

DOCKETED	
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Project Title:	Carlsbad Energy Center - Compliance
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Document Title:	Annual Compliance Report- 2020
Description:	Annual Compliance Report- 2020
Filer:	Anwar Ali
Organization:	Carlsbad Energy Center LLC
Submitter Role:	Applicant
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March 30, 2021

Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

Anwar Ali, Ph.D.
Compliance Project Manager
Carlsbad Energy Center Project (07-AFC-06C)
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

**RE: CARLSBAD ENERGY CENTER PROJECT, DOCKET NO. 07-AFC-06C
CONDITION OF CERTIFICATION, COM-7
ANNUAL COMPLIANCE REPORT, 2020**

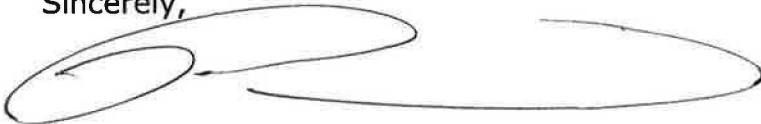
Dear Dr. Ali:

Carlsbad Energy Center LLC ("Project Owner") submits the 2020 Annual Compliance Report in compliance with the AFC Docket No. 07-AFC-06C, Conditions of Certification (COCs) COM-7 for the amended Carlsbad Energy Center Project (ACECP) located at 4950 Avenida Encinas, Carlsbad, California.

This report includes information that demonstrates the facility met all applicable conditions of certification during this operational period.

If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 710-3943.

Sincerely,

A handwritten signature in black ink, appearing to read 'Paul Mattesich', with a large, sweeping loop at the end.

Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: Carlsbad Energy Center Project (07-AFC-06C), California Energy Commission, Annual Compliance Report, 2020

Cc: File

Carlsbad Energy Center Project (07-AFC-06C)

California Energy Commission Annual Compliance Report

2020

***Submitted by: Carlsbad Energy Center LLC
Date Submitted: 03-30-2021***

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I. Summary

a. Project Annual Compliance Summary

The Carlsbad Energy Center Project (CECP) began commercial operation on December 12, 2018. In compliance with the California Energy Commission (Energy Commission) license, Carlsbad Energy Center LLC submits the information herein demonstrating compliance with condition of certification COM-8 Annual Compliance Report requirements.

This annual report includes data required by COM-7 for 2020.

II. Operational Status

- a. CECP is commercially operational. No significant changes to operations occurred in 2020.

III. Post-Certification Changes to license 07-AFC-06C

- a. There were no changes to license 07-AFC-06C in 2020.

IV. Submittal Deadlines Missed

- a. No submittal deadlines were missed in 2020.

V. List of Files to and Permits Issued by Other Governmental Agencies

a. Filings Submitting:

- i. San Diego Air Pollution Control District Variances 4507 Extension to August 21, 2020.

b. Permits issued:

- i. Department of Environmental Health Annual Permit: DEH2018-HUPFP-004698
- ii. San Diego Air Pollution Control District: Revised Startup Authorization: APCD2014-APP-003480-003486 with modifications to conditions 14, 40, 41 with expiration of January 10, 2021, later extended to May 24, 2021.

VI. Evaluation of the Site's Contingency Plan

- a. The site's contingency plan was reviewed for potential updates in 2020.
- b. The emergency contact list was reviewed for accuracy and minor updates were applied.
- c. Various changes were made related to Encina Demolition status, PA system upgrades, and emergency supplies location.

VII. List of Complaints, Notices of Violation, Official Warnings, Citations Received:

- a. The following Complaints, Notices of Violation, Official Warnings, Citations were received in 2020:
 - i. San Diego Air Pollution Control District (SDAPCD) issued Notice of Violation APCD2020-NOV-000452 on July 29, 2020. On February 15, 2020, a decision was made by the SDACPD that no violation occurred and the Notice of Violation was voided.
 - ii. A complaint contesting the modification to Startup Authorization APCD2014-APP-003480-003486 was received in 2020. This complaint was heard by the San Diego Air Pollution Control District Hearing Board on January 7, 2021. The complaint was denied by the board.

Attachment A BIO-2: Annual Biologist Report



Biological Resources Annual Compliance Report

Prepared for:
Carlsbad Energy
Center LLC

Carlsbad Energy Center Project
(07-AFC-06C), 2020 Reporting Period

January 2021

Signature Page

January 2021

Biological Resources Annual Compliance Report



Steve Williams, P.G.
Partner

A handwritten signature in blue ink, reading "Melissa Fowler", positioned above a horizontal line.

Melissa Fowler
Designated Biologist/Senior Biologist

Environmental Resources Management

1920 Main Street, Suite 300
Irvine, California 92614

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1: Site Vicinity Map

1. INTRODUCTION

This Annual Compliance Report (ACR) summarizes biological resources monitoring activities and documentation conducted during operations at the Carlsbad Energy Center (CEC; see Figure 1) from 1 January through 31 December 2020, in accordance with the July 2015 Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) and California Energy Commission (CEC) Conditions of Certification (COCs) BIO-6.

1.1 CECP Phase I Overview

Tank demolition/removal, site preparation and remediation activities for Phase I of the Amended CECP were completed in November 2015. Phase I berm removal commenced the first week of February 2016 and was completed in mid-May 2016.

1.2 CECP Phase II Overview

The CEC's Compliance Project Manager (CPM) approved the start of construction on 6 June 2016. Phase II of the Amended CECP began in February 2017 and was completed in October 2018 with complete demobilization in January 2019.

The Construction Closure Report was submitted to the CEC on March 18, 2019 and was approved by the CEC on August 20, 2019.

1.3 COCs Overview

The following biological COCs covered by this ACR include, but are not limited to:

- BIO-2 Designated Biologist Duties
- BIO-5 Worker Environmental Awareness Program (WEAP);
- BIO-6 Biological Resources Mitigation Implementation and Monitoring Plan;
- BIO-7 Impact Avoidance Mitigation Features; and
- BIO-8 Mitigation Management to Avoid Harassment or Harm.

2. OPERATIONS MONITORING SUMMARY

This section summarizes biological monitoring activities conducted by ERM-West, Inc. (ERM) during the 2020 reporting period. This ACR document site conditions and biological monitoring events for CECP Operations. As previously noted, CECP Phase I and Phase II have been completed.

The frequency and duration of monitoring is dependent upon nesting and migratory seasons and the biological resources located within, as well as transiting through the work area. Biological monitoring will continue on a quarterly basis (one visit per quarter), as well as on-call monitoring, until the Designated Biologist determines that a change is necessary for the protection of sensitive biological resources or an increase in monitoring is warranted because of a lack of biological resources within the site.

The Biological Resources Compliance Monitoring Logs are provided in Appendix A. A list of wildlife species observed during the monitoring events are included in Appendix B.

2.1 CECP Operations Monitoring Events and Compliance Inspections

CECP operational activities are monitored on a quarterly basis. Biological monitoring events occurred on 6 March, 23 June, 18 September, and 4 December 2020. The Biological Resources Compliance Monitoring Logs are provided in Appendix A.

2.2 Nesting Birds

No active nests were identified within the operating site and no buffers were required. All observed active nests were outside operating facility or in areas that were not accessible; therefore, these nests were naturally buffered. The Biological Resources Compliance Monitoring Logs are provided in Appendix B.

2.3 Special-Status Species

Six special-status avian species were observed within the site vicinity during the biological monitoring events, which included: American peregrine falcon (*Falco peregrinus anatum*; United States Fish and Wildlife Service [USFWS] Birds of Conservation Concern [BCC]; California Department of Fish and Wildlife [CDFW] Fully Protected [FP]; California Department of Forestry [CDF] Sensitive [S]), California brown pelican (*Pelecanus occidentalis californicus*; CDFW FP), California gull (*Larus californicus*; CDFW Watch List [WL], great blue heron (*Ardea herodias*; CDF S), great egret (*Ardea alba*; CDF S), and osprey (*Pandion haliaetus*; CDFW WL; CDF S). Buffer zones were not needed for these special-status species because there were no active nests within operating areas. A list of wildlife species observed during the monitoring event is included in Appendix B. California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) were not submitted because birds in transit (fly-overs) or foraging are not recorded according to CNDDB guidelines¹.

2.4 Wildlife Displacement, Injuries, and Mortalities

2.4.1 Migratory Bird Treaty Act Protected Species

On 9 December 2020, a deceased American coot (*Fulica americana*) was found in the gas cylinder staging area. No additional injured or dead species protected by the Migratory Bird Treaty Act (MBTA) or California Department of Fish and Game Codes (3503, 3503.5) were observed at the site. A list of avian

¹ California Department of Fish and Wildlife (CDFW). 2016. *Submitting Avian Detections to the CNDDB*. Available online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25731>

species observed during the monitoring event is included in Appendix B. A Wildlife Observation Form (WOF) is provided in Appendix C.

2.4.2 Other Species

On March 6, 2020, a deceased Norway rat (*Rattus norvegicus*) was found within the site. The remains were disposed of according to site guidelines. No additional injured or dead wildlife species were observed at the site. A list of wildlife species observed during the monitoring event is included in Appendix B. A WO) is provided in Appendix C.

2.5 Hazardous Material Spills

No hazardous material spills have occurred at the project site during the biological monitoring event.

2.6 Trash

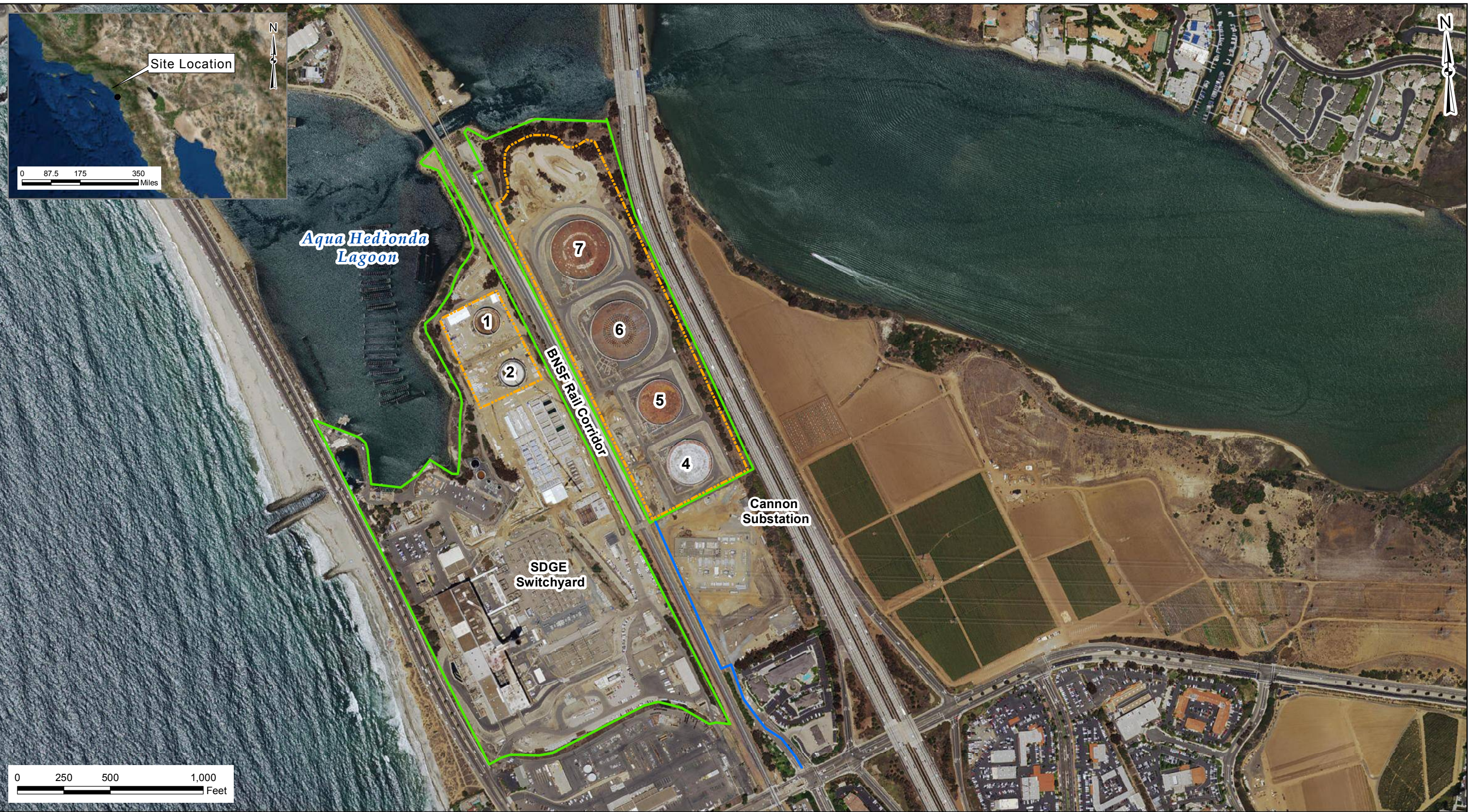
No litter was observed within the project site during the biological monitoring events.

2.7 Non-compliance Report

No formal non-compliance notifications or incident reports were issued.

FIGURE

C:\Users\Austin.Frey\Desktop\NRG Proposal\NRG\Carlsbad\NRG Carlsbad_Figure1_10102016.mxd Created By: Author Under Map Document Properties Date: 10/10/2016 Project: XXXXXXX



Legend

- Demo and Construction Worker Access
- Amended CECP Site Boundary
- Encina Power Station Site

Figure 1
Site Location Map
Carlsbad Energy Center Project
San Diego County, CA
October, 2016

APPENDIX A BIOLOGICAL RESOURCES COMPLIANCE MONITORING LOGS

Carlsbad Energy Center (CEC)
BIOLOGICAL RESOURCES
COMPLIANCE MONITORING LOG - OPERATIONS

Date		Monitor			Time (Begin-End)
March 6, 2020		Leigh Ann Boswell			08:00-13:00
Temperature (°F)	Humidity (%)	Wind (mph)	Precipitation (Y/N, amount)	Visibility	Weather Comment
57-63	-	2-3	N	-	100% cloud cover (AM); 0% cloud cover (PM)
Site Location(s)					
CEC site					
Summary of Biological Resources Monitoring Observations					
<p>Biological resources monitoring survey for biological constraints, special-status species, and nesting birds was conducted on the CEC site.</p> <p>Bird/Nesting Birds Observations:</p> <ul style="list-style-type: none"> No active avian courtship, nests, or nesting behaviors were observed during the monitoring event. <p>Special-Status Species Observed:</p> <ul style="list-style-type: none"> California gulls (<i>Larus californicus</i>; California Department of Fish and Wildlife [CDFW] Watch List [WL]) were observed within the project vicinity. An American peregrine falcon (<i>Falco peregrinus anatum</i>; United States Fish and Wildlife Service [USFWS] Birds of Conservation Concern (BCC); CDFW Fully Protected [FP]; California Department of Forestry [CDF] Sensitive [S]) was observed perching on Unit 6. No additional special-status species were observed. <p>Other Observations:</p> <ul style="list-style-type: none"> An inactive nest was observed within the southern-most dead tree, which is located along the vegetated berm. A deceased Norway rat (<i>Rattus norvegicus</i>) was located on the eastern access road next to landscaped berm. A Wildlife Observation Form (WOF) was completed. Storm drain covers prevent debris from entering the storm drain system. Waste and recycle bins have been installed in pairs throughout the project area to eliminate trash and encourage recycling. Eight dead trees were observed on the landscaped berm, and three inactive nests were observed. A red-tailed hawk was observed flying above the north end of the project and perched within the project vicinity. No additional observations were noted. 					
Items Requiring Action/Follow-up					
<ul style="list-style-type: none"> None. 					
Wildlife Species Observed:					
<p>American crow (<i>Corvus brachyrhynchos</i>), American peregrine falcon, Anna's hummingbird, black phoebe (<i>Sayornis nigricans</i>), California gull, house finch, killdeer (<i>Charadrius vociferous</i>), Norway rat, red-tailed hawk (<i>Buteo jamaicensis</i>), song sparrow, western fence lizard (<i>Sceloporus occidentalis</i>), and yellow-rumped warbler (<i>Setophaga coronata</i>).</p>					

Photo 1



Location	CEC site	Description	An inactive nest was observed in the southern-most dead tree located on the landscaped berm.
-----------------	----------	--------------------	--

Photo 2



Location	CEC site	Description	A red-tailed hawk was observed flying near the north end of the site and perched within the project vicinity.
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Photo 3



Location	CEC site	Description	Storm drain covers prevent debris from entering the storm drain system.
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Photo 4



Location	CEC site	Description	Waste and recycle bins have been installed in pairs throughout the site.
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<div> <div>Carlsbad Energy Center (CEC)</div> <div>BIOLOGICAL RESOURCES</div> <div>COMPLIANCE MONITORING LOG - OPERATIONS</div> </div>					
Date		Monitor			Time (Begin-End)
June 23, 2020		Leigh Ann Boswell			07:00-12:00
Temperature (°F)	Humidity (%)	Wind (mph)	Precipitation (Y/N, amount)	Visibility	Weather Comment
64-68	-	0-5	N	-	100% cloud cover; light mist (AM)
Site Location(s)					
CEC site					
Summary of Biological Resources Monitoring Observations					
<p>Biological resources monitoring survey for biological constraints, special-status species, and nesting birds was conducted on the CEC site.</p> <p>Bird/Nesting Birds Observations:</p> <ul style="list-style-type: none"> Allen's hummingbird (<i>Selasphorus sasin</i>) was observed performing territorial behaviors in the landscaped area at the north end of the site. House finches (<i>Haemorhous mexicanus</i>) were observed on the landscaped berm and were observed bringing nesting material to a cavity in the southwest corner of Unit 8. Two western gulls were observed perching on a potential nest site near Unit 8 and were observed harassing a red-tailed hawk (<i>Buteo jamaicensis</i>) by the landscaped berm. An inactive nest was located on the southeast side of Unit 9, on the power pole. No additional avian courtship, nests, or nesting behaviors were observed. <p>Special-Status Species Observed:</p> <ul style="list-style-type: none"> An American peregrine falcon (<i>Falco peregrinus anatum</i>; United States Fish and Wildlife Service [USFWS] Birds of Conservation Concern (BCC); CDFW Fully Protected [FP]; California Department of Forestry [CDF] Sensitive [S]) was observed within the site. A great blue heron (<i>Ardea herodias</i>; CDF S) was observed within the site vicinity. A great egret (<i>Ardea alba</i>; CDF S) was observed within the site vicinity. No additional special-status species were observed. <p>Other Observations:</p> <ul style="list-style-type: none"> A bee swarm was observed around a power pole located east of Unit 6. No additional observations were noted. 					
Items Requiring Action/Follow-up					
<ul style="list-style-type: none"> None. 					
Wildlife Species Observed:					
Allen's hummingbird, American crow (<i>Corvus brachyrhynchos</i>), American peregrine falcon, Anna's hummingbird (<i>Calypte anna</i>), great blue heron, great egret, house finch, killdeer (<i>Charadrius vociferous</i>), mourning dove (<i>Zenaida macroura</i>), red-tailed hawk (<i>Buteo jamaicensis</i>), song sparrow (<i>Melospiza melodia</i>), western fence lizard (<i>Sceloporus occidentalis</i>), and western gull (<i>Larus occidentalis</i>).					

Photo 1



Location	CEC site	Description	An inactive nest was located on the southeast side of Unit 9 on the power pole.
----------	----------	-------------	---

Photo 2



Location	CEC site	Description	A bee swarm was observed at the top of the power pole, east of Unit 6.
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Photo 3



Location	CEC site	Description	An Allen's hummingbird observed performing territorial behaviors in the northern end of the site.
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Photo 4



Location	CEC site	Description	Two house finches were observed entering a cavity on the southwest corner of Unit 8.
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Carlsbad Energy Center (CEC) BIOLOGICAL RESOURCES COMPLIANCE MONITORING LOG - OPERATIONS					
Date		Monitor			Time (Begin-End)
September 18, 2020		Leigh Ann Boswell			07:00-12:00
Temperature (°F)	Humidity (%)	Wind (mph)	Precipitation (Y/N, amount)	Visibility	Weather Comment
64-81	-	0-5	N	-	0% cloud cover
Site Location(s)					
CEC site					
Summary of Biological Resources Monitoring Observations					
<p>Biological resources monitoring survey for biological constraints, special-status species, and nesting birds was conducted on the CEC site.</p> <p>Bird/Nesting Birds Observations:</p> <ul style="list-style-type: none"> An inactive nest was observed on the southeast side of Unit 9. No additional avian courtship, nests, or nesting behavior was observed. <p>Special-Status Species Observed:</p> <ul style="list-style-type: none"> An American peregrine falcon (<i>Falco peregrinus</i>; California Department of Fish and Wildlife [CDFW] Fully Protected [FP]; California Department of Forestry [CDF] Sensitive [S]) was observed within the site. An osprey (<i>Pandion haliaetus</i>; CDFW Watch List [WL]; California Department of Forestry [CDF] Sensitive [S]) was observed within the site vicinity. No additional special-status species were observed. <p>Other Biological Resources Observations:</p> <ul style="list-style-type: none"> A coyote (<i>Canis latrans</i>) was observed in the vegetation along the northern portion of the site. Coyote scat was observed throughout the northern end of the site. No additional observations were noted. <p>Other Observations/Comments:</p> <ul style="list-style-type: none"> No additional observations were noted. 					
Items Requiring Action/Follow-up					
<ul style="list-style-type: none"> None. 					
Wildlife Species Observed:					
<p>American bushtit (<i>Psaltirparus minimus</i>), American crow (<i>Corvus brachyrhynchos</i>), American peregrine falcon, Anna's hummingbird (<i>Calypste anna</i>), black phoebe (<i>Sayornis nigricans</i>), common yellowthroat (<i>Geothlypis trichas</i>), coyote, house finch (<i>Haemorhous mexicanus</i>), mourning dove (<i>Zenaida macroura</i>), Nuttall's woodpecker (<i>Dryobates nuttallii</i>), osprey, red-tailed hawk (<i>Buteo jamaicensis</i>), song sparrow (<i>Melospiza melodia</i>), western fence lizard (<i>Sceloporus occidentalis</i>), and western kingbird (<i>Tyrannus verticalis</i>).</p>					

Photo 1



Location	CEC site	Description	Overview of the CEC site.
----------	----------	-------------	---------------------------

Photo 2



Location	CEC site	Description	Coyote scat was observed within the site.
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Photo 3



Sep 18, 2020 10:28:09 AM
33.1405N 117.3337W

Location	CEC site	Description	Overview of trash management and no litter was observed.
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Photo 4

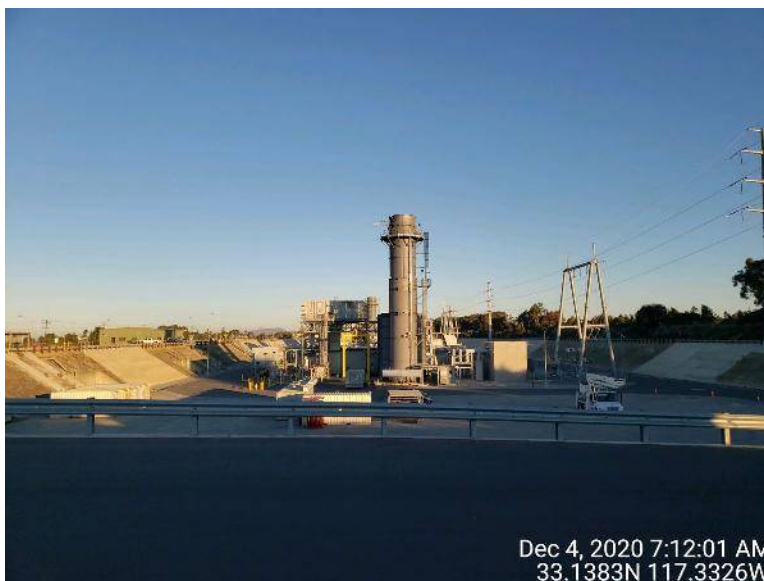


Sep 18, 2020 7:15:57 AM
33.1385N 117.3322W

Location	CEC site	Description	Overview of the eastern access road.
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<div> <div>Carlsbad Energy Center (CEC)</div> <div>BIOLOGICAL RESOURCES</div> <div>COMPLIANCE MONITORING LOG - OPERATIONS</div> </div>					
Date		Monitor			Time (Begin-End)
December 4, 2020		Leigh Ann Boswell			06:50-12:00
Temperature (°F)	Humidity (%)	Wind (mph)	Precipitation (Y/N, amount)	Visibility	Weather Comment
48-66	-	5-10	N	-	0% cloud cover
Site Location(s)					
CEC site					
Summary of Biological Resources Monitoring Observations					
<p>Biological resources monitoring survey for biological constraints, special-status species, and nesting birds was conducted on the CEC site.</p> <p>Bird/Nesting Birds Observations:</p> <ul style="list-style-type: none"> No avian courtship, active, or nesting behaviors were observed. <p>Special-Status Species Observed:</p> <ul style="list-style-type: none"> An American peregrine falcon (<i>Falco peregrinus</i>; California Department of Fish and Wildlife [CDFW] Fully Protected [FP]; California Department of Forestry Sensitive [S]) was observed within the site. California brown pelicans (<i>Pelecanus occidentalis californicus</i>; CDFW FP) were observed within the project vicinity. No additional special-status species were observed. <p>Other Biological Resources Observations:</p> <ul style="list-style-type: none"> Coyote (<i>Canis latrans</i>) scat was observed throughout the site. A deceased coyote was observed on train tracks, west of the CEC site. No additional observations were noted. <p>Other Observations/Comments:</p> <ul style="list-style-type: none"> No additional observations were noted. 					
Items Requiring Action/Follow-up					
<ul style="list-style-type: none"> None. 					
Wildlife Species Observed:					
<p>Allen's hummingbird (<i>Selasphorus sasin</i>), American bushtit (<i>Psaltirparus minimus</i>), American crow (<i>Corvus brachyrhynchos</i>), American kestrel (<i>Falco sparverius</i>), American peregrine falcon, Anna's hummingbird (<i>Calypte anna</i>), black phoebe (<i>Sayornis nigricans</i>), California brown pelican, common yellowthroat (<i>Geothlypis trichas</i>), coyote, house finch (<i>Haemorhous mexicanus</i>), house sparrow (<i>Passer domesticus</i>), mourning dove (<i>Zenaida macroura</i>), Nuttall's woodpecker (<i>Dryobates nuttallii</i>), red-tailed hawk (<i>Buteo jamaicensis</i>), western fence lizard (<i>Sceloporus occidentalis</i>), western gull (<i>Larus occidentalis</i>), white-crowned sparrow (<i>Zonotrichia leucophrys</i>), and yellow-rumped warbler (<i>Setophaga coronata</i>).</p>					

Photo 1



Location	CEC site	Description	Overview of the CEC site.
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Photo 2



Location	CEC site	Description	Overview of trash management.
----------	----------	-------------	-------------------------------

Photo 3



Location	CEC site	Description	Coyote scat was observed within the CEC site.
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Photo 4



Location	CEC site	Description	A deceased coyote was observed on the railroad tracks.
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APPENDIX B OBSERVED WILDLIFE SPECIES LIST

Observed Wildlife Species List 2020 Carlsbad Energy Center		
Common Name	Scientific Name	Status Federal/State/Other*
Birds		
Allen's hummingbird	<i>Selasphorus sasin</i>	--/--/--
American bushtit	<i>Psaltirparus minimus</i>	--/--/--
American kestrel	<i>Falco sparverius</i>	--/--/--
American peregrine falcon	<i>Falco peregrinus anatum</i>	BCC/FP/CDF: S
American crow	<i>Corvus brachyrhynchos</i>	--/--/--
Anna's hummingbird	<i>Calypste anna</i>	--/--/--
Black phoebe	<i>Sayornis nigricans</i>	--/--/--
California brown pelican	<i>Pelecanus occidentalis californicus</i>	--/FP/USFS: S
California gull	<i>Larus californicus</i>	--/WL/--
Common yellowthroat	<i>Geothlypis trichas</i>	--/--/--
Great blue heron	<i>Ardea herodias</i>	--/--/CDF: S
Great egret	<i>Ardea alba</i>	--/--/CDF: S
House finch	<i>Haemorhous mexicanus</i>	--/--/--
House sparrow	<i>Passer domesticus</i>	--/--/--
Killdeer	<i>Charadrius vociferous</i>	--/--/--
Mourning dove	<i>Zenaida macroura</i>	--/--/--
Nuttall's woodpecker	<i>Dryobates nuttallii</i>	--/--/--
Osprey	<i>Pandion haliaetus</i>	--/WL/CDF: S
Red-tailed hawk	<i>Buteo jamaicensis</i>	--/--/--
Song sparrow	<i>Melospiza melodia</i>	--/--/--
Western gull	<i>Larus occidentalis</i>	--/--/--
Western kingbird	<i>Tyrannus verticalis</i>	--/--/--
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	--/--/--
Yellow-rumped warbler	<i>Setophaga coronata</i>	--/--/--
Mammals		
Coyote	<i>Canis latrans</i>	--/--/--
Norway rat	<i>Rattus norvegicus</i>	--/--/--
Reptiles		
Western fence lizard	<i>Sceloporus occidentalis</i>	--/--/--

Source:

California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database. November 2020. Special Animals List. Periodic publication. 116 pp.

