .

Operations

- No Safety incidents during the month September.
- No Environmental incidents for EHP Power Plant or CPG1.
- Produced energy was 336,783 MWhrs.
- Reliability for the month was 100% and 99.2% year to date.
- Plant availability for the month was 100% .
- Purpa Steam export for the month was 5.5% . Year to date export is 4.0%.
- Water usage for the Month and Year to date was 275 and 2,372 acre feet, respectively.

Attached are the Financial and Performance reports for the month of October.

Operations

- No Safety incidents during the month October.
- No Environmental incidents for CPG1. EHP Power had a CEMS Breakdown on October 11th which was reported to SJVAPCD.
- Produced energy was 285,087 MWhrs.
- Reliability for the month was 80.2%, primarily due to a hydrogen seal failure on Unit 2. Reliability year to date is 97.2%
- Plant availability for the month was 80.2% .
- Purpa Steam export for the month was 5.3% . Year to date export is 4.2%.
- Water usage for the Month and Year to date was 249 and 2,621 acre feet, respectively.

Attached are the Financial and Performance reports for the month of November.

Operations

- No Safety incidents during the month .
- No Environmental incidents for CPG1 or EHP Power.
- Produced energy was 313,587 MWhrs.
- Reliability for the month was 100%
- Plant availability for the month was 92.2% due to a planned fall outage for Unit 1.
- Purpa Steam export for the month was 5.0% . Year to date export is 4.3%.
- Water usage for the Month and Year to date was 253 and 2,874 acre feet, respectively.

Attached are the Financial and Performance reports for the month of December.

Operations

- No Safety incidents during the month .
- No Environmental incidents for CPG1 or EHP Power.
- Produced energy was 315,230 MWhrs.
- Reliability for the month was 100%
- Plant availability for the month was 92.4% due to a planned fall outage for Unit 2.
- Purpa Steam export for the month was 5.8% . Year to date export is 4.4%.
- Water usage for the Month and Year to date was 183 and 3,057 acre feet, respectively.

2018 - Annual Compliance Report

ATTACHMENT 2 – List of Missed Submittal Deadlines

None

2018 - Annual Compliance Report

ATTACHMENT 3 – Listing of Filings made to, or permit issued by, other government agencies.

EHPP 2018 List Of Submittals.pdf

ENVIRONMENTAL AND REGULATORY CALENDAR - 2018 Elk Hills Power Plant

This calendar provides a snapshot of primary recurring requirements and due dates. This calendar does not include daily or weekly requirements, training or monitoring requirements, or event-triggered requirements. The calendar is intended to serve as a work planning tool and a high level summary for Management communications and monitoring, to be used in conjunction with a tracking/tickler system.

*Dates in this Environmental Calendar should be updated by the plant at least annually (in December for the next year), as the Calendar reflects actual due dates in each year.