Status Codes:

If status codes are not provided, it indicates that the observed species is not a special-status species.

Federal:

FE = Federally listed Endangered: species in danger of extinction throughout a significant portion of its range

FT = Federally listed Threatened: species likely to become endangered within the foreseeable future

BCC = Birds of Conservation Concern

State:

SE = State listed as Endangered

ST = State listed as Threatened

FP = Fully Protected

CSC = California Species of Special Concern Species of concern to California Department of Fish and Wildlife (CDFW) because of declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

S = Sensitive

WL = Watch List

***Other:**

Bureau of Land Management (BLM): Sensitive (S)

California Department of Forestry and Fire Protection (CDF) classifies "sensitive species" as those species that warrant special protection during timber operations.

U.S. Forest Service (USFS): Sensitive (S)

APPENDIX C WILDLIFE OBSERVATION FORM

Carlsbad Energy Center (CEC) Wildlife Observation Form (WOF)

To be filled out by personnel who find active nest sites, wildlife dens, dead and/or injured wildlife, or other biological resources during daily construction activities and to document predation events. If nesting birds, dead and/or injured wildlife have been identified, please contact Melissa Fowler/Designated Biologist (DB) at (714) 768-1173 or melissa.n.fowler@gmail.com.

Date	Observer	Observer's Employer
March 6, 2020	Leigh Ann Boswell	ERM
Location of Observation		
Eastern access road, near the landscape berm		
Wildlife Species	Condition of Wildlife (alive/dead)	
Norway rat (<i>Rattus norvegicus</i>)	Dead	
Cause of Injury or Mortality (Don't speculate, If unknown, enter "unknown")		
Unknown		
Current Location of Animal		
The carcass was disposed of per site guidelines.		
Is the Biological Resource in Danger of Being Impacted by Project or Other Site Activities?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
If Yes, Explain		
Additional Comments		

Attachment B HAZ-1: Hazardous Materials Business Plan

Carlsbad Energy Center Project (CERSID: 10765651)**Facility Information** **Submitted Nov 20, 2020**

Submitted on 11/20/2020 1:13:34 PM by *Paul Mattesich* of Carlsbad Energy Center Project (Carlsbad, CA)

- Business Activities
- Business Owner/Operator Identification

Hazardous Materials Inventory **Submitted Nov 20, 2020**

Submitted on 11/20/2020 1:13:34 PM by *Paul Mattesich* of Carlsbad Energy Center Project (Carlsbad, CA)

Comments by Submitter: Added various wastes. Adjusted various quantities.

- Hazardous Material Inventory (26)
- Site Map (Official Use Only)
 - *Annotated Site Map (Official Use Only)* (Adobe PDF, 954KB)
- Locally-Required Documentation
 - *Carcinogens and Reproductive Toxins -2019* (Adobe PDF, 213KB)

Emergency Response and Training Plans **Submitted Nov 20, 2020**

Submitted on 11/20/2020 1:13:34 PM by *Paul Mattesich* of Carlsbad Energy Center Project (Carlsbad, CA)

Comments by Submitter: Site emergency response/contingency plan was updated with minor changes to corporate contacts.

- Emergency Response/Contingency Plan
 - *Emergency Response/Contingency Plan* (Adobe PDF, 11759KB)
- Employee Training Plan
 - Provided In Submittal Element: Emergency Response and Training Plans

Aboveground Petroleum Storage Act **Submitted Nov 20, 2020**

Submitted on 11/20/2020 1:13:34 PM by *Paul Mattesich* of Carlsbad Energy Center Project (Carlsbad, CA)

Comments by Submitter: No changes.

- Aboveground Petroleum Storage Act Documentation
 - *Aboveground Petroleum Storage Act Documentation* (Adobe PDF, 97KB)
- APSA Facility Information

Site Identification

Carlsbad Energy Center Project

4950 Avenida Encinas

Carlsbad, CA 92008

County

San Diego

CERS ID

10765651

EPA ID Number

CAR000256545

Submittal Status

Submitted on 11/20/2020 by *Paul Mattesich* of Carlsbad Energy Center Project (Carlsbad, CA)

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

No additional comments provided.

Facility/Site**Carlsbad Energy Center Project**4950 Avenida Encinas
Carlsbad, CA 92008CERS ID
10765651**Submittal Status**Submitted on 11/20/2020 by *Paul Mattesich* of Carlsbad Energy Center Project (Carlsbad, CA)**Identification****NRG Energy Services**Operator Phone
(760) 710-3945Business Phone
(760) 710-3945

Business Fax

Beginning Date

Ending Date

Dun & Bradstreet

SIC Code

Primary NAICS

Facility/Site Mailing Address4590 Avenida Encinas
CARLSBAD, CA 92008-4301**Primary Emergency Contact**

Control Room

Title

Control Room

Business Phone
(760) 710-395024-Hour Phone
(760) 710-3950

Pager Number

OwnerCarlsbad Energy Center
(760) 710-3945
4590 Avenida Encinas
Carlsbad, CA 92008**Secondary Emergency Contact**

Ryan Goerl

Title

Environmental Specialist

Business Phone
(760) 268-402024-Hour Phone
(760) 573-3802

Pager Number

Billing Contact

David Brown

(760) 268-4029

david.brown1@nrg.com

4590 Avenida Encinas
CARLSBAD, CA 92008**Environmental Contact**

Ryan Goerl

(760) 268-4020

ryan.goerl@nrg.com

4590 Avenida Encinas
CARLSBAD, CA 92008

Name of Signer

Paul Mattesich

Signer Title

Plant Manager

Document Preparer

Sheila Henika

Additional Information

Facility under construction

Locally-collected Fields

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

Property Owner

Carlsbad Energy Center

Phone

(760) 710-3945

Mailing Address

4590 Avenida Encinas
Carlsbad, CA 92008

Assessor Parcel Number (APN)

210-010-47-00

Number of Employees

18

Facility ID

37-000-004698

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Carlsbad Energy Center Project		Chemical Location				CERS ID 10765651				
Facility Name Carlsbad Energy Center Project						Facility ID 37-000-004698				
4950 Avenida Encinas, Carlsbad 92008						Status Submitted on 11/20/2020 1:13 PM				
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids	Diesel Fuel, #2	Gallons	600	500	500		- Physical			
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
	68334-30-5	Liquid	Steel Drum, Can		Ambient		- Health			
	Combustible Liquid, Class II	<u>Type</u>	Days on Site: 365		<u>Temperature</u>		Carcinogenicity			
		Pure			Ambient		- Health Acute			
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
DOT: 3 - Flammable and Combustible Liquids	Gasoline	Gallons	200	5	100		- Physical			
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
	86290-81-5	Liquid	Can		Ambient		- Health			
	Flammable Liquid, Class I-B	<u>Type</u>	Days on Site: 365		<u>Temperature</u>		Carcinogenicity			
		Pure			Ambient		- Health Acute			
							Toxicity			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			
DOT: 8 - Corrosives (Liquids and Solids)	Lead Acid Batteries	Gallons	195	13	195		- Physical	Sulfuric Acid	30 %	✓ 7664-93-9
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
		Liquid	Other		Ambient		- Physical	Lead	70 %	7439-92-1
	Corrosive	<u>Type</u>	Days on Site: 365		<u>Temperature</u>		Explosive			
		Mixture			Ambient		- Health			
							Carcinogenicity			
							- Health Acute			
							Toxicity			
							- Health			
							Reproductive			
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Carlsbad Energy Center Project		Chemical Location				CERS ID	10765651		
Facility Name Carlsbad Energy Center Project						Facility ID	37-000-004698		
4950 Avenida Encinas, Carlsbad 92008						Status	Submitted on 11/20/2020 1:13 PM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)	
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt EHS CAS No.
DOT: 2.2 - Nonflammable Gases	Nitrogen	Cu. Feet	18000	304	3600		- Physical Gas		
	CAS No 7727-37-9	State Gas Type Pure	Storage Container Cylinder		Pressue > Ambient Temperature Ambient	Waste Code	Under Pressure		
DOT: 2.1 - Flammable Gases	Liquefied Petroleum Gas (lpg)	Gallons	3000	5	1200		- Physical		
Flammable Gas	CAS No 74-98-6	State Gas Type Pure	Storage Container Cylinder		Pressue > Ambient Temperature Ambient	Waste Code	Flammable - Physical Gas Under Pressure		
DOT: 8 - Corrosives (Liquids and Solids)	Corrshield MD4100	Gallons	75	5	55		- Physical	Sodium Nitrite	20 % 7632-00-0
	CAS No	State Liquid Type Mixture	Storage Container Plastic/Non-metalic Drum		Pressue Ambient Temperature Ambient	Waste Code	Corrosive To Metal - Health Carcinogenicity - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity		
DOT: 9 - Misc. Hazardous Materials	Natural Gas Knockout Tank Oil Waste	Gallons	300	55	200	800	- Health Carcinogenicity	Benzene	0 % ✓ 71-43-2
	CAS No	State Liquid Type Waste	Storage Container Aboveground Tank, Steel Drum, Tank Wagon		Pressue Ambient Temperature Ambient	Waste Code 331			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Carlsbad Energy Center Project		Chemical Location				CERS ID	10765651			
Facility Name Carlsbad Energy Center Project						Facility ID	37-000-004698			
4950 Avenida Encinas, Carlsbad 92008						Status	Submitted on 11/20/2020 1:13 PM			
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.2 - Nonflammable Gases	CARBON DIOXIDE, COMPRESSED	Cu. Feet	2500	143	400		- Physical Gas			
	GAS	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Under Pressure			
		Gas	Cylinder		> Ambient					
	<u>CAS No</u>	<u>Type</u>			<u>Temperature</u>					
	124-38-9	Pure	Days on Site: 365		Ambient					
	Nytro 11 GBXUS Transformer Oil	Gallons	49000	9062	49000		- Health Skin	Hydrotreated Light Naphthenic	60 %	64742-53-6
		<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosion	Distillate		
		Liquid	Aboveground Tank		Ambient		Irritation	Hydrotreated Middle Naphthenic	40 %	64742-46-7
		<u>Type</u>			<u>Temperature</u>		- Health	Distillate		
		Mixture	Days on Site: 365		Ambient		Respiratory Skin	Solvent-dewaxed light paraffinic	40 %	64742-56-9
							Sensitization	2,6-ditertiary butyl-4-methyl	0 %	128-37-0
							- Health Serious	phenol		
							Eye Damage Eye			
							Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Carlsbad Energy Center Project					Chemical Location	CERS ID	10765651		
Facility Name	Carlsbad Energy Center Project					Ammonia Tank	Facility ID	37-000-004698		
	4950 Avenida Encinas, Carlsbad 92008						Status	Submitted on 11/20/2020 1:13 PM		
						Annual Waste	Hazardous Components			
DOT Code/Fire Haz. Class		Common Name	Unit	Quantities		Amount	Federal Hazard Categories	(For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS
DOT: 2.2 - Nonflammable Gases		Aqueous Ammonia	Gallons	16067	16067	14000	- Health Skin	Ammonia	19 %	✔ 7664-41-7
Corrosive, Flammable Gas	CAS No	State	Storage Container		Pressue	Waste Code	Corrosion			
		Liquid	Aboveground Tank		Ambient		Irritation			
		Type			Temperature		- Health			
		Mixture	Days on Site: 365		Ambient		Respiratory Skin Sensitization			
							- Health Serious Eye Damage Eye Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Carlsbad Energy Center Project				Chemical Location		CERS ID	10765651		
Facility Name	Carlsbad Energy Center Project				Fuel Gas Compressors		Facility ID	37-000-004698		
	4950 Avenida Encinas, Carlsbad 92008						Status	Submitted on 11/20/2020 1:13 PM		
						Annual Waste			Hazardous Components	
							Federal Hazard			(For mixture only)
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Quantities Largest Cont.	Avg. Daily	Amount	Categories	Component Name	% Wt	EHS CAS No.
	SAE 40 wt Engine Oil - Compressors	Gallons	275	55	220		- Health Skin	1-DECENE, HOMOPOLYMER	40 %	68037-01-4
		State	Storage Container		Pressure		Corrosion	HYDROGENATED		
	CAS No	Liquid	Other		Ambient	Waste Code	Irritation	TRIPHENYL PHOSPHATE	0 %	115-86-6
		Type			Temperature		- Health			
		Mixture	Days on Site: 365		Ambient		Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Carlsbad Energy Center Project	Chemical Location				CERS ID	10765651			
Facility Name	Carlsbad Energy Center Project	Hazardous Materials Storage Area				Facility ID	37-000-004698			
4950 Avenida Encinas, Carlsbad 92008						Status	Submitted on 11/20/2020 1:13 PM			
						Hazardous Components (For mixture only)				
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 9 - Misc. Hazardous Materials	Waste Air Filters	Pounds	500	500	500	500	- Health Hazard			
	CAS No	State	Storage Container		Pressue		Not Otherwise			
		Solid	Box		Ambient	Waste Code	Classified			
		Type			Temperature	352				
		Mixture	Days on Site: 90		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Carlsbad Energy Center Project	Chemical Location					CERS ID	10765651		
Facility Name	Carlsbad Energy Center Project	Hazardous Waste Storage Area					Facility ID	37-000-004698		
4950 Avenida Encinas, Carlsbad 92008							Status	Submitted on 11/20/2020 1:13 PM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 9 - Misc. Hazardous Materials	USED OIL	Gallons	800	55	400	2000	- Health Hazard Not Otherwise Classified	Waste Petroleum Hydrocarbons		Mixture
	CAS No	State	Storage Container		Pressue	Waste Code				
		Liquid	Steel Drum		Ambient					
		Type			Temperature					
		Waste	Days on Site: 365		Ambient					
DOT: 9 - Misc. Hazardous Materials	OILY DEBRIS	Pounds	3000	150	1000	6000	- Health Hazard Not Otherwise Classified			
	CAS No	State	Storage Container		Pressue	Waste Code				
		Solid	Steel Drum		Ambient					
		Type			Temperature					
		Waste	Days on Site: 365		Ambient					
DOT: 9 - Misc. Hazardous Materials	Used Oil With Benzene	Gallons	165	55	55	275	- Health Carcinogenicity - Health Hazard Not Otherwise Classified	Waste Petroleum Hydrocarbons	98 %	Mixture
	CAS No	State	Storage Container		Pressue	Waste Code		Benzene	2 %	71-43-2
		Liquid	Steel Drum		Ambient					
		Type			Temperature					
		Waste	Days on Site: 365		Ambient					
DOT: 9 - Misc. Hazardous Materials	Waste Oily Debris with Benzene	Pounds	450	150	150	750	- Health Carcinogenicity - Health Hazard Not Otherwise Classified	Oil with Benzene	10 %	
	CAS No	State	Storage Container		Pressue	Waste Code				
		Solid	Steel Drum		Ambient					
		Type			Temperature					
		Waste	Days on Site: 365		Ambient					
DOT: 3 - Flammable and Combustible Liquids	Misc Aerosols Waste	Pounds	100	100	20	25	- Physical Flammable - Physical Gas Under Pressure - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard			
	CAS No	State	Storage Container		Pressue	Waste Code				
		Liquid	Steel Drum		Ambient					
		Type			Temperature					
		Mixture	Days on Site: 365		Ambient					
DOT: 9 - Misc. Hazardous Materials	Waste Oil Filters	Pounds	500	500	500	500	- Health Hazard Not Otherwise Classified			
	CAS No	State	Storage Container		Pressue	Waste Code				
		Solid	Box		Ambient					
		Type			Temperature					
		Mixture	Days on Site: 90		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Carlsbad Energy Center Project				Chemical Location	CERS ID	10765651			
Facility Name	Carlsbad Energy Center Project				Hazardous Waste Storage Area	Facility ID	37-000-004698			
	4950 Avenida Encinas, Carlsbad 92008					Status	Submitted on 11/20/2020 1:13 PM			
						Hazardous Components (For mixture only)				
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 9 - Misc. Hazardous Materials	Waste Oil Filters with Benzene	Pounds	500	500	500	500	- Health	Benzene	2 %	71-43-2
	CAS No	State	Storage Container		Pressue	352	Carcinogenicity			
		Solid	Box		Ambient		- Health Hazard			
		Type			Temperature		Not Otherwise			
		Mixture	Days on Site: 90		Ambient		Classified			

Hazardous Materials And Wastes Inventory Matrix Report

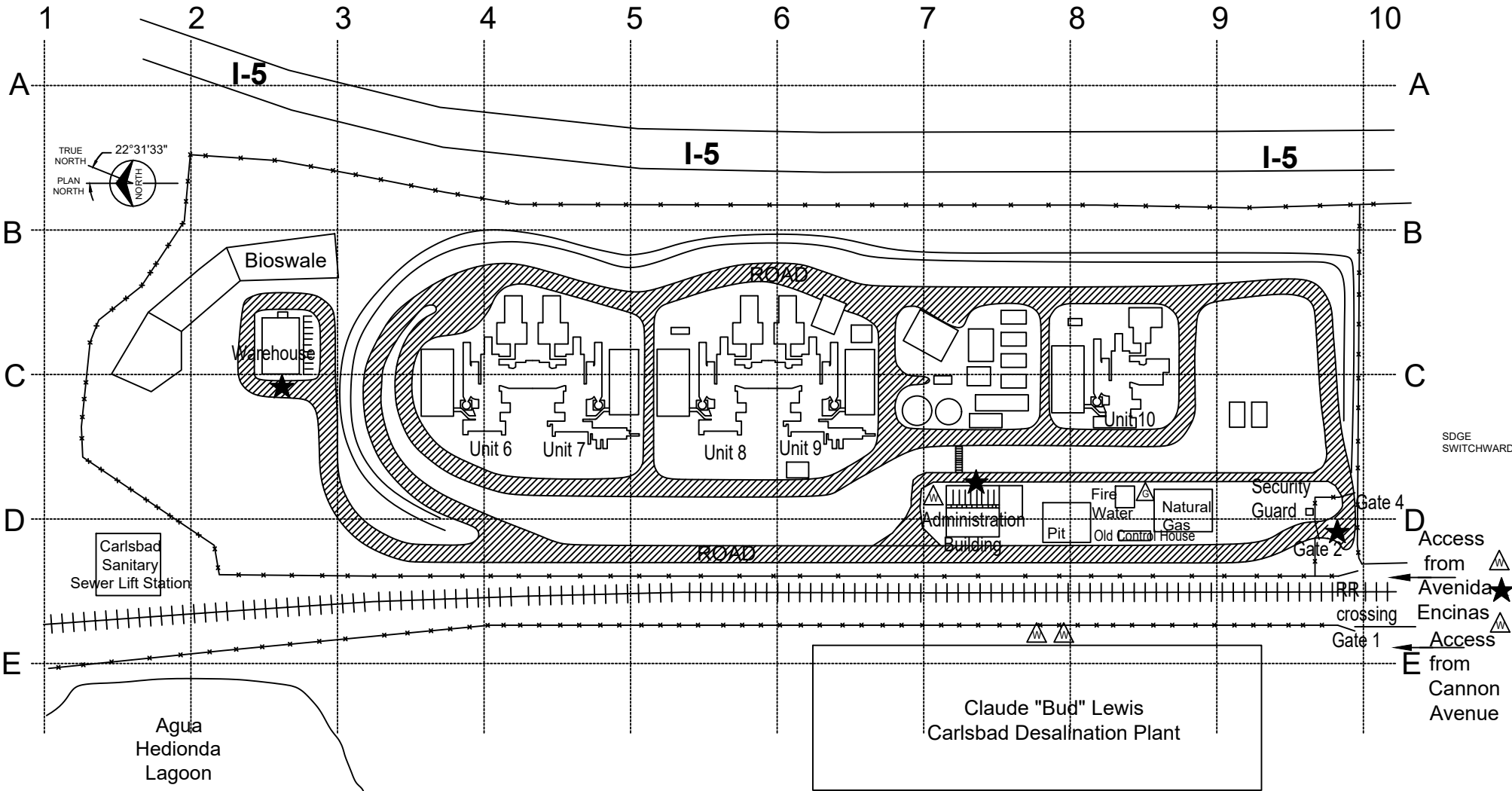
CERS Business/Org.	Carlsbad Energy Center Project	Chemical Location					CERS ID	10765651			
Facility Name	Carlsbad Energy Center Project	In Equipment, Oil Storage					Facility ID	37-000-004698			
4950 Avenida Encinas, Carlsbad 92008							Status	Submitted on 11/20/2020 1:13 PM			
						Annual Waste	Hazardous Components				
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Federal Hazard	(For mixture only)				
			Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	Mineral Lube Oil	Gallons	48000	7400	46000		- Health Skin	2,6-DI-TERT-BUTYLPHENOL	1 %		128-39-2
	CAS No	State	Storage Container		Pressue	Waste Code	Corrosion				
		Liquid	Steel Drum, Other		Ambient		Irritation				
		Type			Temperature		- Health				
		Mixture	Days on Site: 365		Ambient		Respiratory Skin Sensitization				
							- Health Serious				
							Eye Damage Eye Irritation				
Combustible Liquid, Class II	Synthetic Lube Oil	Gallons	2000	300	1500		- Physical Hazard	N-PHENYL-1-NAPHTHYLAMINE	1 %		90-30-2
	CAS No	State	Storage Container		Pressue	Waste Code	Not Otherwise	9,10-ANTHRACENEDIONE, 1,4-DIHYDROXY-	0 %		81-64-1
		Liquid	Steel Drum, Tote Bin, Other		Ambient		Classified				
		Type			Temperature		- Health Hazard	ALKYLATED DIPHENYL AMINES	5 %		68411-46-1
		Mixture	Days on Site: 365		Ambient		Not Otherwise	TRICRESYL PHOSPHATE	3 %		1330-78-5
							Classified				
	Hydraulic Lube Oil	Gallons	500	55	330		- Health	2,6-DI-TERT-BUTYL-P-CRESOL	0 %		128-37-0
	CAS No	State	Storage Container		Pressue	Waste Code	Respiratory Skin	NAPHTHALENESULFONIC ACID,	1 %		57855-77-3
		Liquid	Steel Drum, Other		Ambient		Sensitization	DINONYL-, CALCIUM			
		Type			Temperature		- Health Serious	PHOSPHORODITHIOIC ACID,	1 %		68442-22-8
		Mixture	Days on Site: 365		Ambient		Eye Damage Eye Irritation	MIXED 0,0-BIS(2-ETHYL			
							- Health Hazard				
							Not Otherwise				
							Classified				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Carlsbad Energy Center Project	Chemical Location				CERS ID	10765651
Facility Name	Carlsbad Energy Center Project	Unit CEMS, Compressed Gas Storage				Facility ID	37-000-004698
4950 Avenida Encinas, Carlsbad 92008						Status	Submitted on 11/20/2020 1:13 PM
		</					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Carlsbad Energy Center Project		Chemical Location				CERS ID	10765651			
Facility Name Carlsbad Energy Center Project		Water Tank Area				Facility ID	37-000-004698			
4950 Avenida Encinas, Carlsbad 92008						Status	Submitted on 11/20/2020 1:13 PM			
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Oxidizing, Class 2	Sodium Hypochlorite 12.5%	Gallons	2310	330	1320		- Health Skin	Sodium Hypochlorite	13 %	7681-52-9
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>		Corrosion			
	7681-52-9	Liquid	Tote Bin, Other		Ambient	<u>Waste Code</u>	Irritation			
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		- Health Serious			
		Pure			Ambient		Eye Damage Eye Irritation			



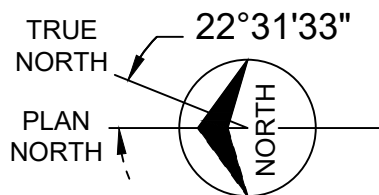
REVISIONS										AUTOCAD VERSION: 2019		DATE	REF. PROJECT No.			
A	Update		B	Update		C	Update		D	Update		E			Update	
Added Diesel and Gasoline on Page 2 Added Cal gases on Page 2			Added Sodium Hypochlorite totes North side of warehouse			Added Fuel Gas knockout tanks To each unit and BOP			Re-locating hazwaste and oil storage, compressed gases. Added battery banks. Added Flammable Cabinets			Added in Page 5 additional temporary compressed gases storage			DEH HazBizPlan	
DWN: PH 12/27/18 CHK'D: RG 12/27/18 APPD: 12/27/18			DWN: PH 1/31/19 CHK'D: RG 1/31/19 APPD: 1/31/19			DWN: PH 3/20/19 CHK'D: RG 3/20/19 APPD: 3/20/19			DWN: PH 12/20/20 CHK'D: RG 12/20/20 APPD: PM 12/20/20			DWN: PH 4/10/20 CHK'D: RG 4/10/20 APPD: PM 4/10/20			W.O.	
Carlsbad Energy Center General Plan										FACILITY: Carlsbad Energy Center		SCALE: NONE PLOT SCALE: 1=1				
										AUTOCAD FILE NAME: cec outline Jan 2019		SHEET: 1 REV.				
										POMMS EQUIP. NO. • •		DWG No.: CEC01 E				

Site Name: CARLSBAD ENERGY CENTER LLC
 Site Address: 4950 Avenida Encinas, Carlsbad CA 92008

Date: 4/10/2020
 Page 2 of 7

B

C



BIOSWALE



WM trash and
recycling

WAREHOUSE

Aerosols:
WD-40,
contact cleaner,
knocker loose,
etc

Diesel
Gasoline
Storage



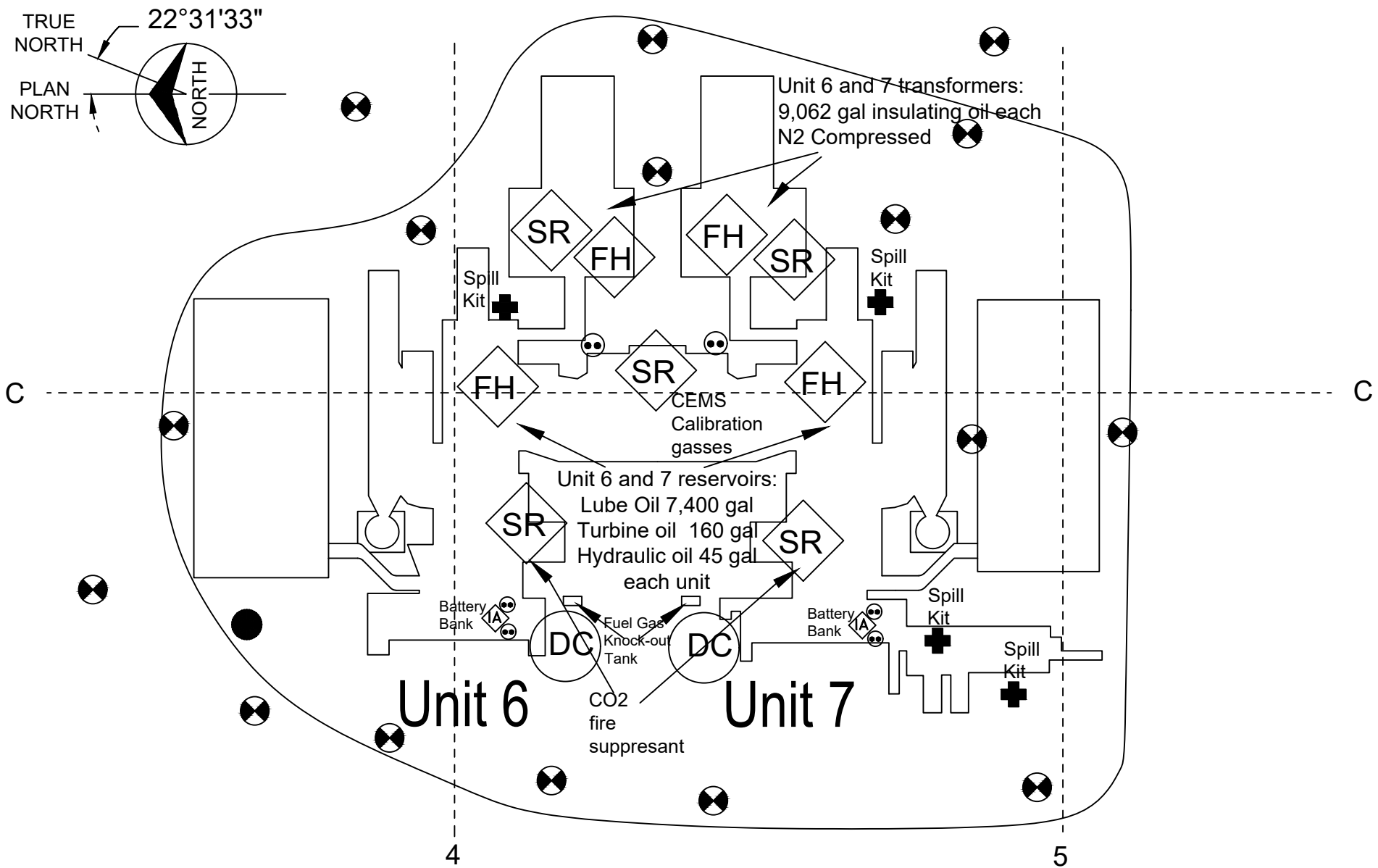
REVISIONS

A	Update	B	Update	C	Update	D	Update	E	Update
Added Diesel and Gasoline on Page 2 Added Cal gases on Page 2		Added Sodium Hypochlorite totes North side of warehouse		Added Fuel Gas knockout tanks To each unit and BOP		Re-locating hazwaste and oil storage, compressed gases. Added battery banks. Added Flammable Cabinets		Added on Page 5 additional temporary compressed gases storage	
DWN: PH CHKD: RG APPD:	12/27/18 12/27/18	DWN: PH CHKD: RG APPD:	1/31/19 1/31/19	DWN: PH CHKD: RG APPD:	3/20/19 3/20/19	DWN: PH CHKD: RG APPD: PM	12/20/20 12/20/20	DWN: PH CHKD: RG APPD: PM	4/10/20 4/10/20

AUTOCAD VERSION: 2013 LT	DATE
DWN: PH	10/17/2018
CHKD: RG	
APPD: PM	
AUTOCAD FILE NAME: CEC OUTLINE OCT 2018	
POINMS EQUIP. NO. ____ • ____ • ____	

REF. PROJECT No. NA
PROJECT No. NA
W.O.
SCALE: NONE PLOT SCALE: 1=1
SHEET: 2
DWG No.: CEC01

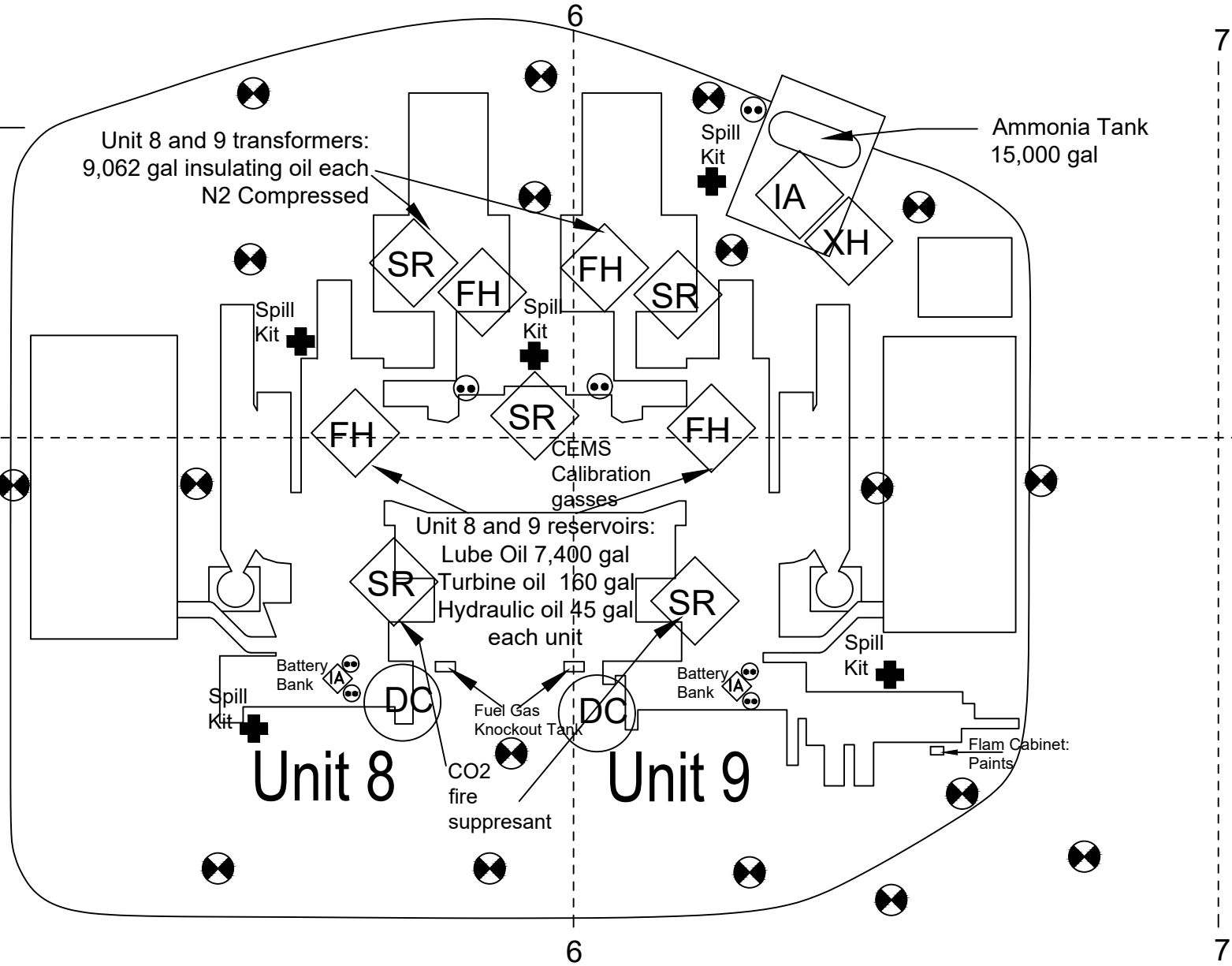
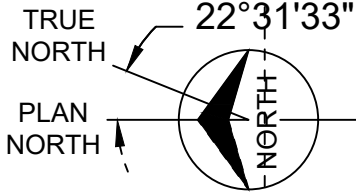
FACILITY: CARLSBAD ENERGY CENTER
Warehouse and Bioswale
REV.
E



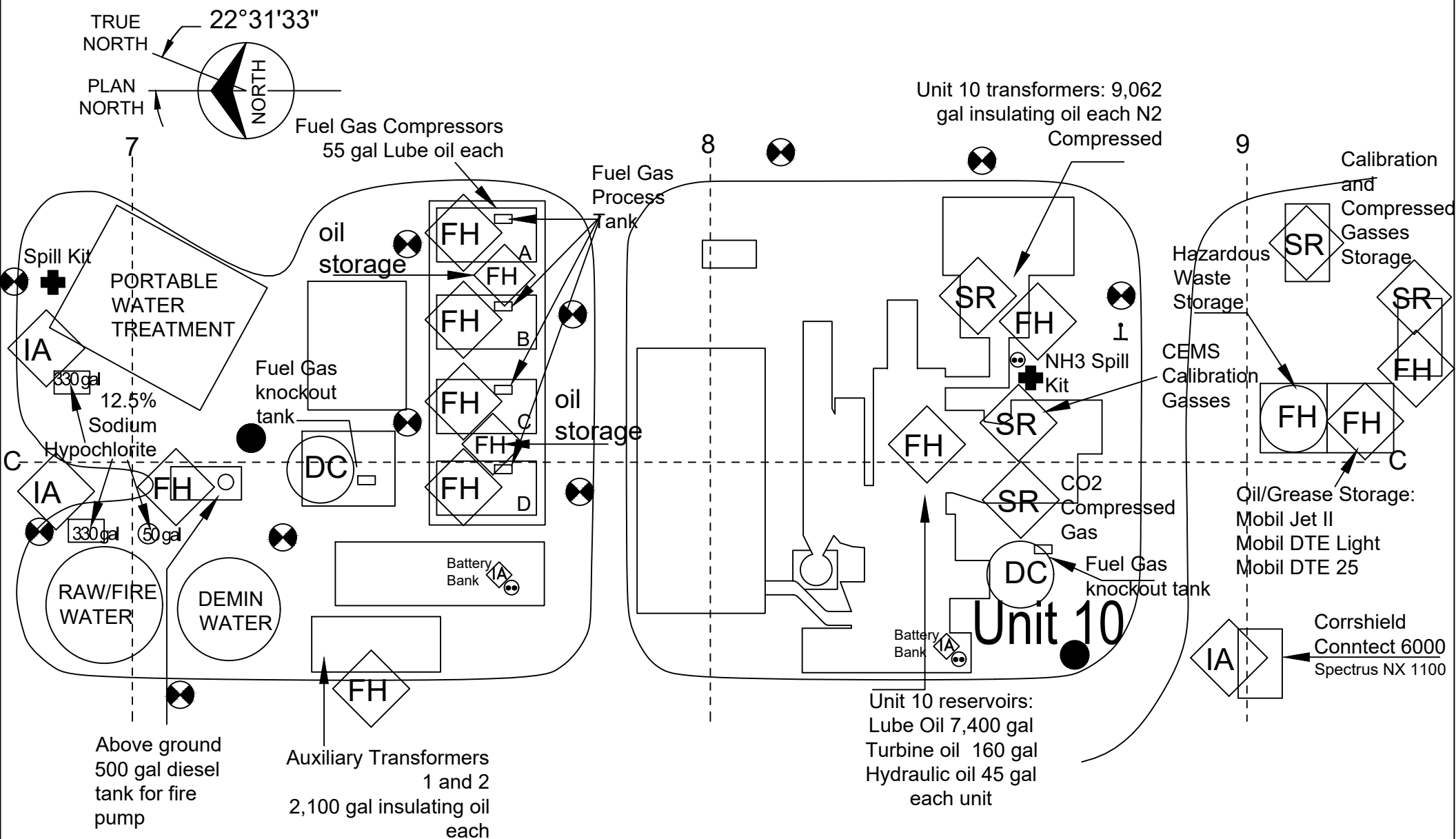
REVISIONS										AUTOCAD VERSION: 2013		DATE		REF. PROJECT No. NA												
A	Update			B	Update			C	Update			D	Update			E	Update			PROJECT No. NA						
Added Diesel and Gasoline on Page 2 Added Cal gases on Page 2					Added Sodium Hypochlorite totes North side of warehouse					Added Fuel Gas Hypochlorite totes To each unit and BOP					Re-locating hazwaste and oil storage, compressed gasses. Added battery banks Added Flammable Cabinets					Added on Page 5 additional temporary compressed gasses storage					W.O.	
DWN: PH 12/27/18 CHK'D: RG 12/27/18 APP'D:					DWN: PH 1/31/19 CHK'D: RG 1/31/19 APP'D:					DWN: PH 3/29/19 CHK'D: RG 3/29/19 APP'D:					DWN: PH 1/2/2020 CHK'D: RG 1/2/2020 APP'D: PM					DWN: PH 4/10/20 CHK'D: RG 4/10/20 APP'D: PM					SCALE: NONE PLOT SCALE: 1=1	
																				FACILITY: CARLSBAD ENERGY CENTER		SHEET: 3 REV.				
																				Units 6 and 7		DWG No.: CEC01 E				
																				AUTOCAD FILE NAME: CEC OUTLINE OCT 2018						
																				POMMS EQUIP. NO. ____ • ____ • ____						

Site Name: **CARLSBAD ENERGY CENTER LLC**
Site Address: **4950 Avenida Encinas, Carlsbad CA 92008**

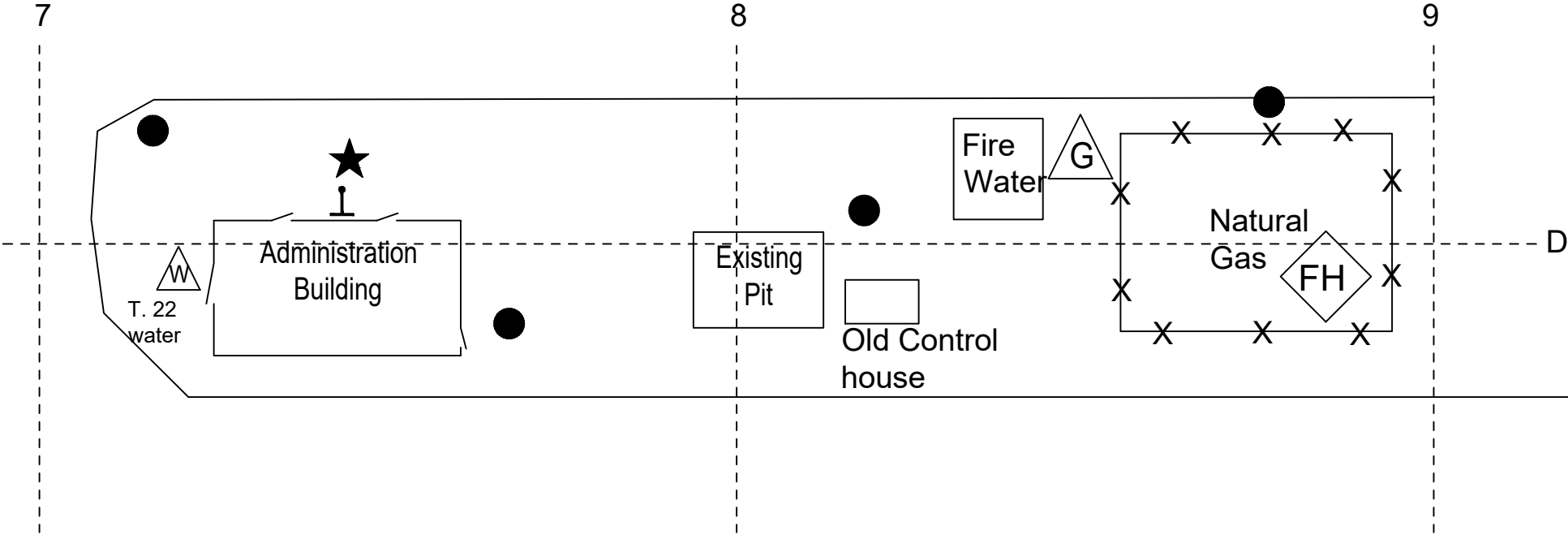
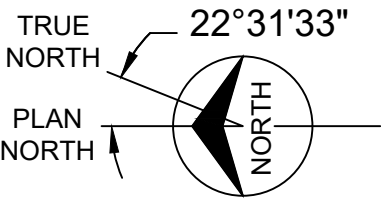
Date: **4/10/2020**
Page 4 of 7



REVISIONS					AUTOCAD VERSION: 2013		DATE	REF. PROJECT No. NA	
A	Update	B	Update	C	Update	D	Update	E	Update
Added Diesel and Gasoline on Page 2 Added Cal gases on Page 2					DWN: PH		10/17/2018	PROJECT No. NA	
Added Sodium Hypochlorite totes North side of warehouse					CHKD: RG			W.O.	
Added Fuel Gas knockout tank To each unit and BOP					APPD:			SCALE: NONE PLOT SCALE: 1=1	
Re-locating hazwaste and oil storage, compressed gases. Added battery banks. Added Flammable Cabinets					AUTOCAD FILE NAME: CEC OUTLINE OCT 2018			SHEET: 4 REV.	
Added on Page 5 additional temporary compressed gases storage					POMMS EQUIP. NO. ____ . ____ . ____			DWG No.: CEC01 E	
DWN: PH CHKD: RG APPD:	12/27/18 12/27/18	DWN: PH CHKD: RG APPD:	1/31/19 1/31/19	DWN: PH CHKD: RG APPD:	3/20/19 3/20/19	DWN: PH CHKD: RG APPD: PM	12/20/20 12/20/20	DWN: PH CHKD: RG APPD: PM	4/10/20 4/10/20



REVISIONS					AUTOCAD VERSION: 2013	DATE	REF. PROJECT No. NA	
A	Update	B	Update	C	DWN: PH	10/17/2018	PROJECT No. NA	
Added Diesel and Gasoline on Page 2 Added Cal gases on Page 2					CHKD: RG		W.O.	
					APPD:		SCALE: NONE PLOT SCALE: 1=1	
					FACILITY: CARLSBAD ENERGY CENTER		SHEET: 5 REV.	
					Unit 10, BOP and Haz Mat area		DWG No.: CEC01 E	
					AUTOCAD FILE NAME: CEC OUTLINE OCT 2018			
					POMMS EQUIP. NO. ____ . ____ . ____			
D	Update	E	Update		DWN: PH	4/10/20		
Re-locating hazwaste and oil storage, compressed gases Added battery banks. Added Flammable Cabinets					CHKD: RG	4/10/20		
					APPD: PM			
A	Update	B	Update	C	DWN: PH	3/20/19		
Added Fuel Gas knock out tank To each unit and BOP					CHKD: RG	3/20/19		
					APPD: APPD:			
D	Update	E	Update		DWN: PH	12/2020		
Re-locating hazwaste and oil storage, compressed gases Added battery banks. Added Flammable Cabinets					CHKD: RG	12/2020		
					APPD: PM			
A	Update	B	Update	C	DWN: PH	4/10/20		
Added Diesel and Gasoline on Page 2 Added Cal gases on Page 2					CHKD: RG	4/10/20		
					APPD: APPD:			



REVISIONS					AUTOCAD VERSION: 2013	DATE	REF. PROJECT No. NA	
A	Update	B	Update	C	DWN: PH	10/17/2018	PROJECT No.	NA
Added Diesel and Gasoline on Page 2 Added Cal gases on Page 2					CHKD: RG		W.O.	
Added Sodium Hypochlorite totes North side of warehouse					APPD:		SCALE: NONE	PLOT SCALE: 1=1
Added Fuel Gas Process pumps To each unit and BOP					FACILITY: CARLSBAD ENERGY CENTER		SHEET: 6	REV.
Re-locating hazwaste and oil storage, compressed gases Added battery banks. Added Flammable Cabinets					Administration Building		DWG No.: CEC01	E
Added on Page 5 additional temporary compressed gases storage					AUTOCAD FILE NAME: CEC OUTLINE OCT 2018			
DWN: PH 12/27/18 CHKD: RG 12/27/18 APPD: APPD:					POMMS EQUIP. NO. ____ • ____ • ____			
DWN: PH 1/31/19 CHKD: RG 1/31/19 APPD: APPD:								
DWN: PH 3/20/19 CHKD: RG 3/20/19 APPD: APPD:								
DWN: PH 12/20/20 CHKD: RG 12/20/20 APPD: PM APPD:								
DWN: PH 4/10/20 CHKD: RG 4/10/20 APPD: PM APPD:								

HMBP STANDARDIZED SITE MAP SYMBOLS

SITE MAP SYMBOLS

ENTRANCE/EXIT



FENCE



SAFE REFUGE AREA



EMERGENCY RESPONSE EQUIPMENT



SEWER DRAIN



FIRE HYDRANT



STORM DRAIN OR CULVERT



FIRE SPRINKLER CONNECTION



F.D. STANDPIPE OUTLET



KNOX BOX



STORAGE TANKS AND CAPACITY

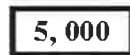
UNDERGROUND



ABOVE GROUND



PLATING TANKS



MAIN UTILITY SHUT OFFS

ELECTRICAL



GAS



WATER



ANNUNCIATOR PANEL



STAIRWELL (i.e. 1 thru 3)



ELEVATOR Range of Floors



HAZARDOUS MATERIALS STORAGE/USE AREA SYMBOLS

IMMEDIATE (ACUTE) HEALTH HAZARD

An adverse effect resulting from a short-term exposure to a chemical. Includes highly toxic, toxic, irritant, sensitizers, corrosive chemicals. Examples: cyanide, hydrochloric acid, sodium hydroxide, chlorine gas.



DELAYED (CHRONIC) HEALTH

An adverse health effect resulting from long-term exposure to a substance. The effects could be a skin rash, bronchitis, cancer or any other medical condition. Examples include carcinogens such as benzene, formaldehyde, and methylene chloride.



FIRE HAZARD

Includes flammable liquids and solids, combustible liquids, pyrophorics and oxidizers. Examples include solvents like acetone and alcohol, solvent based paints, gasoline, naphtha solvent, acetylene gas cylinders, propane gas.



SUDDEN RELEASE OF PRESSURE

This category includes explosives, blasting agents and compressed gases. Examples: nitrogen, oxygen, acetylene, helium, carbon dioxide, etc.



REACTIVE

This category includes unstable air reactive, water reactive or shock materials. Examples: organic peroxides, fine metal dusts like magnesium, aluminum, phosphorous, cyanides, sulfides and picric acid.



MEDICAL (BIOHAZARDOUS) WASTE

Medical or biohazardous wastes generated in medical, dental and lab settings. Typically needles and syringes in sharps containers, infectious materials in biohazard bags, clinical and microbiological lab specimens and some pharmaceutical waste.

Use the appropriate symbol from this column



RADIOACTIVES

Includes mixed waste and radioactive sources used in labs and industrial settings. Examples include: Scintillation materials, nuclear medicine waste and R & D materials and waste.



EXTREMELY HAZARDOUS

Includes materials listed in Appendix A of Part 355 of Subchapter J of Chapter 1 of Title 40 of the Code of Federal Regulations. Examples include: Fluorine gases, Silane, Fumigation gases.



CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM (CERS)
CONSOLIDATED EMERGENCY RESPONSE / CONTINGENCY PLAN

Prior to completing this Plan, please refer to the INSTRUCTIONS FOR COMPLETING A CONSOLIDATED CONTINGENCY PLAN

A. FACILITY IDENTIFICATION AND OPERATIONS OVERVIEW

FACILITY ID #	<div style="border: 1px solid black; height: 20px; width: 100%; position: relative;"><div style="background-color: #cccccc; width: 10%; position: absolute; left: 0;"></div><div style="background-color: #cccccc; width: 10%; position: absolute; left: 20%;"></div></div>	A1. CERS ID #	A2. DATE OF PLAN PREPARATION/REVISION (MM/DD/YYYY)	A3.
BUSINESS NAME (Same as Facility Name or DBA - Doing Business As)				A4.
BUSINESS SITE ADDRESS				A5.
BUSINESS SITE CITY			A6. CA	A7. ZIP CODE
TYPE OF BUSINESS (e.g., Painting Contractor)			A8.	A9. INCIDENTAL OPERATIONS (e.g., Fleet Maintenance)
THIS PLAN COVERS CHEMICAL SPILLS, FIRES, AND EARTHQUAKES INVOLVING (Check all that apply):				A10.
<input type="checkbox"/> 1. HAZARDOUS MATERIALS; <input type="checkbox"/> 2. HAZARDOUS WASTES				

B. INTERNAL RESPONSE

INTERNAL FACILITY EMERGENCY RESPONSE WILL OCCUR BY (Check all that apply):	B1.
<input type="checkbox"/> 1. CALLING PUBLIC EMERGENCY RESPONDERS (e.g., 9-1-1)	
<input type="checkbox"/> 2. CALLING HAZARDOUS WASTE CONTRACTOR	
<input type="checkbox"/> 3. ACTIVATING IN-HOUSE EMERGENCY RESPONSE TEAM	

C. EMERGENCY COMMUNICATIONS, PHONE NUMBERS AND NOTIFICATIONS

In the event of an emergency involving hazardous materials and/or hazardous waste, all facilities must IMMEDIATELY:

1. Notify facility personnel and evacuate if necessary in accordance with the Emergency Action Plan (Title 8 California Code of Regulations §3220);
2. Notify local emergency responders by calling 9-1-1;
3. Notify the local Unified Program Agency (UPA) at the phone number below; and
4. Notify the State Warning Center at (800) 852-7550.

Facilities that generate, treat, store or dispose of hazardous waste have additional responsibilities to notify and coordinate with other response agencies. Whenever there is an imminent or actual emergency situation such as an explosion, fire, or release, the Emergency Coordinator must follow the appropriate requirements for the category of facility and type of release involved:

1. Title 22 California Code of Regulations §66265.56. Emergency Procedures for generators of 1,000 kilograms or more of hazardous waste in any calendar month.
2. Title 22 California Code of Regulations §66265.196. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems.
3. Title 40 Code of Federal Regulations §302.6. Notification requirements for a release of a hazardous substance equal to or greater than the reportable quantity.
4. Title 22 California Code of Regulations §66262.34(d)(2) and Title 40 Code of Federal Regulations §262.34(d)(5)(ii) for generators of less than 1000 kilograms of hazardous waste in any calendar month.