Rev 0 Issue Date 7/01/2018

Program	JAN	Submitted	FEB	Submitted	MAR	Submitted	APR	Submitted	MAY	Submitted	JUN	Submitted	JUL	Submitted	AUG	Submitted	SEPT	Submitted	OCT	Submitted	NOV	Submitted	DEC	Submitted	NOTES
Air Program																									
SJVAPCD/EPA: Quarterly Reports (Qtrs 1-4)	01/30/18	01/18/18					04/30/18	04/19/18					07/30/18	07/23/18					10/30/18	10/22/18					b
SJVAPCD: Title V Permit Semi-Annual Monitoring Report - Report of Required Monitoring (RRM)					03/30/18	03/08/18											09/30/18	09/07/18							c
SJVAPCD: Title V Permit Annual Report - Compliance Certification																	09/30/18	09/07/18							d
SJVAPCD: Permit Fee	01/30/18	01/10/18																							d
SJVAPCD: Air Toxic Fee											06/11/18	04/17/18													
SJVAPCD: Title V Permit Renewal (Note 2)			**02/28/21**																						d
SJVAPCD: Annual Emission Statement Inventory (Rule 1160)							04/01/18	02/22/18																	d
SJVAPCD: Five Year Start Up Testing																			**10/30/22**						f
CEMS RATA & Compliance Test: Test Protocol and Date Notification																			09/04/18	09/17/18					d; Note 3
CEMS RATA & Compliance Test																			10/04/18	10/16/18					d
CEMS RATA & Compliance Test: Test Report																							12/14/18	12/14/18	d; Note 1
Part 60/75 Cylinder Gas Audit /Linearity	01/31/18	01/17/18					04/30/18	05/08/18					07/30/18	08/01/18							11/13/18	10/30/18			b
EPA: Federal GHG Annual Report					03/31/18	03/26/18																			d
CARB: California GHG Emission Data Report (AB32)							04/10/18	03/26/18																	d
CARB: California GHG Emissions Verification Opinion (AB32)																	09/01/18	08/07/18							d
CARB: Diesel Fueled Engine Off Road Vehicle Reporting (2449(g)(2)					03/01/18	02/09/18																			
Turbine/Duct Burner Fuel Flowmeters Transmitter Accuracy Test																			10/30/18						d
Review/Update CEMS QA/QC Plan							04/30/18																		f
CEC: Quarterly Report (Fuel, Emission, Catalyst, Ammonia, etc)	01/30/18	01/23/18					04/30/18	04/19/18					07/30/18	07/26/18					10/30/18	10/22/18					b
CEC: Annual Condition of Certification Report			02/28/18	02/21/18																					Note 8; d
CEC: Permit Fee													07/30/18	05/15/18											Note 8; d
EPA: EDR Acid Rain Title IV (via ECMPS)	01/30/18	01/22/18					04/30/18	04/10/18					07/30/18	07/13/18					10/30/18	10/20/18					b
Water Program																									
Underground Injection Well: Quarterly Discharge Sampling	01/30/18	01/23/18					04/30/18	04/17/18					07/30/18	07/24/18					10/30/18	10/23/18					b
Underground Injection Well: Quarterly Reports	01/30/18	01/10/18					04/30/18	04/04/18					07/30/18	07/03/18					10/30/18	10/05/18					b
Underground Injection Well: Fall Off Testing/MIT/Profile Survey - 30 day Notice																									d; Note 3
Underground Injection Well: Fall Off Testing/MIT/Profile Survey																	09/21/18	09/10/18							d
Underground Injection Well: Fall Off Testing/MIT/Profile Survey - 60 day Report																					11/21/18	11/01/18			d; Note 1
Underground Injection Well: Tag Bottom																	09/01/18	09/10/18							z
Underground Injection Well: 5 Yr Annular Pressure Test 30 day notice																					**11/01/18**	08/06/18			f ; Note 3
Underground Injection Well: 5 Yr Annular Pressure Test																							**12/01/18**	09/18/18	f
SPCC Plan: Quarterly Inspection					03/30/18	03/09/18					06/30/18	06/07/18					09/30/18	09/26/18					12/30/18	12/14/18	b
SPCC Plan: Annual Review & Update									05/30/18	05/02/18															d
SPCC Plan: 5-Year Review - Complete May 2018									**05/30/18**	05/02/18															f
Hazardous Material and Waste Management Programs																									
Hazardous Waste: 90-Day Disposal					03/30/18	02/27/18					06/30/18	05/29/18					09/30/18	09/30/18					12/30/18	12/20/18	Note 9
Universal Waste: 12-Month Disposal																							12/30/18	12/20/18	d
EPA ID Annual Verification Questionnaire/Manifest Fee [Triggered by Agency Notification]													07/30/18	10/10/18											d
Hazardous Materials Permit: Renewal [CUPA] Note 4													7/1/2012	N/A											d
HMBP/Tier II: Hazardous Materials Inventory/Annual Certification					03/01/18	02/07/18									08/31/18	N/A							12/30/18	10/10/18	d
KCEHS: Permit Fee Payment													07/30/18	07/11/18											d
BOE: Lead Fee (waiver annual) - See Note 7															08/31/18	N/A									d
BOE: Hazardous Waste Generator Fee			02/28/18	01/23/18																					
Risk Management Programs																									
RMP/CalARP: 3-Year Compliance Audit																	09/30/18	12/12/17							e
RMP/CalARP: Update Submission to CUPA by 5 Year Anniversary Date							**04/30/18**	12/12/17																	f
RMP/CalARP: 5-Year Review of Offsite Consequence Analyses (OCA)							**04/30/18**	12/12/17																	f
RMP/CalARP: 5-Year Hazard Review							**04/30/18**	10/30/17																	f