Following notification and before facility operations are resumed in areas of the facility affected by the incident, the Emergency Coordinator shall notify the local UPA and the local fire department's hazardous materials program, if necessary, that the facility is in compliance with requirements to:

1. Provide for proper storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from an explosion, fire, or release at the facility; and
2. Ensure that no material that is incompatible with the released material is transferred, stored, or disposed of in areas of the facility affected by the incident until cleanup procedures are completed.

EMERGENCY RESPONSE PHONE NUMBERS:	AMBULANCE, FIRE, POLICE AND CHP	9-1-1
	CALIFORNIA STATE WARNING CENTER (CSWC)/CAL OES.	(800) 852-7550
	NATIONAL RESPONSE CENTER (NRC)	(800) 424-8802
	POISON CONTROL CENTER	(800) 222-1222
	LOCAL UNIFIED PROGRAM AGENCY (UPA)	C1.
	OTHER (Specify):	C2. C3.
NEAREST MEDICAL FACILITY / HOSPITAL NAME:		C4. C5.

AGENCY NOTIFICATION PHONE NUMBERS:	CALIFORNIA DEPT. OF TOXIC SUBSTANCES CONTROL (DTSC)	(916) 255-3545
	REGIONAL WATER QUALITY CONTROL BOARD (RWQCB).	C6.
	U.S. ENVIRONMENTAL PROTECTION AGENCY (US EPA)	(800) 300-2193
	CALIFORNIA DEPT. OF FISH AND WILDLIFE (CDFW)	(916) 358-2900
	U.S. COAST GUARD (USCG)	(202) 267-2180
	CAL OSHA	(916) 263-2800
	CAL FIRE OFFICE OF THE STATE FIRE MARSHAL (OSFM)	(916) 323-7390
	OTHER (Specify):	C7. C8.
	OTHER (Specify):	C9. C10.

Check the applicable boxes to indicate your facility's procedures for containing spills and preventing and mitigating releases, fires and/or explosions.		D1.
<input type="checkbox"/>	1. MONITOR FOR LEAKS, RUPTURES, PRESSURE BUILD-UP, ETC.;	
<input type="checkbox"/>	2. PROVIDE STRUCTURAL PHYSICAL BARRIERS (e.g., Portable spill containment walls, built-in berms);	
<input type="checkbox"/>	3. PROVIDE ABSORBENT PHYSICAL BARRIERS (e.g., Pads, spill pigs, spill pillows);	
<input type="checkbox"/>	4. COVER OR BLOCK FLOOR AND/OR STORM DRAINS;	
<input type="checkbox"/>	5. LINED TRENCH DRAINS AND/OR SUMPS;	
<input type="checkbox"/>	6. AUTOMATIC FIRE SUPPRESSION SYSTEM;	
<input type="checkbox"/>	7. ELIMINATE SOURCES OF IGNITION FOR FLAMMABLE HAZARDS;	
<input type="checkbox"/>	8. STOP PROCESSES AND/OR OPERATIONS;	
<input type="checkbox"/>	9. AUTOMATIC / ELECTRONIC EQUIPMENT SHUT-OFF SYSTEM;	
<input type="checkbox"/>	10. SHUT OFF WATER, GAS, ELECTRICAL UTILITIES;	
<input type="checkbox"/>	11. CALL 9-1-1 FOR PUBLIC EMERGENCY RESPONDER ASSISTANCE AND/OR MEDICAL AID;	
<input type="checkbox"/>	12. NOTIFY AND EVACUATE PERSONS IN ALL THREATENED AND/OR IMPACTED AREAS;	
<input type="checkbox"/>	13. ACCOUNT FOR EVACUATED PERSONS IMMEDIATELY AFTER EVACUATION;	
<input type="checkbox"/>	14. PROVIDE PROTECTIVE EQUIPMENT FOR ON-SITE EMERGENCY RESPONSE TEAM;	
<input type="checkbox"/>	15. REMOVE CONTAINERS AND/OR ISOLATE AREAS;	
<input type="checkbox"/>	16. HIRE LICENSED HAZARDOUS WASTE CONTRACTOR;	
<input type="checkbox"/>	17. USE ABSORBENT MATERIAL FOR SPILL CONTAINMENT;	
<input type="checkbox"/>	18. VACUUM SUCTION USING APPROPRIATE VACUUM (e.g., Intrinsically safe) FOR SPILL CONTROL AND/OR CLEANUP;	
<input type="checkbox"/>	19. DECONTAMINATE PERSONNEL AND EQUIPMENT WITHIN DESIGNATED AREA AND DISPOSE OF WASTEWATER AS HAZARDOUS WASTE;	
<input type="checkbox"/>	20. PROVIDE SAFE TEMPORARY STORAGE OF HAZARDOUS WASTE GENERATED DURING EMERGENCY ACTIONS;	
<input type="checkbox"/>	21. OTHER (Specify):	D2.

THE FOLLOWING ALARM SIGNAL(S) WILL BE USED TO BEGIN EVACUATION OF THE FACILITY (Check all that apply):	E1.
<input type="checkbox"/> 1. BELLS;	E2.
<input type="checkbox"/> 2. HORNS/SIRENS;	
<input type="checkbox"/> 3. VERBAL (i.e., Shouting);	
<input type="checkbox"/> 4. OTHER (Specify):	
THE FOLLOWING LOCATION(S) WILL BE USED FOR AN EMERGENCY ASSEMBLY AREA(S) (e.g., Parking lot, street corner):	E3.
Note: The Emergency Coordinator must account for all onsite employees and visitors after evacuation.	
EVACUATION ROUTE S AND ALTERNATE EVACUATION ROUTES ARE DESCRIBED AS FOLLOWS:	E4.
<input type="checkbox"/> 1. WRITTEN PROCEDURES DESCRIBING ROUTES, EXITS, AND ASSEMBLY AREAS;	
<input type="checkbox"/> 2. EVACUATION MAP(S) DEPICTING ROUTES, EXITS, AND ASSEMBLY AREAS;	
<input type="checkbox"/> 3. OTHER (Specify):	E5.
Note: Evacuation procedures and/or maps should be posted in visible facility locations and must be included in the Contingency Plan.	

ADVANCE ARRANGEMENTS FOR LOCAL EMERGENCY SERVICES (Check one of the following):	F1.
<input type="checkbox"/> 1. HAVE BEEN DETERMINED NOT NECESSARY;	
<input type="checkbox"/> 2. THE FOLLOWING ARRANGEMENTS HAVE BEEN MADE (Specify):	F2.
<p>Note: Advance arrangements with local fire and police departments, hospitals, state and local emergency response teams, and/or emergency services contractors should be made for your facility, if necessary. Large Quantity Generators must describe arrangements in the Contingency Plan.</p>	

G. EMERGENCY EQUIPMENT

Check the applicable boxes to list emergency response equipment available at the facility, identify the location(s) where the equipment is kept, and indicate the equipment's capability, if applicable.

TYPE	EQUIPMENT AVAILABLE <small>G1.</small>	LOCATION <small>G2.</small>	CAPABILITY <small>G3.</small>
EXAMPLE	<input checked="" type="checkbox"/> CHEMICAL PROTECTIVE GLOVES	SPILL RESPONSE KIT	SINGLE USE, OIL RESISTANT ONLY
Safety and First Aid	1. <input type="checkbox"/> CHEMICAL PROTECTIVE SUITS, APRONS, AND/OR VESTS		
	2. <input type="checkbox"/> CHEMICAL PROTECTIVE GLOVES		
	3. <input type="checkbox"/> CHEMICAL PROTECTIVE BOOTS		
	4. <input type="checkbox"/> SAFETY GLASSES, GOGGLES, AND FACE SHIELDS		
	5. <input type="checkbox"/> HARD HATS		
	6. <input type="checkbox"/> AIR-PURIFYING RESPIRATORS		
	7. <input type="checkbox"/> SELF-CONTAINED BREATHING APPARATUS (SCBA)		
	8. <input type="checkbox"/> FIRST AID KITS		
	9. <input type="checkbox"/> PLUMBED EYEWASH FOUNTAIN AND/OR SHOWER		
	10. <input type="checkbox"/> PORTABLE EYEWASH KITS AND/OR STATION		
	11. <input type="checkbox"/> OTHER		
Fire Fighting	12. <input type="checkbox"/> PORTABLE FIRE EXTINGUISHERS		
	13. <input type="checkbox"/> FIXED FIRE SUPPRESSION SYSTEMS AND/OR SPRINKLERS		
	14. <input type="checkbox"/> FIRE ALARM BOXES		
	15. <input type="checkbox"/> OTHER		
Spill Control and Clean-Up	16. <input type="checkbox"/> ALL-IN-ONE SPILL KIT		
	17. <input type="checkbox"/> ABSORBENT MATERIAL		
	18. <input type="checkbox"/> CONTAINER FOR USED ABSORBENT		
	19. <input type="checkbox"/> BERM AND/OR DIKING EQUIPMENT		
	20. <input type="checkbox"/> BROOM		
	21. <input type="checkbox"/> SHOVEL		
	22. <input type="checkbox"/> VACUUM		
	23. <input type="checkbox"/> EXHAUST HOOD		
	24. <input type="checkbox"/> SUMP AND/OR HOLDING TANK		
	25. <input type="checkbox"/> CHEMICAL NEUTRALIZERS		
	26. <input type="checkbox"/> GAS CYLINDER LEAK REPAIR KIT		
	27. <input type="checkbox"/> SPILL OVERPACK DRUMS		
	28. <input type="checkbox"/> OTHER		
Communications and Alarm Systems	29. <input type="checkbox"/> TELEPHONES (e.g., Cellular)		
	30. <input type="checkbox"/> INTERCOM AND/OR PA SYSTEM		
	31. <input type="checkbox"/> PORTABLE RADIOS		
	32. <input type="checkbox"/> AUTOMATIC ALARM CHEMICAL MONITORING EQUIPMENT		
Other	33. <input type="checkbox"/> OTHER		
	34. <input type="checkbox"/> OTHER		

H. EARTHQUAKE VULNERABILITY

Identify areas of the facility that are vulnerable to hazardous materials releases due to seismic motion. These areas require immediate isolation and inspection.

VULNERABLE AREAS (Check all that apply):

H1.

LOCATIONS (e.g., Shop, outdoor shed, lab):

H2.

- ☐ 1. HAZARDOUS MATERIALS AND/OR WASTE STORAGE AREAS
- ☐ 2. PROCESS LINES AND PIPING
- ☐ 3. LABORATORY
- ☐ 4. WASTE TREATMENT AREA

Identify mechanical systems vulnerable to releases / spills due to earthquake-related motion. These systems require immediate isolation and inspection.

VULNERABLE SYSTEMS AND/OR EQUIPMENT (Check all that apply):

H3.

LOCATIONS:

H4.

- ☐ 1. SHELVES, CABINETS AND/OR RACKS
- ☐ 2. TANKS AND SHUT-OFF VALVES
- ☐ 3. PORTABLE GAS CYLINDERS
- ☐ 4. EMERGENCY SHUT-OFF AND/OR UTILITY VALVES
- ☐ 5. SPRINKLER SYSTEMS
- ☐ 6. STATIONARY PRESSURIZED CONTAINERS (e.g., Propane tank)

I. EMPLOYEE TRAINING

Employee training is required for all employees and/or contractors handling hazardous materials and/or hazardous wastes during normal and/or emergency operations. Most facilities will need to submit a separate Training Plan. However, your CUPA may accept this section as the Training Plan for some small facilities.

Employee training plans may include the following content:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Applicable laws and regulations; • Emergency response plans and procedures; • Safety Data Sheets; • Hazard communication related to health and safety; • Methods for safe handling of hazardous substances; • Hazards of materials and processes (e.g., fire, explosion, asphyxiation); • Hazard mitigation, prevention and abatement procedures; • Coordination of emergency response actions; • Notification procedures for local emergency responders, CUPA, Cal OES, and onsite personnel; | <ul style="list-style-type: none"> • Communication and alarm systems; • Personal protective equipment; • Use and maintenance of emergency response equipment and supplies (e.g. Fire extinguishers, respirators, spill control materials); • Decontamination procedures; • Evacuation procedures and evacuation staging locations; • Identification of facility areas, equipment, and systems vulnerable to earthquakes and other natural disasters. • OTHER (Specify): |
|--|--|

Check the applicable boxes below to indicate how the employee training program is administered.

- ☐ 1. FORMAL CLASSROOM ☐ 2. VIDEOS ☐ 3. SAFETY MEETINGS ☐ 4. STUDY GUIDES / MANUALS
- ☐ 5. OTHER (Specify): _____
- ☐ 6. NOT APPLICABLE SINCE FACILITY HAS NO EMPLOYEES
- ☐ 7. CHECK IF A SEPARATE EMPLOYEE TRAINING PLAN IS USED AND UPLOADED TO CERS AS A PDF DOCUMENT
- ☐ 8. CHECK IF EMPLOYEE TRAINING IS COVERED BY THE ABOVE REFERENCED CONTENT AND OTHER DOCUMENTS ONSITE

11.

12.

13.

14.

EMPLOYEE TRAINING FREQUENCY AND RECORDKEEPING TRAINING MUST BE:

- Provided initially for new employees as soon as possible following the date of hire. New employees should not work in an unsupervised position that involves hazardous materials handling and/or hazardous waste management without proper training;
- Provided within six months from the date of hire for new employees at a large quantity generator;
- Ongoing and provided at least annually;
- Amended prior to a change in process or work assignment;
- Given upon modification to the Emergency Response/Contingency Plan.

Large Quantity Generator Training: Large quantity generators (1,000 kg or more) must retain written plan and documentation of employee training which includes:

- A written description of the type and amount of both initial and ongoing training that will be given to persons filling each job position having responsibility for hazardous waste management and/or emergency response.
- The name, job title and job description for each position at the facility related to hazardous waste management.
- Current employee training records must be retained until closure of the facility and former employee training records must be retained for at least three years after termination of employment.

Small Quantity Generator Training: Small quantity generators (less than 1,000 kg) must include basic hazardous waste management and emergency response procedures but a written employee training plan and training records are not required. In order to show that the facility has met the small quantity generator employee training requirement, an employee training plan and training records may be made available.

Hazardous Materials Business Plan Training: Businesses must provide initial and annual employee training that includes the content referenced above. The training may be based on the job position and training records must be made available for a period of at least three years.

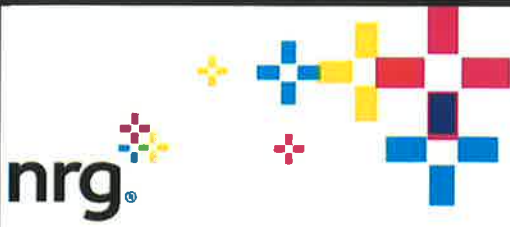


J. LIST OF ATTACHMENTS

Check one of the following:

J1.

- ☐ 1. NO ATTACHMENTS ARE REQUIRED; or
- ☐ 2. THE FOLLOWING DOCUMENTS ARE ATTACHED:

J2.

		<h2>Carlsbad Energy Center Project</h2>		
		Procedure Number	CECP-1201	
		Title	Emergency Action Plan – Site Specific	
		Revision Date	October 2020	
<u>Approved:</u>		<u>Applicable Signatures:</u>		<u>Date:</u>
O & M Supervisor		 		11/4/20
Plant Manager				10/30/20

The purpose of this procedure is to ensure that Carlsbad Energy Center Project (CECP) emergencies are addressed promptly, minimizing exposure to personnel and property and communicating information in an organized manner that will provide accurate reporting to the appropriate parties.

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Emergency Contact List

Carlsbad Energy Center Project

- Facility Name: Carlsbad Energy Center Project
- Owner: Carlsbad Energy Center LLC
- Physical Address of the Facility: 4950 Avenida Encinas, Carlsbad, CA 92008
- Other Identifying Information:

Project Name:	Carlsbad Energy Center ("CECP")
Project Address:	4950 Avenida Encinas, Carlsbad, CA 92008
SDG&E SC ID:	SDG3
CAISO Resource Name:	Carlsbad Energy Center
CAISO Resource ID Unit 1:	CARLS1_2_CARCT1
CAISO Resource ID Unit 2:	CARLS2_1_CARCT1
Project Nominal Capacity:	500 MW

Carlsbad Energy Center

Name	Work Phone No.
24-hour Control Room	760.710.3950 Control Room
CECP Business Phone	760.710.3970 Office
Paul Mattesich Plant Manager	760.710.3945 Office 805.616.5836 Cell
Brian Wood Operations and Maintenance Supervisor	760.710.3949 Office 805.794.3851 Cell
Ryan Goerl Environmental Health and Safety Specialist	760.573.3802 Cell 760.707.6833 Cell
NRG Regional Environmental (Back-Up): George Piantka	

NRG-related

Name	Title	Office Phone Number	Mobile Number	Email Address
SDGE Real-Time Desk	Transaction Scheduler	858-650-6160	619-517-5661	tsched1@semprautilities.com
Aaron Malady	Corporate Security	713-537-2730		Aaron.malady@nrg.com
Chris Rimel (Primary Spokesman)	Manager, Communications	713-537-5388		Chris.Rimel@nrg.com
Diane Fellman (Secondary Spokesman)	VP, Regulatory Affairs	415-627-1651	415-601-2025	Diane.Fellman@nrg.com

Carlsbad Energy Center Project
Emergency Action Plan

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Name	Title	Office Phone Number	Mobile Number	Email Address
Danny Barrett	Energy Services Safety Manager		832-588-0398	Michael.Barrett@nrg.com
George Piantka	Environmental Director		760-707-6833 Cell	George.Piantka@nrg.com
Tim Sisk	Regional Environmental Manager	760-710-2129	860-334-8081	Tim.Sisk@nrg.com
Core Injury Management	All employee injuries			855-723-3674

Emergency Contact Numbers

Agency	When	Phone number
Carlsbad Fire Department	24 Hour emergency Non-Emergency	911 858-756-3006
San Diego County Hazmat	24 Hour emergency	911
Police	24 hr. emergency Non-Emergency	911 760-931-2197
San Diego County Fire Department Hazmat Division (CUPA)	Any significant release or threatened release of a hazardous material requires immediate reporting to CUPA.	858-505-6657
California Office of Emergency Services (O.E.S.) State Warning Center	Any significant release or threatened release of a hazardous material requires immediate reporting to OES.	800-852-7550 916-845-8911
National Response Center	Release exceeding reportable quantity (RQ).	800-424-8802
Chemical Safety and Hazard Investigation Board (CSB)	Report any releases that result in fatality, serious injury, or property damage of at least \$1,000,000.	202-261-7600 (or report@csb.gov)
Division of Occupational Safety & Health (DOSH)	Incident involving serious injury, illness, or death	626-239-0369
Federal Bureau of Investigation (FBI)	Terrorist attack, bomb threat, significant sabotage and active shooter situations	310-477-6565
U.S. Coast Guard	Spill to Waterway (Into Storm Drains)	619-278-7033
San Diego Regional Water Quality Control Board	Spill to Waterway (Into Storm Drains)	(619) 516-1990

Carlsbad Energy Center Project
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San Diego Air Pollution Control District (SDAPCD)	Emissions Exceedance. <i>If due to equipment breakdown call within 1 hour of discovery and choose option 2</i>	858-586-2650. After hours select option 2 on SDAPCD phone system
San Diego County Government	Business related	858-694-3900
California Department of Toxic Substance Control	Improper disposal of hazardous substance	800-728-6942
Poison Control Center	Incidents of ingestion of chemical or medications.	800-222-1222
CA Department of Fish and Wildlife	Incidents that threaten endangered species or migratory birds. <i>Not necessary in the event of a spill as they are notified by OES.</i>	800-334-2258
SDGE Operations Desk	When SDGE Realtime Desk is not available	858-650-6196
SDGE Outage Desk	To schedule an outage	858-650-6178
CAISO Gen Desk		916-351-2488 916-351-2489
CAISO RIG Engineer		916-608-5898 916-608-5897
SDGE Day Ahead Scheduler	When substation switching is needed	858-650-6178 (0500-1300 Mon-Fri) 858-650-6160 – 24 Hour
Carlsbad Municipal Water District	Any issues with water supply	760 438 2722 760 603 7352
SDG&E	Natural Gas Related Issues <i>i.e. Leak or Release</i>	1-800-411-7343
California Public Utilities Commission (CPUC)	Natural Gas Pipeline Release <i>Emergency Call SDG&E Gas first</i>	800-235-1076
California Energy Commission	Report Emergencies When it is safe to do so. Anwar Ali Compliance Project Manager	916-654-5020

Resources

Agency	When	Phone number
American Integrated Services	24 Hour Spill Clean Up/Removal	888-423-6060
Cal OES HazMat Section	Assistance deciding how to respond to a spill	916-845-8798
CHEMTREC	24 Hour Chemical information	800-424-9300
National Weather Service	Weather information	805-988-6610
Fire Department	Non-Emergency	858-756-3006
Police Department	Non-Emergency Business	760-931-2197 760-931-2100

Community Notifications

Company	Distance / Direction	Phone Numbers
West Properties	South of CECF	760-448-4501

COMMUNICATION CENTERS AND EMERGENCY SYSTEMS

I. Emergency Communications Centers

- A. The primary emergency communications center: Control Room
Outside phone (760) 710-3950
- B. Emergency Notification System:
Two-way Radio System

II. Emergency Activity Documentation

All plant activities taken during emergencies will be recorded in chronological order, including equipment problems, personnel injuries, and updates on station status and generation availability.

III. Emergency Systems

- A. In an emergency situation, a senior CECP Manager will take the Incident Commander (IC) role to manage the incident.
- B. If an agency responds to the station, such as fire or police department(s), the agency personnel will take over the IC role from the CECP Manager. The CECP Manager should remain with the agency IC to provide any advice re: the plant equipment or systems.
- C. All personnel shall cooperate with emergency responders for life flight operations, securing appropriate landing under the direction of the responding agency.
- D. Windssocks - shall be monitored during evacuation periods
- E. CECP has three designated safe assembly areas. If in case of severe ammonia leak, evacuate to the tertiary assembly area.
 - 1. Primary Assembly Area: Just outside the administration building in the parking lot on the east side of the building. If workers are in the warehouse the assemble area is in the parking lot on the south side of the warehouse building.
 - 2. Secondary Assembly Area: Just outside of the main gate at the south end of the facility.
 - 3. Tertiary Assembly Area: Evacuate all the way to the south end of the SDG&E substation, outside the substation gate on Avenida Encinas.
 - 4. If in case of a severe ammonia-leaking incident occurs when only a few personnel are in the plant, personnel will

close all doors and shut off the Air Conditioning and ventilation to prevent ammonia vapors from entering the Control Room. Call 911 to notify the Fire Department Hazardous Material Team. Workers will then evacuate the site to the offsite muster area.

- F. If applicable, refer to the Business Emergency/Contingency plan (on file with the San Diego County Department of Environmental Health Department Hazmat Division (CUPA). A copy is located in the Control Room.
- G. Emergency evacuation
 - 1. In the event a helicopter is needed, landing area is at the emergency responder's discretion. The heliport at Encina Power Station is not available due to demolition activities.
 - 2. The leaders during an evacuation are:
Senior Staff Member.
Visitors – Designated Station Contact.
- H. First Aid supplies are available in the Control Room.
- I. All workers will be awareness trained on CPR, First Aid and AED use. Workers will maintain current certifications as required, pending contractor availability and access.
- J. Incipient fire-fighting training shall be given to station employees. Fire equipment is to be inspected monthly.
- K. Emergency supplies consist of our private potable water system, bottled water, and food rations. The water system should remain intact during a major earthquake and if the power lines are down with no auxiliary power to the station, a three day supply of emergency water and food rations is available. Note: All perishable food on site should be consumed first.

PERSONNEL EVACUATION

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	(302) 381-6332 Cell	CECP Manager
Corporate Security (Aaron Malady) – for any significant security emergencies	(713) 537-2730	CECP Manager
NRG Spokesman: Communications Manager (Chris Rimel) – for requests from the media about the situation	(713) 537-5388	CECP Manager
California Energy Commission: Anwar Ali	(916) 654-5020	CECP Environmental Manager

I. Activation

When an evacuation is appropriate:

The Operating Authority will activate the emergency notification system via the plant paging system by paging the following message 3 times over the two-way radio system and the PA system. The message can be followed with more detailed information if required.

**“ATTENTION ALL PERSONNEL! THIS IS AN EMERGENCY.
EVACUATE TO THE (primary, secondary or tertiary) ASSEMBLY
AREA”**

- A. All personnel who are not operating critical areas of the plant are expected to report to the assembly area. Essential personnel shall be under direction of the Operating Authority and will remain on duty unless it is unsafe to do so.
- B. Control Room will provide emergency information to the Evacuation Leader at the evacuation assembly area.
- C. Evacuation Leader shall provide assistance with escape. The leaders are:
 - 1. Evacuation area – Senior Staff Member
 - 2. Control Rooms – On duty Operating Authority

3. Visitors – Designated Station Contact

D. CECF has three designated safe assembly areas. If in case of severe ammonia leak, evacuate to the tertiary assembly area.

1. Primary Assembly Area: Just outside the administration building in the parking lot on the east side of the building. If workers are in the warehouse the assemble area is in the parking lot on the south side of the warehouse building.
2. Secondary Assembly Area: Just outside of the main gate at the south end of the facility.
3. Tertiary Assembly Area: Evacuate all the way to the south end of the SDG&E substation, outside the substation gate on Avenida Encinas.
 4. If in case of a severe ammonia-leaking incident occurs when only a few personnel are in the plant, personnel can stay in the Control Room instead of evacuating to an evacuation area. Ensure to close all doors and shut off the Air Conditioning and ventilation to prevent ammonia vapors from entering the Control Room. Call 911 to notify the Fire Department Hazardous Material Team.
- E. Evacuation Leaders will determine which assembly area can be safely accessed and direct affected personnel to that safe assembly area. Upon arrival at the safe assembly area, personnel will be accounted for. Employees interacting with visitors, vendors, or contract personnel, at the time of evacuation notice will be required to account for their presence. A list of those not accounted for will be forwarded to the Control Room.
- F. Site management, as feasible, will initiate search and rescue efforts. Personnel shall remain in safe assembly area until provided further instructions.
- G. In the event either Control Room is unsafe to occupy, the operator will attempt to trip any running units and report to a safe area communicating via portable radio.

II. Drills

Conduct a drill on the evacuation process every 12 months.

MEDICAL EMERGENCIES

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
VP, Regional Plant Operations (John Robertson) – for injuries	(302) 381-6332 Cell	CECP Manager
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
NRG Spokesman: Communications Manager (Chris Rimel) – for requests from the media about the situation	(713) 537-5388	CECP Manager
Director, Operational Safety (Michael Hagenmayer) - This person will notify Cal/OSHA, if applicable	(315) 349-2329 Office (202) 213-9109 Cell	Safety Specialist
Division of Occupational Safety & Health (Cal/OSHA) – for serious employee injuries or fatalities	(909) 383-4321	Regional Safety Manager
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor, designee or Safety Specialist
California Energy Commission Anwar Ali	(916) 651-2072	Only for worker injuries that require offsite medical attention.

I. Discovery.

The person who discovers an accident/injury shall immediately inform the Control Room with the following information and then ensure that proper basic first aid is provided until help arrives.