Program	JAN	Submitted	FEB	Submitted	MAR	Submitted	APR	Submitted	MAY	Submitted	JUN	Submitted	JUL	Submitted	AUG	Submitted	SEPT	Submitted	OCT	Submitted	NOV	Submitted	DEC	Submitted	NOTES
Regulatory Programs (Operations) *Note 6																									
CEC 1304 Quarterly Generator and Fuel Report			02/15/18	01/18/18					05/15/18	04/18/18					08/15/18	07/23/18					11/15/18	10/11/18			b
WKWD: Backflow Preventer Certification	01/30/18	02/21/18																							d
DOE EIA-923 Report	01/31/18	01/30/18	02/28/18	02/28/18	03/31/18	01/30/18	04/30/18	04/30/18	05/30/18	05/30/18	06/30/18	06/30/18	07/30/18	07/30/18	08/31/18	08/30/18	09/30/18	09/30/18	10/31/18	10/30/18	11/30/18	11/30/18	12/30/18	12/30/18	
DOE EIA-923 Annual Supplemental Report									05/15/18	05/15/18															
DOE EIA- 860 Report					03/13/18	01/18/18																			
FERC EQR	01/30/18	01/28/18					04/30/18	04/28/18					07/30/18	07/28/18					10/30/18	10/28/18					
FERC EQR Quarterly Refile					03/31/18	03/28/18					06/30/18	06/28/18					09/30/18	09/28/18					12/31/18	12/28/18	
FERC Form 566	01/30/18	01/30/18																							
FERC Triennial Filing 2018											06/15/18	n/a													
WECC Self Certification			02/15/18	02/25/18																					
WECC Internal Compliance Program Assesment													07/30/18	07/23/18											
WECC Annual Underfrequency Loadshedding									05/28/18																
WECC Operational Practice Survery			02/26/18	n/a																					
WECC AVR	01/30/18	01/19/18					04/30/18	04/19/18					07/30/18	07/19/18					10/30/18	10/19/18					
WECC PSS	01/30/18	01/19/18					04/30/18	04/19/18					07/30/18	07/19/18					10/30/18	10/19/18					
WECC Event Report - no report if no event	01/30/18	01/18/18					04/30/18	04/19/18					07/30/18	07/19/18					10/30/18	10/18/18					
WECC Vegetation Management	01/30/18	01/20/18					04/30/18	04/20/18					07/30/18	07/15/18					10/30/18	10/15/18					
WECC Misoperations					03/01/18	02/28/18							07/30/18	07/20/18									12/01/18	11/28/18	
NERC GADS			02/15/18	01/28/18					05/15/18	04/28/18			07/30/18	07/28/18							11/15/18	10/28/18			
WECC Transmission Relay Loadability Annual Form							04/20/18	04/20/18																	
WECC Remedial Action Scheme Annual Filing																							12/30/18	12/30/18	
WECC Survey on Natural Gas Outages					03/30/18	n/a																			

NOTES:

Note 1: Due 60 days after end of testing

Note 2: Title V Permit application must be submitted no later than 180 days prior to the permit expiration date. Permit expires 2/29/2018.

Note 3: Due 30 days prior to performing test

Note 4: KCEHS issues renewed permits every six year. Reissuance date can vary from the last issuance year.

Note 5: WECC OATI Submittal

Note 6: Items in light blue area is Regulatory/Operations responsibility.

Note 7: BOE and CDPH issued a permanent waiver for EHP dated September 11, 2013. No further submittal required.

Note 8: Will be performed by Environmental

Note 9: If waste is low at the end of 90 day, then proceed to 180 days

a - Monthly

b - Quarterly

c - Semi-annual

d - Annually

e - Every 3 years

f - Every 5 years

g - Every 10 years

h - 3 out of 4 quarters when RATA not performed

i - If unit operated ≥ 168 hours/qtr

j - Every two or four QA operating qtrs

k - Every four fuel QA operating qtrs

l - Every twelve calendar quarters

m - Due 21 days prior to scheduled test date

n - Between 10/14/2013 and 10/14/2018

o - Between MM/DD/YYYY and MM/DD/YYYY

p - Actual Date triggered by agency notice or state rule

q - Every 12 months

r - 60 days prior to testing

s - Within 60 days of test completion

t- Every 2 years

u - Shipment required within 1 year of the earliest start date of UW in storage

v- if triggered based on haz waste generation

w - if fire any oil or coal and trigger thresholds

x - within 60 days after the end of the calendar year.

y - as applicable, at the frequency determined by the PE or the applicable standard

z - as applicable.

aa - 10-days prior to the test date

bb - Semi-annually if RA from last test was >7.5%, annual if RA was< 7.5%.

cc - One time requirement

dd - Every two months

Revision Note:

Rev 0 - Initial Publication

ATTACHMENT 4 – Projection of project compliance activities scheduled for year 2019

Compliance Activities
Air (SJVAPCD)
Relative Accuracy Test Audit
Annual Compliance Testing
Injection Well (EPA)
Mechanical Integrity Testing
Fall-Off Testing
Green House Gas
ARB EGGRT Green House Gas Emission Reporting
EPA EGGRT Green House Gas Emission Reporting
Air Resources Board (ARB)
Diesel Off-Road Vehicle Regulation Reporting

2018 - Annual Compliance Report

ATTACHMENT 5 – Listing of Year's addition to the on-site compliance file

None

2018 - Annual Compliance Report

ATTACHMENT 6 – Evaluation of the on-site contingency plan for unexpected facility closure

The on-site contingency plan is current. No further addition at this time.

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