- A. Discoverer's name and location.
- B. Exact location of accident/injury.
- C. Name, approximate age and any known medical conditions of injured person(s).
- D. Nature and severity of accident/injury.

- E. Any apparent conditions or hazards that could increase the level of danger (i.e., chemicals, falling hazards, space confinements) in the area of the accident.
- F. Description of any action being taken or about to be taken.

II. Notifications.

Upon notification of a medical emergency, the Operating Authority (person receiving the emergency call) shall:

- A. Gather information from the person reporting the emergency. Use Emergency Response Information Form (Addendum 1).
- B. Notify the appropriate outside agencies, call 911. Report the number of injured personnel, severity and type of injuries.
- C. Follow the Safety and Health Incident Notification instructions (Addendum 2).
- D. Notify Core Injury Management
- E. Notify the Safety Specialist and the available CECF Manager.
- F. Notify SDGE Real-Time Desk - if operation of the unit(s) is affected.

III. Assess Plant Status.

- A. Number of injured (employees and non-employees)
- B. Nature and severity of injuries (include fatalities)
- C. Effect on station generation
- D. Corrective action initiated
- E. Situation stable or unstable

IV. Outside Emergency Assistance.

Give specific direction to outside agencies on route to the station (assign someone at the main gate to direct emergency vehicles entering the site.)

V. Account for all Personnel.

- A. The Operating Authority will account for all personnel on site.
- B. If a major disaster occurred and the plant was not evacuated, a senior staff shall account for his personnel and report the results to the Control Room. Designated Station Contacts shall account for any contractors, visitors, delivery persons, vendors, etc. who are not part of the resident work force.

Note: If the incident necessitates the evacuation of a building, personnel shall report to the evacuation assembly area shown on the station map. (Addendum 4)

- VI. Determine if Hazardous Chemicals are involved.
 - A. De-contaminate affected person(s) as needed.
 - B. Review the Safety Data Sheets (SDSs) for chemical hazards, i.e. flashpoint, extinguishing agent, health hazard, first aid, etc.
 - C. Furnish outside agencies SDSs. This includes fire department, paramedics and hospital.
- VII. Determine Corrective Action as Needed.
- VIII. First Aid Supplies.

The first aid supplies and AED are located in the Control Room.
- IX. Control Panic and Confusion.
 - A. Remain Calm - reassure others
 - B. Update personnel on station status
 - C. Give specific job assignments
 - D. Remove non-essential personnel from the affected area
 - E. If a supervisor is not available, the Operating Authority will assume his responsibilities
 - F. All employees remain on the job unless directed otherwise.
- X. Reassess the Situation (Equipment and Personnel Status). Forward this updated report to the Plant Management or his designee.
- XI. Organize Team to Contain the Situation.
 - A. Evaluate problems associated with online units and units removed from service.
 - B. Identify and Isolate dangerous areas
 - C. Secure plant perimeters, direct traffic, document all personnel entering and leaving station and limit access to authorized personnel only.
 - D. If capable to do so, repair damaged equipment.
- XII. Call out Additional Personnel As needed.
- XIII. Establish an Emergency Communication Center (if necessary) at the Control Room. Plant activities during an emergency will be recorded in chronological order in the emergency communication center.
- XIV. Media reporting

To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating to the incident will be directed to this person. The media will not be allowed in the plant. The media will not be allowed in the plant.

XV. Establish On-Site Teams for Around the Clock Coverage (if-required)

During the crisis, management personnel will supervise and coordinate around-the-clock teams through the unstable and transition periods. This surveillance will continue until conditions stabilize and there is no further danger to personnel and equipment.

FIRE EMERGENCIES

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – if large fires occurred	(302) 381-6332 Cell	CECP Manager
NRG Spokesman: Communications Manager (Chris Rimel) – for requests from the media about the situation	(713)537-5388 Cell	CECP Manager
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager

I. Discovery

The person who discovers a fire shall immediately inform the Control Room with the following information. The person receiving the information should use the Emergency Response Information Form (Addendum 1) for this purpose.

- A. Discoverer's name and location.
- B. Exact location of the fire.
- C. Size and type of fire (Class A, B or C)
- D. Report number and type of injuries if any.
- E. Any apparent conditions or hazards that could increase the level of danger (i.e., chemicals, flammable liquids or gases) in the area of the fire.
- F. Description of any action being taken or about to be taken. The caller should begin fighting the incipient level fire if trained. (Do not attempt to extinguish the fire alone unless you are sure it can be done safely).

II. Notification

If the fire is in its incipient stage and is in the process of being extinguished, the Operating Authority (person receiving the emergency call) shall send all available support to the incident location. Fire

extinguisher hands-on training shall be provided to applicable station employees annually.

If the fire has progressed beyond the incipient stage or there are hazards near the fire which could quickly elevate the danger, the Control Room shall:

- A. Activate the emergency notification system for fire (two-way radio system and PA).
- B. Notify the appropriate outside agencies including calling 911.
 - 1. Magnitude and type of fire.
 - 2. Type of fuel or chemicals involved.
 - 3. Number of personnel injured.
 - 4. Plant location and accessibility to the affected area.
 - 5. Information on station firefighting equipment.
- C. Notify SDGE Real-Time Desk, if operation of the unit(s) is affected.
- D. Follow the Safety and Health Incident Notification Instructions (Addendum 2)
- E. Notify the Plant Management

III. Outside Emergency Assistance

- A. Give specific direction to outside agencies in route to the station.
- B. Assign someone to the main gate to direct emergency vehicles entering the site.
- C. Provide an update to the fire department personnel of the incident and situation

IV. Account for all Personnel

The Operating Authority will account for all personnel on site.

If a major disaster occurred and the plant was not evacuated, supervisors shall account for their personnel and report the results to the Control Room. Designated Station Contacts shall account for any contractors, visitors, delivery persons, vendors, etc. who are not part of the resident work force.

Note: If the incident necessitates the evacuation of a building, personnel shall report to their designated evacuation assembly area shown on the station maps (Addendum 4).

V. Determine Corrective Actions

- A. Identify and isolate sources of danger or fuel sources feeding the fire.
 - B. Evaluate problems associated with online units and off line units.
 - C. Shut off fuel sources. Secure pumps, isolation valves, etc.
 - D. Shut off any potential ignition sources such as motors, electrical circuits, open flames, etc.
 - E. De-energize electrical equipment in or near the fire area.
 - F. If the CO₂ system can extinguish the fire in the area, manually activate CO₂, if it did not take place automatically.
 - G. Monitor fire's progress.
 - H. Check the fire pump status and raw water tank level.
 - I. If Hazardous Chemicals are involved, barricade the area and follow the Hazardous Material Spill Procedure.
 - 1. Barricade the affected area.
 - 2. Review the Safety Data Sheets (SDSs) for chemical hazards, i.e. flashpoint, extinguishing agent, health hazard, first aid, etc.
 - 3. Furnish outside agencies SDSs information. This includes fire department, paramedics and hospital.
- VI. Control Panic and Confusion
- A. Remain calm, reassure others.
 - B. Give specific job assignments.
 - C. Remove non-essential personnel from the affected area.
 - D. If a supervisor is not available, the Operating Authority will assume the responsibilities.
- VII. Assess Plant Status
- A. Number of personnel injured, if any.
 - B. Nature and severity of injuries (include fatalities)
 - C. Effect on station generation
 - D. Corrective action initiated
 - E. Situation stable or unstable
- VIII. First Aid Supplies
- The first aid supplies, burn kit, and AED area located in the Control Room.

IX. Organize Teams to Contain the Station

- A. Evaluate problems associated with online units and units removed from service.
- B. Identify and Isolate dangerous areas
- C. Secure plant perimeters, direct traffic, document all personnel entering and leaving station and limit access to authorized personnel only.
- D. Repair the damaged equipment.

X. Establish an Emergency Communication Center (if necessary) at the Control Room. Plant activities during an emergency will be recorded in chronological order in the emergency communication center.

XI. Media Reporting

To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating to the incident will be directed to this person. The media will not be allowed in the plant.

HAZARDOUS MATERIAL SPILLS

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person to make call
Medical emergency and ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk – if operation of the unit(s) is affected.	626-307-4410	Operating Authority
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	Plant Management
San Diego County Department of Environmental Health Hazmat Division (CUPA)	858-505-6657	Environmental Specialist
California Office of Emergency Services (O.E.S.)	800-852-7550	Environmental Specialist
National Response Center	800-424-8802	Environmental Specialist
Chemical Safety and Hazard Investigation Board (CSB)	202-261-7600 (or report@csb.gov)	Environmental Specialist
California Energy Commission Anwar Ali	916-651-2072	Environmental Specialist
Department of Toxic Substances Control	800-728-6942	Environmental Specialist
San Diego Water Quality Control Board	619-516-1990	Environmental Specialist
US Coast Guard	619-278-7033	Environmental Specialist
SDG&E (gas service/leak)	1-800-411-7343	Environmental Specialist
California Public Utilities Commission	800-235-1076	Environmental Specialist
American integrated Services- 24 Hour Spill Clean Up/Removal	888-423-6060	Environmental Specialist
Global Infrastructure Partners – Michael O'Toole	312-835-8527	Environmental Specialist

- I. This procedure is designed to be used in conjunction with the "Risk Management Plan", "Spill Prevention, Control and Countermeasure Plan", "Hazardous Material Business Plan", Security Plan, and "Waste Management and Minimization Plan."
- II. Discovery

All hazardous material spills are to be reported to the Control Room. The person who discovers a hazardous material release shall immediately inform the Operating Authority through radio or phone and report the following information:

- A. Exact location, time, duration, quantity (estimated), all known substances involved
in the Release, level of containment, media into which the release occurred, proximity of storm drains and any other items of significance that can be ascertained in a few seconds.
- B. Names of personnel exposed to or potentially injured by hazardous material.
- C. Any apparent conditions or hazard, which could increase the level of danger/exposure in the area of the hazardous material release.

III. Notification

- A. The Operating Authority shall assess the severity of the material release, the appropriate responding method for the situation, and shall determine at that point if 911 should be called.
- B. If a health hazard exists, notify station personnel of the incident over the public address system and/or implement the Personnel Evacuation Procedure outlined in this Emergency Action Plan.
- C. After the situation is assessed and/or emergency notification of 911 is made, then notify the O&M Supervisor. After the O&M Supervisor provides the Plant with necessary operational instructions, the O&M Supervisor will contact the CECP Environmental Specialist who will make any necessary internal and external agency notifications (in accordance with section VI of this procedure) and arrange for clean-up if necessary. CECP EH&S Specialist is unavailable, contact NRG regional environmental support (see emergency contact list) for assistance immediately.

The following information should be relayed: Exact location, time, duration, quantity, all known substances involved in the release, level of containment, media into which the release occurred, proximity of storm drains and any other items of significance that can be ascertained in a few seconds. The O&M Supervisor will also notify the Plant Manager.

- D. If in case of a severe ammonia-leaking incident occurs when only a few personnel are in the plant, personnel will close all doors and shut off the Air Conditioning and ventilation to prevent ammonia vapors from entering the Control Room. Workers will

call 911 to notify the Fire Department Hazardous Material Team.
Worker will evacuate to the offsite muster area.

IV. Assessment and response to a hazardous material leak

A. Types of leaks:

1. For a release from a drum, tote, or tank and if the leak is minor, make an attempt to stop the leak if it can be done safely. If the leak is downstream of a block valve and the valve can be safely shut, shut it off and barricade the leak. **Do not attempt to plug or stop any chemical leaking from a tank or line other than attempting to quickly stop it by closing a block valve located upstream of the leak.** Barricade a perimeter a safe distance from the leak and stay away. Call 911 to ask for assistance with the leak.
 2. Releases of bulk storage chemicals (i.e. ammonia, sulfuric acid, sodium hypochlorite)
 - i. If the release cannot be stopped or is likely to breach the secondary containment, call 911 immediately to report the spill to the Carlsbad Fire Department.
 - ii. If the storage tank has a leak, call in a vacuum or tank truck, as required, to allow the storage tank to be drained and flushed prior to repair. Dispose of all Hazardous Waste to an approved waste disposal site.
 - iii. If the chemical is leaking from the piping system, close the tank discharge valve and stop all feed equipment.
 - iv. For a release during offloading operations immediately shut off the **chemical supply from tanker (i.e., close dispenser; isolate supply hose).**
- B. If the hazardous material leaking is ammonia and personnel can smell ammonia, barricade to isolate the area and stay upwind.
- C. Spill kits for ammonia are located at each power block and the ammonia offloading area. Ammonia spill kits consist of absorbent spill pads (hydrophilic) and a chemical compatible container. DO NOT DILUTE spills. Any ammonia or ammonia cleanup materials must be placed in a waste compatible container and placed in the hazardous waste accumulation area onsite depending disposal.

- D. For all operations that are to be performed, personnel must wear proper personal protective equipment (PPE), including a respirator with appropriate filter cartridges.
 - E. Allow only authorized persons wearing appropriate PPE in the affected area.
 - F. Review Safety Data Sheets (formerly MSDSs) for the characteristics of the leaking substance. Provide the information to the outside agencies when they are notified.
 - G. For oil leaks, follow the SPCC procedure.
 - H. If leak is discovered at the Hazardous Waste Accumulation Area, remediate the situation using appropriate oil or chemical spill kit. Notify the Environmental Specialist as soon as possible. (See attached locations of spill clean-up equipment)
 - I. Hazardous material spill clean-up is to be done by a contractor except any spill that is of low hazard or that is considered to be small quantity. Small quantity based on only requires one spill kit to cleanup from within containment and is below reportable quantity (RQ).
 - J. All spill cleanup wastes must be stored and disposed of in accordance with the facility waste management plan.
- V. Establish a communication center (if required)
- A. In the event of calling 911, secure the plant perimeter.
 - B. All plant activities will be recorded in chronological order in the CECF Logbook, including but not limited to equipment problems, personnel injuries, environmental impact and notifications and updates on station status and generation availability.
- VI. Regulatory Notifications & Reporting

The Environmental Specialist will make all notifications to regulatory agencies. If unable to reach the Environmental Specialist, the Plant Manager or NRG Regional Environmental Support contact (see Emergency Contacts) will make the following notifications:

Verbal Notifications					
Agency	Circumstances	When to Report	What to Report	Phone	Citation
911	Imminent threat to public health	Immediately	Detailed information about spill and any injuries or safety incidents involved.	911	-

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San Diego County Department of Environmental Health Hazmat Division (CUPA)	Any release of oil, hazardous material or waste (including any reported to the NRC or OES) to the environment.	Immediately	Spill information and any other details requested.	858-505-6657	23 CCR 2650-2652; 19 CCR 2701-2705
Agency	Circumstances	When to Report	What to Report	Phone	Citation
California Office of Emergency Services (Cal OES)	A significant release or threatened release of oil, hazardous materials or hazardous waste, or sewage including fire or explosions which could threaten human health, or the environment. All releases of 42 gallons or more from a tank. All hazardous liquid pipeline releases.	Immediately	<ol style="list-style-type: none"> 1. The exact location of the release or threatened release; 2. The name of the person reporting the release or threatened release; 3. The hazardous materials involved in the release or threatened release; 4. An estimate of the quantity of hazardous materials involved; and 5. If known, the potential hazards presented by the hazardous material involved in the release or threatened release; 	800-852-7550 or 916-845-8911	19 CCR 2703 - 2705; 23 CCR 2250-1, 2260; HSC 25501 (o), (p)
National Response Center (NRC)	All releases of oil or hazardous materials equal or exceeding the reportable quantity and any releases of oil or hazardous materials to water (i.e. to our Storm Drains).	Immediately	<ol style="list-style-type: none"> 1. The chemical name or identity of any substance involved in the release. 2. An indication of whether the substance is an extremely hazardous substance. 3. An estimate of the quantity of any such substance that was released into the environment. 4. The time and duration of the release. 5. The medium or media into which the release occurred. 6. Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals. 7. Proper precautions to take as a result of the release, including evacuation (unless such information is readily available to the community emergency coordination pursuant to the emergency plan). 8. The names and telephone number of the person or persons to be contacted for further information. 	800-424-8802	40 CFR 110.6, 302.4, 355.40
Department of Toxic Substances Control (DTSC)	All hazardous waste tank releases and/or containment systems. (release of Fuel Gas Compressor Drain Tank)	Immediately	Spill information and any other details requested.	800-728-6942	22 CCR 66265.56
US Coast Guard	All releases of oil or hazardous materials/hazardous waste to water (storm drains)	Immediately	Spill information and any other details requested.	619-278-7033	33 CFR 153.201 - 153.203

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Regional Water Quality Control Board (San Diego)	All releases of oil or hazardous materials/hazardous waste to water (storm drains)	Immediately	Spill information and any other details requested.	619-516-1990	23 CCR 2260 Reporting Requirements
SDG&E Gas	Release of Natural Gas	Immediately	Spill information and any other details requested.	1-800-411-7343	-
California Public Utilities Commission	For release of Natural Gas (call SDG&EGas 1st)	Immediately	Spill information and any other details requested.	800-235-1076	-
California Energy Commission	Report any incident that requires outside agency reporting or response.	As soon as it is safe to report.	1. Health and safety impacts on the surrounding population; 2. Property damage off-site; 3. Response by off-site emergency response agencies; 4. Serious on-site injury; 5. Serious environmental damage; or 6. Emergency reporting to any federal, state, or local agency.	916-651-2072	CEC License COM-13
Global Infrastructure Partners	Report any environmental emergency.	As soon as it is safe to report	Any Environmental Emergency	Michael O'Toole: 312-835-8527	-

Written Follow-Up Reports					
Agency	Circumstances	When to Report	What to Report	Submit To	Citation
California Office of Emergency Services (Written Report)	A significant release or threatened release of oil, hazardous materials or hazardous waste, or sewage including fire or explosions which could threaten human health, or the environment. All releases of 42 gallons or more from a tank. All hazardous liquid pipeline releases.	As soon as practicable following a release, but no later than 30 days from the date of the release.	Emergency Release Follow-up Notice Reporting Form (See addendum 5).	Chemical Emergency Planning and Response Commission (CEPRC) 3650 Schriever Ave, Mather, CA 95655	19 CCR 2705
EPA Region IX	Any discharge of 1,000 gallons or more of oil; or second discharge of 42 gallons or more of oil over a 12-month period.	Written follow-up within 60 days	See form and instructions in SPCC Plan.	See form and instructions in SPCC Plan.	40 CFR 112.4
California Energy Commission	1. Health and safety impacts on the surrounding population; 2. Property damage off-site; 3. Response by off-site emergency response agencies; 4. Serious on-site injury; 5. Serious environmental damage; or 6. Emergency reporting to any federal, state, or local agency.	Written follow-up within 1 week.	See COM-13	CEC CPM	CEC License COM-13

***NOTE:** The timing on verbal notifications is to call "as soon as there is knowledge of any release." The priority is on timeliness. However, a balance must be struck between acting to report and acting to contain and prevent damage. Call in the report as soon as possible and not less than an hour from when the incident occurred.

The report (and any emergency response) cannot be delayed in order to provide the complete information. The report can always be modified at a later date.

VII. Media reporting

To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating

to the incident will be directed to this person. The media will not be allowed in the plant.

VIII. Required Training

A. Spill Prevention Control & Countermeasure (SPCC):

1. Required For: 40 CFR §112.7(f). Oil storage and oil filled equipment. Required and enforced by the EPA. All personnel handling oil or responsible for conducting SPCC inspections must be trained. Appropriate personnel who are responsible for the operation and maintenance of equipment in the effort to prevent oil discharge must also receive training.
2. Frequency: Within 6 months of hire or prior to working with oil or fuel materials unsupervised. Prior to a new assignment or change in operation. Refresher training is required annually.
3. Must Include: Initial training for appropriate personnel covers the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules and regulations; general facility operations; and the contents of this SPCC Plan.

Appropriate personnel also receive annual discharge prevention briefings to assure adequate understanding of this SPCC Plan. Such briefings highlight and describe past reportable discharges or failures, malfunctioning components, and any recently developed precautionary measures

B. CalARP RMP (Risk Management Plan)

1. Required For: 19 CCR §2755.4. Aqueous Ammonia 19%. Required by the (California Accidental Release Prevention) Program and enforced by the San Diego County Department of Environmental Health Hazardous Materials Department (CUPA). All personnel involved in operating or maintaining the ammonia process must be trained.
2. Frequency: Before an employee is allowed to operate or maintain covered processes and prior to a change in assignments. Refresher training is required every 3 years.
3. Must Include: Safety information, a Hazard review, Operating procedures, Maintenance requirements, Compliance audits and Training requirements.

C. Hazardous Materials (HMBP) & Hazardous Waste

1. Required For: 19 CCR §2732. Hazardous Materials Business Plan. All personnel must be trained.
2. Frequency: At the time of hire and prior to new assignments or changes in operation. Refresher training is required annually.
3. Must Include: Internal Alarm/Notification, Evacuation/Re-entry Procedure and Assembly Point Locations
Emergency incident reporting, External Emergency Response Organization Notification, Locations and Contents of Emergency Response/Contingency Plan, Facility Evacuation Drills, Safe Methods for Handling and Storage of Hazardous Materials, Location and Proper Use of Spill Equipment, Spill Procedures/Emergency Procedures, Hazards of Chemicals Exposed to and Hazardous Waste Management.

IX. Definitions

- A. Personnel training provided: First Responder, Operations Level (FRO). FRO are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures.
 - B. Hazardous material: Any substance that may result in adverse effects on the health or safety of employees.
 - C. Discharge: Includes but not limited to, spilling, leaking, pumping, pouring, emitting, emptying, or dumping of material.
- X. Spill kit locations – see Addendum 6 (Map of CECP Emergency Equipment Locations)

EARTHQUAKE

(Major where damage is suspect)

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	(302) 381-6332 Cell	CECP Manager
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	CECP Manager
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor or designee
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager

I. Steps to Follow During an Earthquake

A. If you are Indoors: "DROP, COVER and HOLD ON"

1. Stay there - don't rush outside.
2. Remain calm - take cover under a sturdy table or desk or move against an interior wall and protect your head with your arms. Do not stand in a doorway.
3. Stay away from tall fixtures, windows and exterior walls.
- 4.

B. If you are Outdoors:

1. Stay away from fallen electrical wires.
2. Move away from high structures, lamp posts, and chemical containers.

II. Assess Plant Status

- A. Determine if earthquake was large enough to require emergency response.
 - B. Notify the Plant Manager or his designee and NRG Energy representatives.
 - C. Inspect the plant areas and equipment with emphasis given to critical equipment.
 - D. Furnish an assessment of plant damage and personnel status to the Plant Manager and NRG Energy representatives. (This report will be updated following a more thorough investigation.)
- III. Determine Corrective Action (If required)
- A. Identify problems where assistance is required from outside agencies
 - B. Identify and isolate potential sources of danger; i.e. natural gas, chemical tanks, high voltage lines, etc.
- Note: Due to widespread devastation, outside assistance may not be readily available. Therefore, the station could be required to be self-sufficient for a period of time. In such case follow the Personnel Required to Stay On-site during an Evacuation Procedure in this Emergency Action Plan.
- IV. Account for all Personnel
- If the plant was a not evacuated, all personnel shall be account for and report the results to the Control Room. Designated Station Contacts shall account for any contractors, visitors, delivery persons, gas company employees, vendors, etc. who are not part of the resident work force.
- Note: If the earthquake necessitates the evacuation of a building, personnel shall report to their designated evacuation assembly area shown on the station map.
- V. Assemble the Injured at a Central Location
- A. Administer immediate first aid to injured personnel until the paramedics are at the plant.
 - B. If capable of being moved, transfer the injured to a safer area.
- VI. First Aid Supplies
- The first aid supplies, burn kit, and AED area located in the Control Room.
- VII. Control Panic and Confusion
- A. Remain Calm - reassure others

- B. Give specific job assignments
- C. If a supervisor is not available, the Operating Authority will assume his responsibilities
- D. All employees remain on the job unless their supervisor releases them from duty.

VIII. Reassess the Situation (Equipment and Personnel Status)

Effective use and condition of personnel should be reviewed. All structures and equipment shall be inspected for possible damage. This includes but is not limited to:

- A. Injured Personnel
- B. Transformer casings, bushings and foundations
- C. Fuel gas lines and connections
- D. Chemical and water tanks
- E. Turbine and Generator structures and foundation supports
- F. Forward this updated report to the Plant Manager or his representative and others necessary persons.

IX. Determine if Hazardous Chemicals are Involved

- A. Barricade the affected area
- B. Review the Safety Data Sheets (SDSs) for chemical hazards, i.e. flashpoint, extinguishing agent, health hazard, first aid, etc.
- C. Furnish outside agencies SDSs. This includes fire department, paramedics and hospital.

X. Organize Team to Contain the Situation

- A. Evaluate problems associated with online units and units removed from service.
- B. Identify and isolate dangerous areas.
- C. Provide personnel, engineering and materials to repair damaged equipment.

XI. Call out Additional Personnel as Required

XII. Assess Damage for Media Reporting Purposes

To ensure consistency in the release of information, a single qualified spokesman will handle interface with news media. For CECP Energy Station, the spokesman will be Senior Director of Wholesale Public Relations and Media Relations. Any telephone calls or inquiries relating to the incident will be directed to this person.

- XIII. Establish an Emergency Communication Center at the Control Room, if necessary.
 - A. Plant activities during an emergency will be recorded in chronological order in the emergency communication center.
- XIV. Secure Plant Perimeter
 - A. Operations will be responsible in performing this function
 - B. Only authorized persons will be allowed on site.
 - C. Secure plant perimeters, direct traffic, document all personnel entering and leaving station and limit access to authorized personnel only.
 - D. Contact the family members of the injured who were transported to hospitals.
- XVI. Establish On-Site Teams for Around the Clock Coverage (if- required)

During the crisis, management personnel will supervise and coordinate around-the-clock teams through the unstable and transition periods. This surveillance will continue until conditions stabilize and there is no further danger to personnel and equipment.

HIGH WIND CONDITIONS

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	(302) 381-6332 Cell	CECP Manager
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	CECP Manager

Note: Plant structures are designed to withstand high wind but considerable plant damage could occur with winds of lesser magnitude.

I. Assess Plant Status

- A. If high winds occur, notify the persons on the Contact List above to alert them of potential plant problems and update them on weather conditions in the area.
- B. Notify the persons if the station sustains major damage, is disabled, or placed on restricted load due to the wind.
- C. In the event of high winds:
 1. Check and monitor condition of all structures, especially those constructed of fiberglass or metal. Inspections should be conducted from the upwind side of any structure if possible.
 2. Close all doors tightly to prevent damage to mechanical and electrical apparatus from blowing particles.
 3. Call out operating and maintenance personnel as required for assistance.
- D. Precautions
 1. Wear close fitting safety glasses
 2. Avoid high areas
 3. Don't use the overhead crane

4. Exercise caution when driving vehicles. Blowing particles can create poor visibility.

BOMB THREAT

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency, Ambulance and Police	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	(302) 381-6332 Cell	CECP Manager
Corporate Security (Aaron Malady)	(713) 537-2730	CECP Manager
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	CECP Manager
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager
Federal Bureau of Investigation (FBI)	(310)477-6565	Operating Authority or CECP Manager

Note: Bomb threats may be received by telephone, mail, e-mail, or other means.

I. Discovery

- A. For bomb threats received by telephone, the person who receives the threat shall:
 - 1. Remain calm and try to keep the caller talking.
 - 2. Record all information and exact comments made by the caller accurately. Fill out the Bomb Threat Checklist AS COMPLETELY AS POSSIBLE!
 - 3. Do not transfer the bomb threat call to another employee.
 - 4. Do not hang up first.
- B. For bomb threats received by mail, report it to the management.
- C. If a suspicious item has been sent to the facility by mail or delivery service, relocate it to a nearby segregated area. Since the item has already been handled by many people, it should be safe for relocating.

II. Notification

- A. Report the threat to the CECP Management IMMEDIATELY.
- B. Call 911 to report the threat to the local law enforcement.
- C. Notify the dispatcher, if the unit operation is affected.
- D. Contact the Corporate Security Manager.

III. Assessment - CECP management will evaluate the available information and make appropriate responding procedures whether:

- A. To have the employees to move to the areas where they typically receive daily work assignments for check-in and for further instructions.
- B. To activate the plant Emergency Notification System to evacuate the plant.
- C. The personnel are to return to their workstations when the plant management determines it is safety to do so.

III. Response

- A. Employees/contractors shall follow directions issued by two-way radio system or by supervision in charge.
- B. Visitors/vendors are the responsibility of the personnel they are visiting (Station Contact).
- C. Assign personnel to monitor/control automotive and pedestrian traffic in and out of the facility.

IV. CECP management is to decide if the personnel would need to search the plant to look for a suspicious package that may contain an explosive material. Refer to section 5.1 Bomb Threat Policy in the Operations Security Plan and the NRG Corporate Policy for Bomb Threat Response (SEC-2911) for the threat evaluation procedures.

V. Establish an Emergency Communication Center (if necessary) at the Control Room. Station activities during an emergency will be recorded in chronological order in the emergency communication center.

VI. Media reporting

To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating to the incident will be directed to this person. The media will not be allowed in the plant.

TERRORIST ACTIVITY

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency. Ambulance and Police	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	(302) 381-6332 Cell	CECP Manager
Corporate Security (Aaron Malady)	(713) 537-2730	CECP Manager
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	CECP Manager
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager
Federal Bureau of Investigation (FBI)	(310)477-6565	Operating Authority or CECP Manager

Note: It is the CECP Management's objective to provide maximum protection to station personnel, consistent with providing electrical service to our customers during periods of disturbance. It is expected that in such instances, law enforcement agencies will establish boundaries delineating the trouble area(s) and will set forth rules for limited access. CECP uses a three-level system of security, which should be adhered to in time of uncertainty.

I. Discovery

The person who discovers a terrorist activity shall immediately inform the Control Room with the following information:

- A. Discoverer's name and location.
- B. Exact location of terrorist activity.
- C. Any apparent conditions or hazards that could increase the level of danger.

II. Levels of system of security

Level 3 When there is an increased possibility of a terrorist act, but the nature and extent of the act is unpredictable.

- A. Ensure ability to identify all on site personnel.
- B. Check the identification of all visitors and contractors. Do not grant access unless you are absolutely sure the person has legitimate identification.
- C. Increase spot checks of vehicles, people, mail, packages, briefcases, etc. entering and leaving the site.
- D. Report suspicious activity (e.g., people, vehicles, packages, etc.) to the supervisor.
- E. Frequently check areas where hazardous substances are stored and ensure storage-tank valves are protected. Check containment systems around storage facilities.
- F. Check and repair, as necessary, fences, gates and lighting.
- G. Use a minimum number of access points and close and lock the points not used.
- H. Contact firms that provide guard services to your site and ask what steps they are taking to furnish guards on short notice.
- I. Contact emergency agencies and furnish a list with phone numbers of critical site personnel.
- J. Ensure emergency agencies serving your location have directions to your site.
- K. Request periodic patrol checks from the police agency serving your facility.
- L. Look ahead to requirements associated with Levels 1 and 2.

Level 2 When the threat of a terrorist act is more predictable, or terrorist activity exists.

- A. Review requirements associated with Level 3.
- B. Communicate information to employees and encourage community security awareness of suspicious activity.
- C. Evaluate assigning security guards to sites, especially during non-daylight hours, weekends and holidays, and ensure guards have specific direction on their duties.
- D. Check, to the extent possible, all vehicles, people, mail, packages, briefcases, etc. entering and leaving the site and placard visiting vehicles indicating they have been checked by security.

- E. Assign areas of the site to employees/guards and require periodic inspections of the areas for suspicious items and activity.
- F. Advise all personnel to inspect deliveries, packages, mail, etc. and notify the supervisor if there is any concern.
- G. Report trespassers.
- H. Develop steps that need to be taken to seal off an area, if prudent (i.e. collision barriers, heavy equipment, etc.).
- I. Prohibit non-company vehicle parking within 30 yards of critical equipment.
- J. Practice emergency action plans.
- K. Increase communication with the police agency serving your facility and request more frequent patrol checks.
- L. Review requirements associated with Level 1.

Level 1 When a terrorist act is imminent or has occurred.

- A. Review requirements associated with Levels 2 and 3.
- B. Refuse access if people do not have positive identification or do not have a legitimate need to enter the site.
- C. Reduce site ingress and egress points to an absolute minimum.
- D. Check all vehicles (including inside, outside and undercarriage), people, mail, packages, briefcases, etc. entering and leaving the site and placard vehicles indicating they have been checked by security. If possible, offload all vehicles outside the site's perimeter fence and move the deliveries inside the fence using company vehicles and personnel.
- E. Use security guards round-the-clock.
- F. Guards should continually check the perimeter fence and critical facilities while staying in communication with site personnel via two-way radio.
- G. Install collision barriers around critical facilities, if prudent.
- H. Request consistent patrol checks from the police agency serving your facility.

III. Media reporting

To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating

to the incident will be directed to this person. The media will not be allowed in the plant.

INTRUSION

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Police	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	(302) 381-6332 Cell	CECP Manager
Corporate Security (Aaron Malady)	(713) 537-2730	CECP Manager

Note: Intrusion is defined as an act of an unauthorized person or persons entering station property.

I. Notification

- A. Station employees should monitor the intruder's movements in the plant area but do not attempt to physically restrain the individual(s).
- B. Call the persons on the above list, including 911 regarding the intruder's movements, location, activities and physical attributes such as carrying a weapon or handbag.
- C. The location of anything dropped or left behind by the intruder should be documented and left for local authorities to inspect and remove.

Note: Avoid confrontation at all cost.

SABOTAGE REPORTING

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	(302) 381-6332 Cell	CECP Manager
Corporate Security (Aaron Malady)	(713) 537-2730	CECP Manager
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	CECP Manager
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager
Federal Bureau of Investigation (FBI)	(310) 477-6565	Operating Authority or CECP Manager

Note: Sabotage is an intentional obstruction of an activity, or willful and malicious destruction of other's property. It is aimed at weakening a government or corporation through subversion, obstruction, disruption, or destruction. One who engages in sabotage typically tries to conceal their identities because of the consequences of their actions.

- I. When there is an increased possibility of a sabotage act, but the nature and extent of the act is unpredictable:
 - A. Identify all plant personnel.
 - B. Check the identification of all visitors and contractors. Do not grant access to the plant unless the person has legitimate identification.
 - C. Increase spot checks of vehicles, people, mail, packages, briefcases, etc. entering and leaving the site.
 - D. Report suspicious activity (e.g., people, vehicles, packages, etc.) to the station management.

- E. Frequently check areas where hazardous substances are stored and ensure storage-tank valves are protected. Check containment systems around storage facilities.
- F. Check and repair, as necessary, fences, gates and lighting.
- G. Use a minimum number of access points and close the points not used.
- H. The emergency responders are those who trained in the Hazardous Waste Operations, First Responder Level (HAZWOPER).
- I. Contact emergency agencies and furnish a list with phone numbers of critical plant personnel.
- J. Ensure emergency agencies serving the station location have directions to the station.
- K. Request periodic patrol checks from the police agency serving CECP area.
- L. Be cautious how information pertaining to security is communicated to employees and the media.
- M. Look ahead to requirements associated with Security Levels 1 and 2 (see the Terrorist Activity procedure).

II. When a sabotage event is imminent or has occurred.

- A. Refuse access if people do not have positive identification or do not have a legitimate need to enter the station.
- B. Reduce station ingress and egress points to an absolute minimum.
- C. Check all vehicles (including inside, outside and undercarriage), people, mail, packages, briefcases, etc. entering and leaving the station and placard vehicles indicating they have been checked. If possible, offload all vehicles outside the station's perimeter fence and move the deliveries inside the fence using company vehicles and personnel.
- D. If can be arranged, use security guards round-the-clock.
- E. Guards should continually check the perimeter fence and critical equipment while staying in communication with station personnel via two-way radio.
- F. Request consistent patrol checks from the police agency serving CECP.

III. Media reporting

To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating to the incident will be directed to this person. The media will not be allowed in the plant.

FALL RESCUE PLAN

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant injuries	(302) 381-6332 Cell	CECP Manager
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor or designee
Director, Operational Safety (Michael Hagenmayer) - This person will notify Cal/OSHA, if applicable	(315) 349-2329 Office (202) 213-9109 Cell	Safety Specialist
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager
Division of Occupational Safety & Health (Cal/OSHA) - Serious employee injury or fatality	(909) 383-4321	Regional Safety Manager

- I. In the event a person falls while wearing a fall arresting device and is trapped in their harness above ground level, the following should be implemented:
 - A. Notify the Control Room. Give as much information as you can, i.e. location, person involved, injury status, level of consciousness, etc.
 - B. The Operating Authority is to call 911. Place an operator at the main gate to direct the rescue vehicles.
 - C. If any contractors have the rescue equipment and trained rescuer on-site, attempt the rescue. While waiting for the fire department personnel to arrive, attempt to rescue the person without exposing additional personnel to hazards by providing ladder, man lift, forklift, etc. to help the victim to support himself.
 - D. Administer first aid as needed.

- II. Time is critical.

Depending on the person, loss of consciousness, serious injury and/or death can occur in less than 20 minutes. Rescue of an unconscious person is much more difficult, therefore call 911 immediately and provide relevant information about the incident so that the fire department can bring appropriate equipment to the station.

WATER RESCUE

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency & Ambulance	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor or designee
Director, Operational Safety (Michael Hagenmayer) - This person will notify Cal/OSHA, if applicable	(315) 349-2329 Office (202) 213-9109 Cell	Safety Specialist
Division of Occupational Safety & Health (Cal/OSHA) - Serious employee injury or fatality	(909) 383-4321	Regional Safety Manager

- I. In the event a person falls into water (Pit/Vault/Tank) and needs to be rescued:
 - A. Notify the Control Room. Give as much information as you can, i.e. location, person involved, injury status, level of consciousness, etc.
 - B. Call 911. Place an operator at the main gate to direct the rescue vehicles.
 - C. Do NOT enter the water to assist. If the person in the water is frantic, he/she may drown the rescuer.
 - D. Assist him/her out of the water.
 - E. Administer first aid as needed.

ACTIVE SHOOTER

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency and Police	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant damages	((302) 381-6332 Cell	CECP Manager
Corporate Security (Aaron Malady)	(713) 537-2730	CECP Manager
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	CECP Manager
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor or designee
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager
Federal Bureau of Investigation (FBI)	(310) 477-6565	Operating Authority or CECP Manager

Note: Active shooter incidents are often over in 10 -15 minutes before law enforcement arrives. Typically, law enforcement is dispatched for final resolution of the event.

The following steps are actions to be taken if an active shooter is identified onsite. Also refer to the Operations Security Plan for steps to report, evacuate, and respond to an active shooter.

- I. Immediate actions to take:
 - A. If any employee observes an armed person or active shooter within the plant, notify the Unit Control Room immediately, if possible and safe to do so.
 - B. The Operating Authority receiving the notification of the active shooter is to **immediately** call 911 to report:
 1. Location of the active shooter.
 2. Number of shooters.
 3. Physical description of shooters.

4. Number and type of weapons held by shooters.
 5. Number of potential victims at the location.
 - C. Notify and warn on-site personnel **immediately** using the two-way radio system (while the Operating Authority is calling 911, another person should make this notification if he/she is available):
 1. Notify an armed person/active shooter has been observed.
 2. The specific location of the active shooter in the plant and his/her description.
 3. Determine a location where personnel can safely evacuate to and notify the personnel without alerting the active shooter of the location.
 - D. Report the situation to the plant management, if safe to do so.
- II. Responding actions to the active shooter
- A. If possible, evacuate the area and get to safety:
 1. Remain calm.
 2. Take immediate action.
 3. Evacuate staff and personnel via an evacuation route to a safe area.
 4. Leave your belongings behind.
 5. No matter the circumstances, if you decide to evacuate, DO NOT attempt to stop and monitor any equipment while exiting.
 - B. Shelter in place, if unable to evacuate:
 1. Hide in area out of the shooter's view.
 2. Block/barricade entry to your hiding place and lock all doors.
 3. Silence your cell phone while hiding.
 4. In the event that an Operating Authority determines that an active shooter is attempting to or has entered the Control Room, the Operating Authority is authorized to:
 - a. Barricade in place if this is determined to be the best option, or
 - b. Shut down any operating units (Trip) and seek a safe location or evacuate the plant.
 - C. Act against the shooter only in a last resort:
 1. Only when your life is in immediate danger.

2. Attempt to incapacitate the shooter and act with physical aggression.
- III. Make notifications to the persons on the above Contact List, if possible and safe to do so.
- IV. Media reporting
To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating to the incident will be directed to this person. The media will not be allowed in the plant. The media will not be allowed in the plant.
- V. Incident after-action
 - A. Account for all personnel at a designated assembly area.
 - B. Notification of families of personnel affected by the incident.
 - C. Refer visibly shaken personnel to EAP providers.
 - D. Identify and fill any operational gaps left by the incident.
 - E. Prepare lessons learned report.

**PERSONNEL REQUIRED TO STAY ON-SITE
DURING AN EVACUATION**

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor or designee

I. Purpose

This procedure is for the personnel who are required to stay in the plant during an emergency evacuation to be self-sufficient.

II. Condition

Because damages to the building and equipment can occur during an emergency situation, employees shall only be required to stay in the plant when it is safe to do so.

III. The number of personnel to stay

If possible, more than one personnel are to be in the plant at a given time during an emergency and they are to communicate to be updated of each other's safety.

IV. Sleep

Find a location where the building structure is safe to use as a shelter. Take turns to sleep to ensure at least one person is monitoring the surrounding.

V. Emergency food and water are kept in the warehouse.

VI. Emergency kits located in the warehouse include the following:

- A. Batteries – more in the library at the front of the admin building
- B. Radio
- C. Dust masks
- D. Sleeping bags
- E. Garbage bags
- F. Toiletries
- G. Raincoats

- H. Writing tablets and pens
- I. Flashlights in the charging area in the Control Room
- J. Medical supplies – in the first aid kits in the Control Room and Warehouse Building.

CONFINED SPACE EMERGENCY RESCUE

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
Director, Operational Safety (Michael Hagenmayer) - If anyone is injured. This person will notify Cal/OSHA, if applicable	(315) 349-2329 Office (202) 213-9109 Cell	Safety Specialist
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor or designee

Note:

1. Under any circumstances, no station personnel shall enter a Permit-Required Confined Space (PRCS).
2. All contractors and station personnel must comply with NRG Confined Space and LOTO procedures when entering in any confined space.
3. Try various methods to make a PRSC safer to enter as a Non-Permit Required Space or as an Alternative Entry Procedure.
4. Any entries into PRCS are to be done by trained contractors.
5. Prior to entering PRCS, a detailed rescue plan is required.
6. Trained and qualified rescuers with rescue equipment are required to be at the PRCS prior to anyone entering it.

I. Discovery

The person who discovers an emergency in a confined space shall immediately inform the Control Room with the following information.

- A. Discoverer's name and location.
- B. Exact location of the confined space needing a rescue.
- D. Type of emergency or injuries if any.
- E. Any apparent conditions or hazards that could increase the level of danger (i.e., chemicals, flammable liquids or gases).
- F. Description of any action being taken or about to be taken.

II. Notification

A. The Operating Authority is to:

1. Gather information from the person reporting the emergency. Use the Emergency Response Information Form (addendum 1).
2. Notify 911, if necessary.
3. Notify the station management.

III. Confined Space Rescue

A. Rescuers

1. Unless the contractor has a written rescue plan and trained rescuers onsite, no one is allowed to enter a PRCS.
2. When anyone is entering a Permit Required Confined Space (PRCS), trained rescuers (contractors) are required to be at that confined space ready to provide a rescue. Only trained and qualified rescuers are to perform any rescue activities.
3. For a non-Permit Required Confined Space, the qualified rescuers (contractors) are to perform the rescue, if they are available in the station. If not, the CO is to call 911 to request the fire department personnel to handle the rescue.

B. Rescue procedure:

1. Barricade the affected area.
2. The CO, Confined Space Entry Supervisor, and rescuers are to evaluate the hazards in the confined space before attempting a rescue.
3. The CO and the Entry Supervisor are to verify the rescue procedure.
4. Rescuers are to attempt a non-entry rescue using a tripod with retrieval system (harness, lanyards and winch) before entering the confined space.
5. If the rescuer(s) must enter the confined space, the Entry Supervisor and CO must authorize the entry.
6. Pre-entry job briefing shall be conducted by the Entry Supervisor and discuss about the hazards in the confined space.
7. Before the entering a PRCS, hazards in the confined space need to be controlled, including atmospheric hazards. Verify by testing oxygen, combustible gases and vapors, and then for toxic gases and vapors.

8. The rescuers must wear applicable PPE, including respirators and follow the confined space entry procedure.
 9. Once the injured person is removed from the space, provide applicable first aid and CPR until Emergency Medical Service arrives.
- IV. Establish an Emergency Communication Center (if necessary) at the Control Room. Plant activities during an emergency will be recorded in chronological order in the emergency communication center.
- V. Media reporting
- To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating to the incident will be directed to this person. The media will not be allowed in the plant. The media will not be allowed in the plant.

CATASTROPHIC SYSTEM FAILURE RESPONSE

Important Contact List (for more – see Emergency Contact List)

Where to call	Phone number	Person making the call
Emergency	911	Operating Authority
CECP Management	See the Emergency Contact List	Operating Authority
SDGE Real-Time Desk - if operation of the unit(s) is affected.	(858) 650-6160	Operating Authority
VP, Regional Plant Operations (John Robertson) – for significant failures	(302) 381-6332 Cell	CECP Manager
NRG Spokesman: Manager, Communications (Chris Rimel) – for requests from the media/public about the situation	713-537-5388	CECP Manager
Energy Services Safety Manager – Danny Barrett	(832) 588-0398 Cell	Safety Specialist
Global Infrastructure Partners – Michael O'Toole	(312) 835-8527 Cell	CECP Environmental Manager
California Energy Commission Anwar Ali	(916) 651-2072	CECP Environmental Manager
Core Injury Management - All employee injuries	(855) 723-3674	Injured employee's supervisor or designee

Note:

- 1) Catastrophic System Failure (CSF) is a failure of any power plant system's integrity, which would result in the sudden and uncontrollable release, water, fuel, air, chemicals, etc. The failure may or may not have displayed any warning signs and may have begun as a fire or explosion related incident that escalated into a catastrophic system failure. This type of failure places all personnel in the station at risk.
- 2) Refer to applicable emergency procedures in this Emergency Action Plan that are applicable during a CSF incident.

WARNING: A CSF would require an immediate implementation of the Station Emergency Action Plan and all if not most of the emergency support documents contained within.

K. Discovery

The person who discovers a catastrophic system failure (CSF) shall immediately inform the Control Room with the following information. Use 3-way communication to verify the information between the persons reporting and receiving the report.

- A. Discoverer's name and location.
- B. Exact location or system involved with the CSF.
- C. Name or the equipment/system involved with CSF, symptoms or characteristics of a CSF witnessed and events that could lead to a CSF.
- D. Type of injuries, if any.

II. Notification - The Operating Authority is to immediately:

- A. Notify CECP Management
- B. Notify 911.
 - 1. Types(s) of incident(s).
 - 2. Number of injured persons
 - 3. Natures of injuries
 - 4. Specific request (HAZMAT, heavy rescue, fire, ambulance, etc.)

Note: Assign someone to the main gate to direct emergency vehicles entering the site.

- C. Notify station personnel by making an announcement via the plant paging system of the following. Repeat it 3 times:

ATTENTION ALL PERSONNEL!

THERE IS A (emergency situation detail) AT (location).

STAY AWAY FROM THIS LOCATION

- D. If personnel evacuation is necessary, follow the Personnel Evacuation procedure in this Emergency Action Plan.
- E. Notify SDGE Real-Time Desk of possible issues with the load or operation of the unit(s).

III. Determine Corrective Actions

- A. The Operating Authority is to have an Operator(s) to assess the incident scene to determine the situation.
- B. Communicate the findings with the Control Room.
- C. Execute internal corrective measures that have been directed by the Operating Authority such as:

1. De-energization of electrical systems
 2. Shutting down process systems
 3. Removing equipment/system from service
 4. Adjusting station/unit/equipment loading based on the incident
- D. Implement emergency actions based on assessment of circumstances
- IV. Establish an Emergency Communication Center (if necessary) at the Control Room.
All plant activities will be recorded in chronological order, including equipment problems, personnel injuries, calls, actions taken, updates on station status and generation availability.
- IV. Post Catastrophic System Failure Action
- A. Re-Assess Plant Status
 - B. Notify the Control Room when the incident is secured or over.
 - C. If necessary, the Operating Authority is to conduct a visual inspection of the CSF scene to verify the status.
 - D. The Operating Authority is to notify station management of the status.
 - E. Notify personnel of the status by stating the following 3 times:
ATTENTION ALL PERSONNEL!
THE (emergency situation) IS SECURED
- IV. Post Catastrophic System Failure Review
- A. If necessary, CECF Management is to conduct a visual inspection of the CSF scene.
 - B. All station safety systems must be identified, and a plan developed to restore them to service.
 - C. Environmental impact must be determined.
 - D. Applicable agencies must be notified.
 - E. Fire/Rescue equipment must be inventoried and returned to service.
 - F. Post incident critique must be conducted.
 - G. Submit the post review report of the CSF to applicable station and corporate personnel.

V. Drill – An annual drill is to be conducted with a scenario relating to CSF.

VI. Media reporting

To ensure consistency in the release of information, a single spokesman (Senior Director of Wholesale Public Relations and Media Relations) will handle interface with news media. Any inquiries relating to the incident will be directed to this person. The media will not be allowed in the plant. The media will not be allowed in the plant.

ADDENDUM 1

Emergency Response Information Form

Type of Emergency:		Time Reported:	AM <input type="checkbox"/> PM <input type="checkbox"/>	
Specific Location Of Emergency:				
Person Reporting:		Reporting From:		
Injuries (Nature/Extent/Number Injured):				
Actions Being Taken:				
Assistance Needed:				
Weather Conditions (circle):		Rainy	Sunny	Cloudy
				Foggy
Wind Direction			Speed mph	
Alarms Sounded(circle):		Fire	Bomb	Chemical Release
				Evacuation
Supervision Contacted:			Time:	AM <input type="checkbox"/> PM <input type="checkbox"/>
Outside Agencies Contacted:				
General Comments:				
Written By:		Date:		

ADDENDUM 2

Safety & Health Incident Notification Instructions - California

Emergency

This includes, but may not be limited to a work related fatality or hospitalization of an employee or contractor for treatment other than observation, fire/explosion/rescue requiring offsite response, spill/release requiring community evacuation or shelter-in-place and any event that results in media presence or adverse attention:

1. Once the scene has been stabilized and medical treatment provided as necessary, the Plant Manager or designee will immediately (within the hour) verbally contact the Vice President responsible for the affected facility, plant or office and provide the following information:
 - Names of injured individuals, company if contractor, nature of injuries and treatment
 - Brief description of the incident, including plant status at the time
 - Description of any off-site impact and actions taken
 - Apparent cause(s) of the incident if obvious; do not speculate
 - Immediate corrective actions
 - Additional response/follow up within the next 24 hours
 - Need for additional resources (communications, crisis management, etc.) or assistance as required
 - Media and/or agency presence
2. The Vice President responsible for the affected facility, plant or office shall determine the need for additional upward notification.
3. Within 8 hours, Plant Manager/designee is responsible for creating the NRG Energy Event Notification Form and distributing electronically.
4. If a work related incident involving an employee results any one of the following Cal/OSHA must be contacted verbally within 8 hours: death, hospitalization with treatment for more than 24 hours, loss of any member of the body (loss of bone) or permanent disfigurement (tissue damage). The Regional Safety Director is responsible for notifying Cal/OSHA.
5. If a work related on-site incident involving a contract employee or contractor results any one of the following, the contract/contractor company must notify Cal/OSHA verbally within 8 hours: death, hospitalization with treatment for more than 24 hours, loss of any member of the body (loss of bone) or permanent disfigurement (tissue damage). NRG safety will ensure that each company involved contacts OSHA accordingly.
6. If the event results in personal injury to an employee, employee's supervision will notify Core Injury Management (855-723-3674) immediately. If off-site treatment is provided, Supervision or Local Safety must notify Worker's Comp according to site specific procedures as soon as practical.

Serious Event Notification

This includes, but is not limited to, an injury or illness that is likely to be an OSHA recordable, fire/explosion or spill response by on-site emergency response personnel, off-site personal injury due to automobile collision or other events while on company business, property damage >\$10,000 due to employee actions, OSHA or other agency inspections and near misses with potentially severe consequences (could reasonably have resulted in a fatality, injury or illness requiring surgery or hospitalization, fractures, amputation, etc.)

1. An event involving acute personal injury to an employee requires immediate notification to Core Injury Management (855-723-3674) by the employee's supervision. Supervision must also notify Worker's Comp according to site specific procedures as soon as practical if offsite treatment is provided.
2. Within eight (8) hours of a serious notification event, Plant Manager/designee will notify the Vice President responsible for the affected facility, plant or office and provide the following information:
 - Names of injured individuals, company name if contractor, nature of injuries and on-site treatment provided
 - Brief description of the incident
 - Description of any off-site impact and actions taken
 - Apparent cause(s) of the incident if obvious; do not speculate
 - Immediate corrective actions
 - Additional response/follow up within the next 24 hours if required
 - Need for additional resources or assistance as required

Carlsbad Energy Center Project Emergency Action Plan

October 2020

- Media and/or agency presence

3. Within 24 hours, Plant Manager/designee is responsible for creating the NRG Energy Event Notification Form and distributing electronically. Within this same 24 hour period Plant Manager/designee will ensure an incident analysis is initiated, including the creation and distribution of an initial incident report.

Minor Incidents

This includes, but is not limited to, small cuts, scratches or bruises and near misses with minor severity potential. Employees must report these events as soon as practical but no later than the end of the work shift. If a NRG employee is injured, employee's supervision will contact Core Injury Management (855-723-3674) upon learning of the incident.

If at any time in the notification process the individual you are contacting is unavailable, move up to the next contact person in the process.

ADDENDUM 3

CECP

Emergency Evacuation Roster

Name	Signature

ADDENDUM 4

Plant Map and Evacuation Assembly Area

ADDENDUM 5

(To be completed by the Environmental Specialist or a designee)

EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A	BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER () -	
B	INCIDENT DATE	MO DAY YR	TIME OES NOTIFIED (use 24 hr time)
C	INCIDENT ADDRESS LOCATION		CITY / COMMUNITY COUNTY ZIP
D	CHEMICAL OR TRADE NAME (print or type)		CAS Number
E	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>		CHECK IF RELEASE REQUIRES NOTIFICATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>
F	PHYSICAL STATE CONTAINED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS		PHYSICAL STATE RELEASED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS
G	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER		QUANTITY RELEASED TIME OF RELEASE DURATION OF RELEASE — DAYS — HOURS — MINUTES
H	ACTIONS TAKEN		
I	KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information) <input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____ <input type="checkbox"/> CHRONIC OR DELAYED (explain) _____ <input type="checkbox"/> NOTKNOWN (explain) _____		
J	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS		
K	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)		
L	CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete. REPORTING FACILITY REPRESENTATIVE (print or type) _____ SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____ DATE: _____		

Instructions for Emergency Release Follow-Up Notice Reporting Form

GENERAL INFORMATION:

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 30 days, following a release. The written follow-up report is required in addition to the verbal notification.

BASIC INSTRUCTIONS:

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

SPECIFIC INSTRUCTIONS:

Block A: Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

Block B: Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

Block C: Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

Block D: Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

Block E: Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

Block F: Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information if necessary to meet requirements specified in 42 U.S.C. § 11004(c).

Block G: Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was made available to individuals exposed and to medical personnel, if appropriate for the incident, as specified in 42 U.S.C. § 11004(c).

Block H: List any additional pertinent information.

Block I: Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

MAIL THE COMPLETED REPORT TO:

Chemical Emergency Planning and Response Commission (CEPRC) /
Local Emergency Planning Committee (LEPC)
Attn: Section 304 Reports, 3650 Schriever Avenue, Mather, CA 95655

ADDENDUM 6

Emergency Equipment Locations

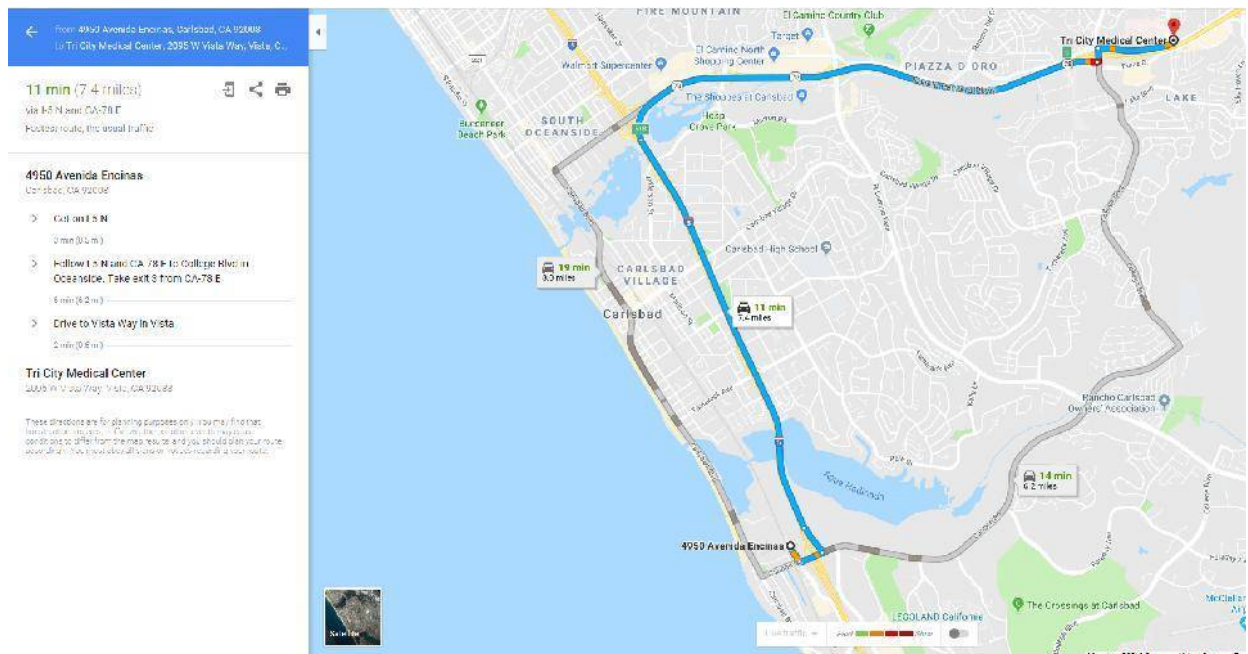
(See attachment at end of document)

ADDENDUM 7

Map to the Nearest Hospital

Tri-City Medical Center
2095 W. Vista Way
Vista, CA 92083
(760) 724-8411

Driving direction from the CECP:



ADDENDUM 8

Revisions History

Date	Person made revision	Reason
3/27/2018	Paul Mattesich	Initial Draft
6/26/2018	Scott Seipel	Revisions based on CEC Review
10/15/2020	Ryan Goerl	Revisions to notifications in several sections. Updates to contact numbers, PA system updates, communication clarifications, Encina demolition activities

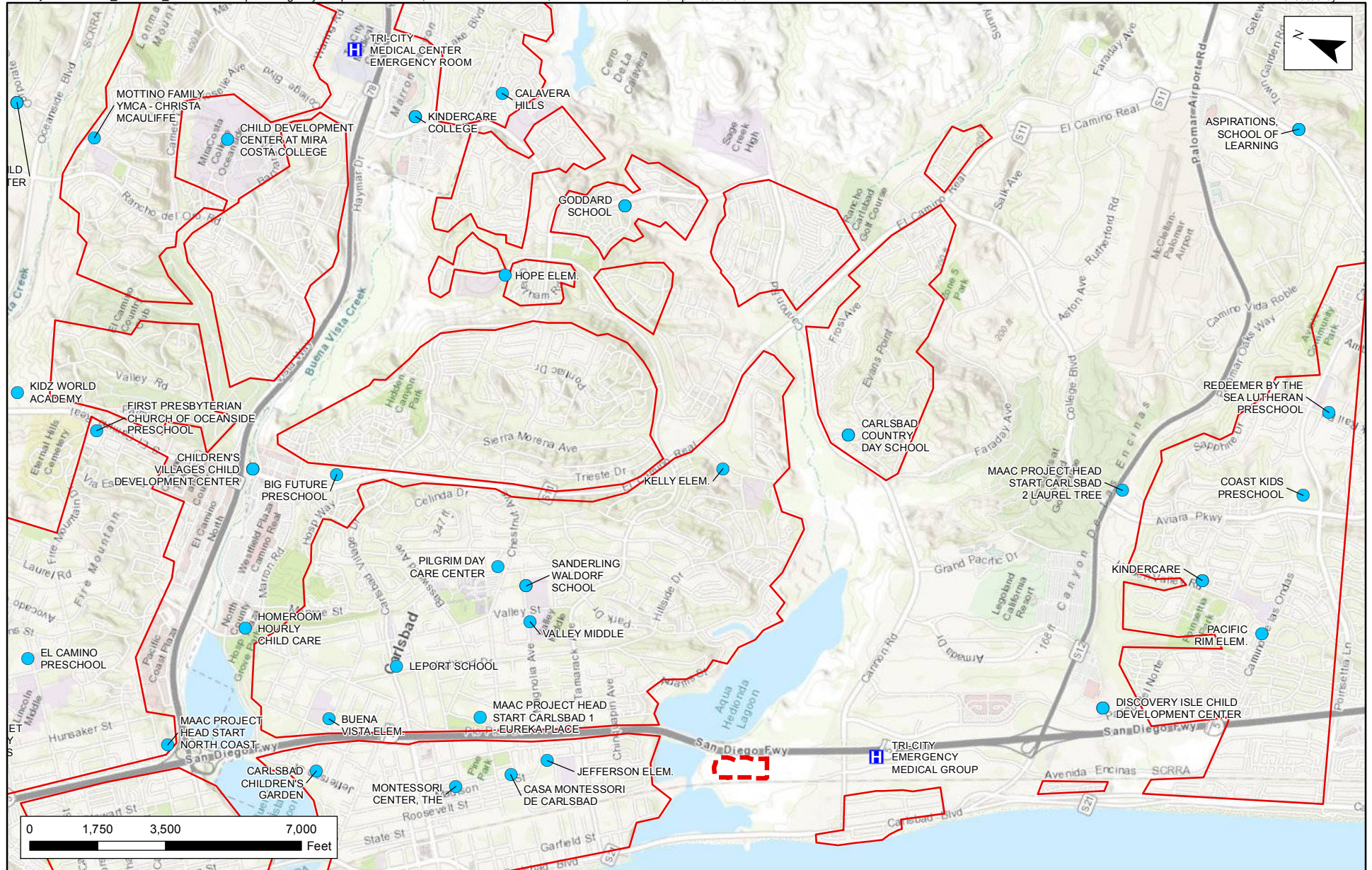
ADDENDUM 9

**Locations of Hardcopies of the
Emergency Action Plan**

- Control Room under the phone
- Control Room bookcase
- Plant Manager's Office
- O&M Supervisor's Office
- Environmental Specialist's Office
- Local Fire Department

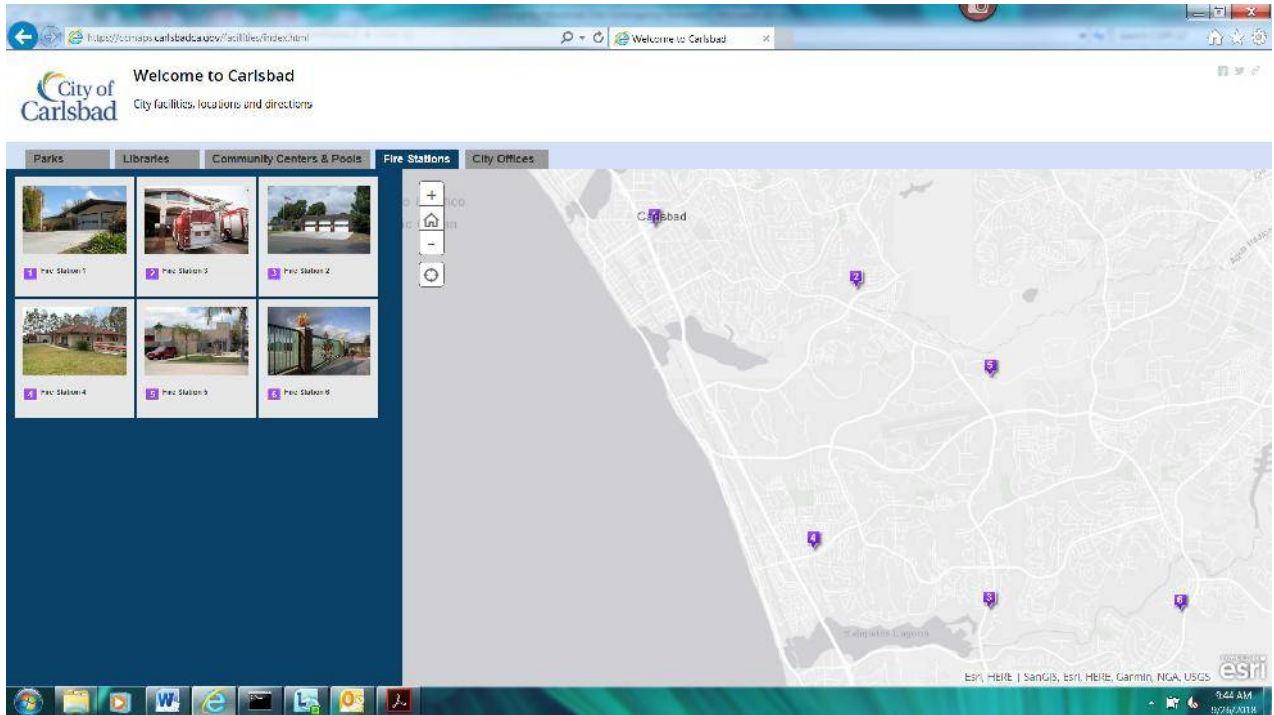
**Carlsbad Energy Center Project
Emergency Equipment Location Map**

**Carlsbad California
Population Centers Map
&
City of Carlsbad Fire Department
Fire Station Locations Map**



Legend

- Sensitive Receptor
- H Emergency Service
- Population Center
- Project Boundary



**Carlsbad Energy Center Project
Plant Map and
Evacuation Assembly Areas**

California Environmental Reporting System (CERS)

Aboveground Petroleum Storage Act - Facility Information Report

Facility/Site

Carlsbad Energy Center Project

4950 Avenida Encinas
Carlsbad, CA 92008

CERS ID

10765651

CAR000256545

Submittal Status

Submitted on 11/20/2020 by *Paul Mattesich* of Carlsbad Energy Center Project (Carlsbad, CA)
Comments by submitter: No changes.

APSA Facility Information

Conditionally Exempt APSA Tank Facility

N

Date Of SPCC Plan Certification or Date of 5-Year Review

5/23/2018

Total Aboveground Storage Capacity of
Petroleum

43165

Number of Tanks in Underground Area(s)

5



COUNTY OF SAN DIEGO CUPA
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(619) 338-2222 FAX 1-800-253-9933
<http://www.sdcdeh.org>

/ /
Date Submitted

Aboveground Petroleum Storage Tank Facility Statement

Page 1 of 1

I. FACILITY/BUSINESS INFORMATION

FACILITY ID #

3 7 0 0 0

FACILITY NAME (Same as BUSINESS NAME or DBA-Doing Business As)

Carlsbad Energy Center LLC

FACILITY ADDRESS

4950 Avenida Encinas

FACILITY CITY

Carlsbad

104

CA

ZIP CODE

92008

105

CONTACT NAME

Ryan Goerl

117a

CONTACT PHONE

118a

(760) 573-3802

Does the facility have an SPCC plan? ☒ Yes ☐ No
(see reverse for instructions)

920

Date of last SPCC Plan Revision/Review:

05 / 23 / 2018

II. TOTAL FACILITY CAPACITY (in gallons)

921

Facility's total aboveground petroleum storage **capacity** for all tanks and containers greater than or equal to 55 gal.: 43165 gal.
(see reverse for instructions)

Capacity of the largest tank/container that stores petroleum at your facility (in gallons): 7400 gal.

III. TANK DETAILS for facilities with tanks 10,000 gallons in capacity or more (attach additional forms if needed)

Tank ID Number ⁹²²	Contents (Gas, Diesel, etc.) ⁹²³	Capacity (in gallons) ⁹²⁴	Tank Location ⁹²⁵	Age of Tank (in years) ⁹²⁶	Secondary Containment ⁹²⁷
			SEE SITE MAP/PLAN FOR TANK LOCATION		<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No

IV. SIGNATURE

I certify under penalty of law that the information submitted is accurate and complete to the best of my knowledge.

SIGNATURE OF OWNER OR TANK FACILITY OPERATOR

PRINTED NAME OF OWNER OR TANK FACILITY OPERATOR

136

DATE (MM/DD/YYYY)

134

PAUL MATTESICH

10 / 22 / 2018

Attachment C HAZ-8: Contractor Verification Statement

Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

March 30, 2021

Subject: CARLSBAD ENERGY CENTER COM-8 REPORT – HAZ-8: Contractor Verification Statement

The Carlsbad Energy Center Project takes the following actions to maintain compliance with the requirements in HAZ-8:

- All NRG employees at CECP undergo a background check in the onboarding process.
- Through 2020, all contractors are vetted by the NRG and Clearway procurement through the AdaptOne vendor registration and screening process. Vendors must complete and maintain current AdaptOne status before the contractor is allowed to conduct work at CECP.
- In November 2020, Clearway transitioned to COUPA for vendor registration and screening. Similar to AdaptOne, vendors must maintain current COUPA status prior to work by any contractors.

Attachment D SOIL&WATER-4: EPS Water Reports

CABRILLO POWER I LLC - MONTHLY REPORT

Facility Name: Encina Power Station
 Order No: R9-2006-0043 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: January, 2020 Collected By: Operations personnel
 Report Due: March 1, 2020 Analyzed By: Operations personnel
 Wastestream: Combined Discharge, Low Volume Waste, & Metal Cleaning Waste

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	COMBINED DISCHARGE	LOW VOLUME WASTE	METAL CLEANING WASTE
1/1/2020	271.2	0.026	0.000
1/2/2020	266.7	0.027	0.000
1/3/2020	272.0	0.004	0.000
1/4/2020	269.0	0.053	0.000
1/5/2020	259.4	0.040	0.000
1/6/2020	262.1	0.025	0.000
1/7/2020	256.0	0.029	0.000
1/8/2020	250.8	0.017	0.000
1/9/2020	258.2	0.021	0.000
1/10/2020	256.3	0.024	0.000
1/11/2020	263.1	0.028	0.000
1/12/2020	254.7	0.025	0.000
1/13/2020	254.3	0.035	0.000
1/14/2020	260.1	0.025	0.000
1/15/2020	258.0	0.034	0.000
1/16/2020	264.9	0.012	0.000
1/17/2020	262.6	0.025	0.000
1/18/2020	266.1	0.020	0.000
1/19/2020	255.1	0.024	0.000
1/20/2020	250.2	0.025	0.000
1/21/2020	250.7	0.024	0.000
1/22/2020	253.5	0.016	0.000
1/23/2020	247.2	0.027	0.000
1/24/2020	252.9	0.022	0.000
1/25/2020	252.6	0.028	0.000
1/26/2020	245.7	0.014	0.000
1/27/2020	242.7	0.031	0.000
1/28/2020	245.7	0.032	0.000
1/29/2020	249.7	0.030	0.000
1/30/2020	245.0	0.021	0.000
1/31/2020	266.1	0.026	0.000

DISCHARGE DAYS

AVERAGE: 184.1 0.025 0.000

DAILY MAXIMUM 319.2 0.053 0.000

REQUIREMENTS: 857.3 4.090 0.797

CABRILLO POWER I LLC - MONTHLY REPORT

Facility Name: Encina Power Station
 Order No: R9-2006-0043 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: February, 2020 Collected By: Operations personnel
 Report Due: April 1, 2020 Analyzed By: Operations personnel
 Wastestream: Combined Discharge, Low Volume Waste, & Metal Cleaning Waste

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	COMBINED DISCHARGE	LOW VOLUME WASTE	METAL CLEANING WASTE
2/1/2020	243.5	0.045	0.000
2/2/2020	241.9	0.027	0.000
2/3/2020	242.8	0.009	0.000
2/4/2020	246.4	0.014	0.000
2/5/2020	248.3	0.038	0.000
2/6/2020	244.6	0.019	0.000
2/7/2020	246.2	0.026	0.000
2/8/2020	243.3	0.000	0.000
2/9/2020	242.7	0.050	0.000
2/10/2020	252.5	0.031	0.000
2/11/2020	267.9	0.010	0.000
2/12/2020	266.8	0.027	0.000
2/13/2020	258.3	0.021	0.000
2/14/2020	250.5	0.022	0.000
2/15/2020	243.9	0.023	0.000
2/16/2020	247.6	0.034	0.000
2/17/2020	248.9	0.030	0.000
2/18/2020	257.2	0.032	0.000
2/19/2020	246.7	0.018	0.000
2/20/2020	243.6	0.023	0.000
2/21/2020	247.9	0.038	0.000
2/22/2020	245.7	0.024	0.000
2/23/2020	252.9	0.021	0.000
2/24/2020	242.0	0.034	0.000
2/25/2020	245.7	0.019	0.000
2/26/2020	252.9	0.024	0.000
2/27/2020	242.0	0.025	0.000
2/28/2020	253.4	0.047	0.000
2/29/2020	243.5	0.054	0.000

DISCHARGE DAYS			
AVERAGE:	248.8	0.027	0.000
DAILY MAXIMUM	267.9	0.054	0.000
REQUIREMENTS:	857.3	4.090	0.797

CABRILLO POWER I LLC - MONTHLY REPORT

Facility Name: Encina Power Station
 Order No: R9-2006-0043 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: March, 2020 Collected By: Operations personnel
 Report Due: May 1, 2020 Analyzed By: Operations personnel
 Wastestream: Combined Discharge, Low Volume Waste, & Metal Cleaning Waste

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	COMBINED DISCHARGE	LOW VOLUME WASTE	METAL CLEANING WASTE
3/1/2020	171.9	0.024	0.000
3/2/2020	0.0	0.016	0.000
3/3/2020	0.0	0.016	0.000
3/4/2020	0.0	0.030	0.000
3/5/2020	0.0	0.014	0.000
3/6/2020	0.0	0.002	0.000
3/7/2020	0.0	0.046	0.000
3/8/2020	110.6	0.031	0.000
3/9/2020	293.8	0.038	0.000
3/10/2020	287.4	0.025	0.000
3/11/2020	293.8	0.044	0.000
3/12/2020	287.0	0.044	0.000
3/13/2020	275.5	0.030	0.000
3/14/2020	263.2	0.032	0.000
3/15/2020	260.2	0.035	0.000
3/16/2020	259.2	0.047	0.000
3/17/2020	264.0	0.032	0.000
3/18/2020	264.8	0.022	0.000
3/19/2020	269.6	0.039	0.000
3/20/2020	272.6	0.024	0.000
3/21/2020	265.3	0.032	0.000
3/22/2020	268.9	0.042	0.000
3/23/2020	269.0	0.024	0.000
3/24/2020	268.7	0.039	0.000
3/25/2020	268.6	0.029	0.000
3/26/2020	269.9	0.038	0.000
3/27/2020	276.4	0.030	0.000
3/28/2020	276.6	0.029	0.000
3/29/2020	269.9	0.031	0.000
3/30/2020	276.4	0.020	0.000
3/31/2020	276.6	0.033	0.000
DISCHARGE DAYS			
AVERAGE:	211.6	0.030	0.000
DAILY MAXIMUM			
	293.8	0.047	0.000
REQUIREMENTS:			
	857.3	4.090	0.797

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: April, 2020 Collected By: Operations personnel
 Report Due: June 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
4/1/2020	0.028	0.025	0.003	0.000
4/2/2020	0.026	0.020	0.006	0.000
4/3/2020	0.033	0.027	0.005	0.000
4/4/2020	0.026	0.022	0.003	0.000
4/5/2020	0.032	0.025	0.007	0.000
4/6/2020	0.144	0.036	0.016	0.092
4/7/2020	0.358	0.021	0.007	0.330
4/8/2020	0.613	0.028	0.008	0.578
4/9/2020	0.248	0.026	0.050	0.173
4/10/2020	0.044	0.026	0.018	0.000
4/11/2020	0.015	0.010	0.004	0.000
4/12/2020	0.028	0.025	0.003	0.000
4/13/2020	0.038	0.032	0.007	0.000
4/14/2020	0.043	0.023	0.020	0.000
4/15/2020	0.076	0.023	0.053	0.000
4/16/2020	0.040	0.033	0.006	0.000
4/17/2020	0.026	0.021	0.005	0.000
4/18/2020	0.041	0.027	0.014	0.000
4/19/2020	0.032	0.025	0.007	0.000
4/20/2020	0.033	0.030	0.004	0.000
4/21/2020	0.011	0.006	0.006	0.000
4/22/2020	0.013	0.008	0.006	0.000
4/23/2020	0.013	0.009	0.004	0.000
4/24/2020	0.010	0.006	0.004	0.000
4/25/2020	0.010	0.007	0.003	0.000
4/26/2020	0.047	0.043	0.004	0.000
4/27/2020	0.032	0.028	0.004	0.000
4/28/2020	0.028	0.025	0.003	0.000
4/29/2020	0.132	0.126	0.005	0.000
4/30/2020	0.031	0.028	0.004	0.000

DISCHARGE DAYS

AVERAGE:	0.075	0.026	0.010	-----
DAILY MAXIMUM	0.613	0.126	0.053	0.578
REQUIREMENTS:	2.2	-----	-----	-----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: May, 2020 Collected By: Operations personnel
 Report Due: July 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
5/1/2020	0.029	0.020	0.009	0.000
5/2/2020	0.043	0.037	0.005	0.000
5/3/2020	0.035	0.028	0.007	0.000
5/4/2020	0.030	0.023	0.007	0.000
5/5/2020	0.029	0.026	0.003	0.000
5/6/2020	0.039	0.036	0.002	0.000
5/7/2020	0.023	0.021	0.003	0.000
5/8/2020	0.033	0.030	0.003	0.000
5/9/2020	0.032	0.029	0.003	0.000
5/10/2020	0.030	0.026	0.004	0.000
5/11/2020	0.023	0.023	0.000	0.000
5/12/2020	0.028	0.024	0.004	0.000
5/13/2020	0.024	0.023	0.002	0.000
5/14/2020	0.027	0.024	0.003	0.000
5/15/2020	0.027	0.025	0.002	0.000
5/16/2020	0.023	0.021	0.002	0.000
5/17/2020	0.044	0.037	0.007	0.000
5/18/2020	0.023	0.020	0.003	0.000
5/19/2020	0.027	0.023	0.003	0.000
5/20/2020	0.036	0.031	0.004	0.000
5/21/2020	0.024	0.019	0.005	0.000
5/22/2020	0.039	0.035	0.004	0.000
5/23/2020	0.022	0.019	0.003	0.000
5/24/2020	0.029	0.025	0.004	0.000
5/25/2020	0.008	0.004	0.004	0.000
5/26/2020	0.023	0.018	0.005	0.000
5/27/2020	0.007	0.008	0.001	0.000
5/28/2020	0.010	0.013	0.002	0.000
5/29/2020	0.014	0.011	0.003	0.000
5/30/2020	0.032	0.026	0.007	0.000
5/31/2020	0.024	0.019	0.005	0.000

DISCHARGE DAYS				
AVERAGE:	0.027	0.023	0.004	-----
DAILY MAXIMUM	0.044	0.037	0.009	-----
REQUIREMENTS:	2.2	-----	-----	-----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: June, 2020 Collected By: Operations personnel
 Report Due: August 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
6/1/2020	0.537	0.003	0.017	0.516
6/2/2020	1.198	0.001	0.007	1.189
6/3/2020	0.900	0.002	0.013	0.886
6/4/2020	0.156	0.000	0.002	0.154
6/5/2020	0.039	0.000	0.000	0.039
6/6/2020	0.003	0.001	0.003	0.000
6/7/2020	0.004	0.001	0.003	0.000
6/8/2020	0.009	0.001	0.008	0.000
6/9/2020	0.004	0.001	0.003	0.000
6/10/2020	0.072	0.011	0.061	0.000
6/11/2020	0.016	0.002	0.013	0.000
6/12/2020	0.007	0.001	0.006	0.000
6/13/2020	0.000	0.000	0.000	0.000
6/14/2020	0.000	0.000	0.000	0.000
6/15/2020	0.363	0.010	0.054	0.300
6/16/2020	0.447	0.003	0.016	0.428
6/17/2020	0.113	0.005	0.030	0.078
6/18/2020	0.177	0.027	0.151	0.000
6/19/2020	0.035	0.005	0.030	0.000
6/20/2020	0.020	0.003	0.017	0.000
6/21/2020	0.016	0.002	0.013	0.000
6/22/2020	0.014	0.002	0.012	0.000
6/23/2020	0.005	0.001	0.005	0.000
6/24/2020	0.027	0.004	0.023	0.000
6/25/2020	0.000	0.000	0.000	0.000
6/26/2020	0.000	0.000	0.000	0.000
6/27/2020	0.000	0.000	0.000	0.000
6/28/2020	0.000	0.000	0.000	0.000
6/29/2020	0.061	0.009	0.052	0.000
6/30/2020	0.011	0.002	0.009	0.000

DISCHARGE DAYS				
AVERAGE:	0.141	0.023	0.004	-----
DAILY MAXIMUM	1.198	0.037	0.009	-----
REQUIREMENTS:	2.2	-----	-----	-----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: July, 2020 Collected By: Operations personnel
 Report Due: September 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
7/1/2020	0.011	0.009	0.002	0.000
7/2/2020	0.013	0.011	0.002	0.000
7/3/2020	0.004	0.004	0.001	0.000
7/4/2020	0.000	0.000	0.000	0.000
7/5/2020	0.000	0.000	0.000	0.000
7/6/2020	0.066	0.056	0.010	0.000
7/7/2020	0.001	0.001	0.000	0.000
7/8/2020	0.019	0.016	0.003	0.000
7/9/2020	0.030	0.026	0.005	0.000
7/10/2020	0.009	0.008	0.001	0.000
7/11/2020	0.000	0.000	0.000	0.000
7/12/2020	0.000	0.000	0.000	0.000
7/13/2020	0.000	0.000	0.000	0.000
7/14/2020	0.103	0.088	0.016	0.000
7/15/2020	0.029	0.025	0.004	0.000
7/16/2020	0.029	0.025	0.004	0.000
7/17/2020	0.002	0.002	0.000	0.000
7/18/2020	0.000	0.000	0.000	0.000
7/19/2020	0.000	0.000	0.000	0.000
7/20/2020	0.006	0.005	0.001	0.000
7/21/2020	0.003	0.003	0.001	0.000
7/22/2020	0.001	0.001	0.000	0.000
7/23/2020	0.000	0.000	0.000	0.000
7/24/2020	0.000	0.000	0.000	0.000
7/25/2020	0.013	0.011	0.002	0.000
7/26/2020	0.000	0.000	0.000	0.000
7/27/2020	0.039	0.033	0.006	0.000
7/28/2020	0.015	0.013	0.002	0.000
7/29/2020	0.003	0.002	0.000	0.000
7/30/2020	0.001	0.001	0.000	0.000
7/31/2020	0.000	0.000	0.000	0.000

DISCHARGE DAYS

AVERAGE:	0.141	0.015	0.003	-----
DAILY MAXIMUM	1.198	0.151	0.027	-----
REQUIREMENTS:	2.2	-----	-----	-----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: August, 2020 Collected By: Operations personnel
 Report Due: October 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
8/1/2020	0.000	0.000	0.000	0.000
8/2/2020	0.048	0.041	0.007	0.000
8/3/2020	0.002	0.002	0.000	0.000
8/4/2020	0.017	0.014	0.002	0.000
8/5/2020	0.030	0.025	0.004	0.000
8/6/2020	0.018	0.015	0.003	0.000
8/7/2020	0.000	0.000	0.000	0.000
8/8/2020	0.000	0.000	0.000	0.000
8/9/2020	0.000	0.000	0.000	0.000
8/10/2020	0.035	0.029	0.005	0.000
8/11/2020	0.015	0.013	0.002	0.000
8/12/2020	0.020	0.017	0.003	0.000
8/13/2020	0.014	0.012	0.002	0.000
8/14/2020	0.014	0.012	0.002	0.000
8/15/2020	0.006	0.005	0.001	0.000
8/16/2020	0.000	0.000	0.000	0.000
8/17/2020	0.027	0.023	0.004	0.000
8/18/2020	0.010	0.009	0.002	0.000
8/19/2020	0.013	0.011	0.002	0.000
8/20/2020	0.017	0.014	0.003	0.000
8/21/2020	0.012	0.010	0.002	0.000
8/22/2020	0.009	0.008	0.001	0.000
8/23/2020	0.000	0.000	0.000	0.000
8/24/2020	0.001	0.001	0.000	0.000
8/25/2020	0.000	0.000	0.000	0.000
8/26/2020	0.037	0.031	0.005	0.000
8/27/2020	0.012	0.010	0.002	0.000
8/28/2020	0.017	0.015	0.003	0.000
8/29/2020	0.007	0.006	0.001	0.000
8/30/2020	0.000	0.000	0.000	0.000
8/31/2020	0.023	0.020	0.003	0.000

DISCHARGE DAYS				
AVERAGE:	0.013	0.011	0.002	-----
DAILY MAXIMUM	0.048	0.041	0.007	-----
REQUIREMENTS:	2.2	-----	-----	-----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: September, 2020 Collected By: Operations personnel
 Report Due: November 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
9/1/2020	0.009	0.007	0.001	0.000
9/2/2020	0.020	0.017	0.003	0.000
9/3/2020	0.016	0.014	0.002	0.000
9/4/2020	0.005	0.004	0.001	0.000
9/5/2020	0.013	0.011	0.002	0.000
9/6/2020	0.009	0.007	0.001	0.000
9/7/2020	0.008	0.006	0.001	0.000
9/8/2020	0.012	0.010	0.002	0.000
9/9/2020	0.020	0.017	0.003	0.000
9/10/2020	0.017	0.015	0.003	0.000
9/11/2020	0.033	0.028	0.005	0.000
9/12/2020	0.031	0.026	0.005	0.000
9/13/2020	0.016	0.014	0.002	0.000
9/14/2020	0.014	0.012	0.002	0.000
9/15/2020	0.015	0.013	0.002	0.000
9/16/2020	0.012	0.010	0.002	0.000
9/17/2020	0.019	0.016	0.003	0.000
9/18/2020	0.010	0.009	0.002	0.000
9/19/2020	0.016	0.013	0.002	0.000
9/20/2020	0.008	0.007	0.001	0.000
9/21/2020	0.025	0.021	0.004	0.000
9/22/2020	0.010	0.009	0.002	0.000
9/23/2020	0.005	0.004	0.001	0.000
9/24/2020	0.015	0.013	0.002	0.000
9/25/2020	0.005	0.004	0.001	0.000
9/26/2020	0.000	0.000	0.000	0.000
9/27/2020	0.000	0.000	0.000	0.000
9/28/2020	0.034	0.029	0.005	0.000
9/29/2020	0.008	0.007	0.001	0.000
9/30/2020	0.016	0.013	0.002	0.000

DISCHARGE DAYS

AVERAGE:	0.014	0.012	0.002	-----
DAILY MAXIMUM	0.034	0.029	0.005	-----
REQUIREMENTS:	2.2	-----	-----	-----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: October, 2020 Collected By: Operations personnel
 Report Due: December 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
10/1/2020	0.012	0.011	0.002	0.000
10/2/2020	0.005	0.005	0.001	0.000
10/3/2020	0.000	0.000	0.000	0.000
10/4/2020	0.009	0.007	0.001	0.000
10/5/2020	0.021	0.018	0.003	0.000
10/6/2020	0.022	0.019	0.003	0.000
10/7/2020	0.013	0.011	0.002	0.000
10/8/2020	0.018	0.015	0.003	0.000
10/9/2020	0.037	0.031	0.006	0.000
10/10/2020	0.013	0.011	0.002	0.000
10/11/2020	0.013	0.011	0.002	0.000
10/12/2020	0.013	0.011	0.002	0.000
10/13/2020	0.012	0.010	0.002	0.000
10/14/2020	0.013	0.011	0.002	0.000
10/15/2020	0.014	0.012	0.002	0.000
10/16/2020	0.012	0.010	0.002	0.000
10/17/2020	0.014	0.012	0.002	0.000
10/18/2020	0.015	0.013	0.002	0.000
10/19/2020	0.013	0.011	0.002	0.000
10/20/2020	0.007	0.006	0.001	0.000
10/21/2020	0.013	0.011	0.002	0.000
10/22/2020	0.015	0.013	0.002	0.000
10/23/2020	0.014	0.012	0.002	0.000
10/24/2020	0.013	0.011	0.002	0.000
10/25/2020	0.014	0.012	0.002	0.000
10/26/2020	0.014	0.012	0.002	0.000
10/27/2020	0.007	0.006	0.001	0.000
10/28/2020	0.020	0.017	0.003	0.000
10/29/2020	0.018	0.016	0.003	0.000
10/30/2020	0.014	0.012	0.002	0.000
10/31/2020	0.015	0.013	0.002	0.000

DISCHARGE DAYS

AVERAGE: 0.014 0.012 0.002 -----

DAILY MAXIMUM 0.037 0.031 0.006 -----

REQUIREMENTS: 2.2 -----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: November, 2020 Collected By: Operations personnel
 Report Due: January 1, 2020 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
11/1/2020	0.013	0.011	0.002	0.000
11/2/2020	0.016	0.014	0.002	0.000
11/3/2020	0.014	0.012	0.002	0.000
11/4/2020	0.015	0.013	0.002	0.000
11/5/2020	0.014	0.012	0.002	0.000
11/6/2020	0.016	0.013	0.002	0.000
11/7/2020	0.009	0.008	0.001	0.000
11/8/2020	0.009	0.008	0.001	0.000
11/9/2020	0.015	0.013	0.002	0.000
11/10/2020	0.022	0.018	0.003	0.000
11/11/2020	0.006	0.005	0.001	0.000
11/12/2020	0.020	0.017	0.003	0.000
11/13/2020	0.018	0.015	0.003	0.000
11/14/2020	0.016	0.013	0.002	0.000
11/15/2020	0.013	0.011	0.002	0.000
11/16/2020	0.015	0.012	0.002	0.000
11/17/2020	0.013	0.011	0.002	0.000
11/18/2020	0.010	0.008	0.001	0.000
11/19/2020	0.017	0.014	0.003	0.000
11/20/2020	0.012	0.010	0.002	0.000
11/21/2020	0.000	0.000	0.000	0.000
11/22/2020	0.000	0.000	0.000	0.000
11/23/2020	0.051	0.044	0.008	0.000
11/24/2020	0.014	0.012	0.002	0.000
11/25/2020	0.014	0.012	0.002	0.000
11/26/2020	0.016	0.013	0.002	0.000
11/27/2020	0.010	0.009	0.002	0.000
11/28/2020	0.006	0.005	0.001	0.000
11/29/2020	0.012	0.010	0.002	0.000
11/30/2020	0.008	0.007	0.001	0.000

DISCHARGE DAYS

AVERAGE: 0.014 0.012 0.002 -----

DAILY MAXIMUM 0.051 0.044 0.008 -----

REQUIREMENTS: 2.2 -----

CABRILLO POWER I LLC - MONTHLY REPORT, Appendix

Facility Name: Encina Power Station
 Order No: R9-2020-0005 Signed _____ e-signed _____
 Report Freq: Monthly
 Report For: December, 2020 Collected By: Operations personnel
 Report Due: February 1, 2021 Analyzed By: Operations personnel
 Wastestream: EFF-001, Low Volume Waste- 001-B & 001-H, and Tunnel Dewatering

PARAMETER: Flow Rate
 UNITS: Million Gallons per Day (MGD)

DATE	EFF-001 DISCHARGE	LVW 001-B DISCHARGE	LVW 001-H DISCHARGE	TUNNEL DEWATERING DISCHARGE
12/1/2020	0.000	0.000	0.000	0.000
12/2/2020	0.000	0.000	0.000	0.000
12/3/2020	0.001	0.000	0.000	0.000
12/4/2020	0.000	0.000	0.000	0.000
12/5/2020	0.000	0.000	0.000	0.000
12/6/2020	0.000	0.000	0.000	0.000
12/7/2020	0.013	0.011	0.002	0.000
12/8/2020	0.026	0.022	0.004	0.000
12/9/2020	0.091	0.000	0.000	0.091
12/10/2020	0.015	0.000	0.000	0.015
12/11/2020	0.000	0.000	0.000	0.000
12/12/2020	0.000	0.000	0.000	0.000
12/13/2020	0.000	0.000	0.000	0.000
12/14/2020	0.091	0.000	0.000	0.091
12/15/2020	0.115	0.000	0.000	0.115
12/16/2020	0.012	0.000	0.000	0.012
12/17/2020	0.013	0.000	0.000	0.013
12/18/2020	0.017	0.014	0.003	0.000
12/19/2020	0.014	0.012	0.002	0.000
12/20/2020	0.012	0.010	0.002	0.000
12/21/2020	0.037	0.031	0.006	0.000
12/22/2020	0.035	0.030	0.005	0.000
12/23/2020	0.020	0.017	0.003	0.000
12/24/2020	0.017	0.014	0.003	0.000
12/25/2020	0.013	0.011	0.002	0.000
12/26/2020	0.017	0.015	0.003	0.000
12/27/2020	0.016	0.014	0.002	0.000
12/28/2020	0.017	0.014	0.003	0.000
12/29/2020	0.013	0.011	0.002	0.000
12/30/2020	0.010	0.009	0.002	0.000
12/31/2020	0.015	0.012	0.002	0.000

DISCHARGE DAYS

AVERAGE: 0.014 0.008 0.001 0.011

DAILY MAXIMUM 0.115 0.031 0.006 0.115

REQUIREMENTS: 2.2 -----

Attachment E SOIL&WATER-5: Potable Water Statement

Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

March 30, 2021

Subject: CARLSBAD ENERGY CENTER COM-8 REPORT – SOIL&WATER-5: Potable Water Statement

To date, the City of Carlsbad has not required or requested any water quality monitoring reports related to the potable water system.

Attachment F SOIL&WATER-6: Water Use Report

2020 Water Usage By Type

Emergency Water Use:		
Month	Gallons	Acre-Feet
Jan-20	0	0
Feb-20	0	0
Mar-20	0	0
Apr-20	0	0
May-20	0	0
Jun-20	0	0
Jul-20	0	0
Aug-20	0	0
Sep-20	0	0
Oct-20	0	0
Nov-20	0	0
Dec-20	0	0

Title 22 Water Use:				
Month	Total (gal)	Daily Average (gal)	Daily Max (gal)	Total (Acre-Feet)
Jan-20	772,684.00	24,925.29	256,251.84	2.37
Feb-20	939,488.00	33,553.14	188,065.91	2.88
Mar-20	1,166,132.00	37,617.16	206,295.44	3.58
Apr-20	325,380.00	10,846.00	181,458.77	1.00
May-20	852,720.00	27,507.10	127,049.84	2.62
Jun-20	475,728.00	15,857.60	152,262.46	1.46
Jul-20	1,281,324.00	41,333.03	160,866.71	3.93
Aug-20	1,831,104.00	59,067.87	216,119.36	5.62
Sep-20	1,681,504.00	56,050.13	211,250.75	5.16
Oct-20	1,718,904.00	55,448.52	164,375.83	5.28
Nov-20	1,517,692.00	50,589.73	137,027.82	4.66
Dec-20	759,220.00	24,490.97	128,113.80	2.33
Total	13,321,880.00			40.88

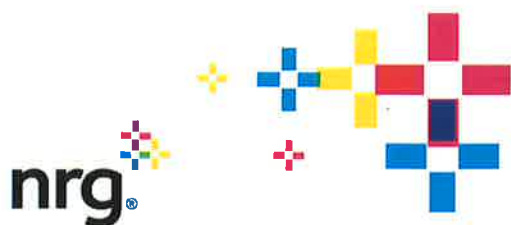
Potable Water Use:			
Month	Total (gal)	Daily Average (gal)	Total (Acre-Feet)
Jan-20	14,212.00	458.45	0.04
Feb-20	17,204.00	614.43	0.05
Mar-20	20,196.00	651.48	0.06
Apr-20	17,952.00	598.40	0.06
May-20	16,456.00	530.84	0.05
Jun-20	19,448.00	648.27	0.06
Jul-20	13,464.00	434.32	0.04
Aug-20	14,212.00	458.45	0.04
Sep-20	18,700.00	623.33	0.06
Oct-20	20,196.00	651.48	0.06
Nov-20	14,960.00	498.67	0.05
Dec-20	15,708.00	506.71	0.05

Fire Water Lines				
Meter	Total (gal)	Monthly Average (gal)	Daily Average (gal)	Total (Acre-Feet)
2"	18,700.00	1,558.33	51.23	0.06
8"	12,716.00	1,059.67	34.84	0.04

Total 2020 Potable	
Gallons:	234,124.00
Acre-Feet:	0.72

Life of Project Annual Usage (Acre-Feet)			
	Average	Min	Max
Potable Water	1.1	0.7	1.5
Recycled Water	41.0	40.9	41.0

Attachment G SOIL&WATER-7: Wastewater Quality Monitoring Reports

**Carlsbad Energy Center LLC**

4950 Avenida Encinas

Carlsbad, CA 92008

Phone: 760-710-3970

March 26, 2020

Mr. Don Little
Compliance Project Manager
Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, California 92011

RE: CARLSBAD ENERGY CENTER PROJECT, FOURTH QUARTER OF 2019 WASTE WATER SAMPLES

Dear Mr. Little:

Carlsbad Energy Center LLC ("Project Owner") submits the results for the required samples for the First Quarter of 2020 (4Q2019). This report is submitted in compliance with the table in condition 2 of permit number 2405. The samples were taken on Monday, March 9, 2020. The following table summarizes the results:

Constituent	Limit	Units	Results		Notes
			Sample Point 1	Sample Point 2	
Arsenic, Total	1.5	mg/L	0.018	ND	
Cadmium, Total	0.77	mg/L	ND	ND	
Chromium, Total	3.5	mg/L	ND	0.0025	
Copper, Total	11	mg/L	0.097	0.24	
Lead, Total	5.1	mg/L	ND	ND	
Mercury, Total	0.27	mg/L	ND	ND	
Molybdenum, Total	4.1	mg/L	0.022	0.029	
Nickel, Total	15	mg/L	ND	ND	
Selenium, Total	2.5	mg/L	ND	ND	
Silver, Total	4.2	mg/L	ND	ND	
Zinc, Total	29	mg/L	1.2	2.7	
Oil and Grease (HEM)	400	mg/L	4.1	ND	
BOD	500	lb/day	0.11	0.04	Flow - SP1: 454 gal, SP2: 1888 gal
BOD	N/A	mg/L	28	2.6	Sample Results for Calc
TDS	N/A	mg/L	430	1100	
TSS	500	lb/day	0.13	0.06	Flow - SP1: 454 gal, SP2: 1888 gal
TSS	N/A	mg/L	34	4.1	Sample Results for Calc

If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 573-3802.

Sincerely,

A handwritten signature in black ink, appearing to read 'Paul Mattesich', with a large, sweeping loop at the end.

Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: TestAmerica Lab Report for Waste Water Samples – March 24, 2020
 EWA Report Certification dated March 26, 2020

Cc: File



ENCINA WASTEWATER AUTHORITY

6200 AVENIDA ENCINAS, CARLSBAD, CA 92011-0195 TEL: (760) 438-3941 FAX: (760) 476-9852

REPORT CERTIFICATION

I. INDUSTRIAL USER INFORMATION:

Carlsbad Energy Center LLC


Industrial User Name	Carlsbad	92008	760-710-3943
4950 Avenida Encinas	City	Zip Code	(Area Code) Phone
Facility Address			
Carlsbad Energy Center LLC			
Owner		Plant Manager	
Paul Mattesich		Title	
IU Contact			
City of Carlsbad	2405		
Member Agency	Permit #		

II. CERTIFICATION STATEMENT:

All applications, reports or information submitted to the Encina Wastewater Authority must include the following certification statement and be signed as required by a responsible corporate officer, President, Vice President, Manager, CEO or an authorized representative.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

	3/26/24	CARLSBAD
PRESIDENT/VP/GENERAL MGR/CEO	DATE	CITY OR COUNTY
(Print and sign name)		

ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-262437-1

Client Project/Site: EWA Waste Water Permit

For:

Carlsbad Energy Center
4950 Avenida Encinas
Carlsbad, California 92008

Attn: Anthony Kalis



Authorized for release by:
3/24/2020 2:25:16 PM

Rossina Tomova, Project Manager I
(949)260-3276
rossina.tomova@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-262437-1	Sample Point #1-composite	Water	03/09/20 20:18	03/10/20 17:15	
440-262437-2	Sample Point #1-First Grab	Water	03/09/20 04:43	03/10/20 17:15	
440-262437-3	Sample Point #1-Second Grab	Water	03/09/20 09:59	03/10/20 17:15	
440-262437-4	Sample Point #1-Third Grab	Water	03/09/20 15:12	03/10/20 17:15	
440-262437-5	Sample Point #1-Fourth Grab	Water	03/09/20 19:46	03/10/20 17:15	
440-262437-6	Sample Point #1-1664 Composite	Water	03/09/20 19:46	03/10/20 17:15	
440-262437-7	Sample Point #2-composite	Water	03/09/20 20:30	03/10/20 17:15	
440-262437-8	Sample Point #2-First Grab	Water	03/09/20 04:54	03/10/20 17:15	
440-262437-9	Sample Point #2-Second Grab	Water	03/09/20 10:08	03/10/20 17:15	
440-262437-10	Sample Point #2-Third Grab	Water	03/09/20 15:22	03/10/20 17:15	
440-262437-11	Sample Point #2-Fourth Grab	Water	03/09/20 19:54	03/10/20 17:15	
440-262437-12	Sample Point #2-1664 Composite	Water	03/09/20 19:54	03/10/20 17:15	

Case Narrative

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Job ID: 440-262437-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative 440-262437-1

Comments

No additional comments.

Receipt

The samples were received on 3/10/2020 5:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.2° C, 1.3° C and 1.5° C.

Metals

Method 200.7 Rev 4.4: The continuing calibration blank (CCB) for 440-600051 contained Selenium above the method detection limit (MDL). This target analyte concentration was less than the reporting limit (RL).(CCB 440-600051/61)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method SM5210B: The residual D.O. in samples Sample Point#1-composite (440-262437-1) and Sample Point#1-composite (440-262437-1[DU]) was < 1.0 mg/L in all dilutions tested; they were over depleted. Results were reported, but they may be biased low.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 1664A: Due to lab oversight matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-601568 and analytical batch 440-601657 was not performed on a client sample. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. Method 1664A.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Lab Admin

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Client Sample ID: Sample Point #1-composite

Date Collected: 03/09/20 20:18

Date Received: 03/10/20 17:15

Lab Sample ID: 440-262437-1

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.018		0.010	0.0089	mg/L		03/11/20 10:13	03/11/20 19:54	1
Cadmium	ND		0.0050	0.0025	mg/L		03/11/20 10:13	03/11/20 19:54	1
Chromium	ND		0.0050	0.0025	mg/L		03/11/20 10:13	03/11/20 19:54	1
Copper	0.097		0.010	0.0050	mg/L		03/11/20 10:13	03/11/20 19:54	1
Lead	ND		0.0050	0.0038	mg/L		03/11/20 10:13	03/11/20 19:54	1
Molybdenum	0.022		0.020	0.010	mg/L		03/11/20 10:13	03/11/20 19:54	1
Nickel	ND		0.010	0.0050	mg/L		03/11/20 10:13	03/11/20 19:54	1
Selenium	ND		0.010	0.0087	mg/L		03/11/20 10:13	03/11/20 19:54	1
Silver	ND		0.010	0.0050	mg/L		03/11/20 10:13	03/11/20 19:54	1
Zinc	1.2		0.020	0.012	mg/L		03/11/20 10:13	03/11/20 19:54	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		03/12/20 17:07	03/13/20 04:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	430		10	5.0	mg/L			03/13/20 09:38	1
Total Suspended Solids	34		10	5.0	mg/L			03/11/20 15:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	28		7.5	7.5	mg/L			03/11/20 08:55	1

Client Sample ID: Sample Point #1-First Grab

Date Collected: 03/09/20 04:43

Date Received: 03/10/20 17:15

Lab Sample ID: 440-262437-2

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.69				SU			03/09/20 04:43	1
Field Temperature	19.30				Celsius			03/09/20 04:43	1

Client Sample ID: Sample Point #1-Second Grab

Date Collected: 03/09/20 09:59

Date Received: 03/10/20 17:15

Lab Sample ID: 440-262437-3

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.56				SU			03/09/20 09:59	1
Field Temperature	20.50				Celsius			03/09/20 09:59	1

Client Sample ID: Sample Point #1-Third Grab

Date Collected: 03/09/20 15:12

Date Received: 03/10/20 17:15

Lab Sample ID: 440-262437-4

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.74				SU			03/09/20 15:12	1
Field Temperature	20.70				Celsius			03/09/20 15:12	1

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Client Sample ID: Sample Point #1-Fourth Grab

Lab Sample ID: 440-262437-5

Date Collected: 03/09/20 19:46

Matrix: Water

Date Received: 03/10/20 17:15

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.70				SU			03/09/20 19:46	1
Field Temperature	19.80				Celsius			03/09/20 19:46	1

Client Sample ID: Sample Point #1-1664 Composite

Lab Sample ID: 440-262437-6

Date Collected: 03/09/20 19:46

Matrix: Water

Date Received: 03/10/20 17:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	4.1		1.3	0.35	mg/L		03/20/20 06:12	03/20/20 11:45	1

Client Sample ID: Sample Point #2-composite

Lab Sample ID: 440-262437-7

Date Collected: 03/09/20 20:30

Matrix: Water

Date Received: 03/10/20 17:15

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		03/11/20 10:13	03/23/20 18:54	1
Cadmium	ND		0.0050	0.0025	mg/L		03/11/20 10:13	03/23/20 18:54	1
Chromium	0.0025	J	0.0050	0.0025	mg/L		03/11/20 10:13	03/23/20 18:54	1
Copper	0.24		0.010	0.0050	mg/L		03/11/20 10:13	03/23/20 18:54	1
Lead	ND		0.0050	0.0038	mg/L		03/11/20 10:13	03/23/20 18:54	1
Molybdenum	0.029		0.020	0.010	mg/L		03/11/20 10:13	03/23/20 18:54	1
Nickel	ND		0.010	0.0050	mg/L		03/11/20 10:13	03/23/20 18:54	1
Selenium	ND		0.010	0.0087	mg/L		03/11/20 10:13	03/23/20 18:54	1
Silver	ND		0.010	0.0050	mg/L		03/11/20 10:13	03/23/20 18:54	1
Zinc	2.7		0.020	0.012	mg/L		03/11/20 10:13	03/23/20 18:54	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		03/12/20 17:07	03/13/20 05:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10	5.0	mg/L			03/13/20 09:38	1
Total Suspended Solids	4.1		1.0	0.50	mg/L			03/11/20 15:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.6		2.0	2.0	mg/L			03/11/20 08:55	1

Client Sample ID: Sample Point #2-First Grab

Lab Sample ID: 440-262437-8

Date Collected: 03/09/20 04:54

Matrix: Water

Date Received: 03/10/20 17:15

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.08				SU			03/09/20 04:54	1
Field Temperature	19.30				Celsius			03/09/20 04:54	1

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Client Sample ID: Sample Point #2-Second Grab

Lab Sample ID: 440-262437-9

Date Collected: 03/09/20 10:08

Matrix: Water

Date Received: 03/10/20 17:15

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.01				SU			03/09/20 10:08	1
Field Temperature	19.90				Celsius			03/09/20 10:08	1

Client Sample ID: Sample Point #2-Third Grab

Lab Sample ID: 440-262437-10

Date Collected: 03/09/20 15:22

Matrix: Water

Date Received: 03/10/20 17:15

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.13				SU			03/09/20 15:22	1
Field Temperature	20.80				Celsius			03/09/20 15:22	1

Client Sample ID: Sample Point #2-Fourth Grab

Lab Sample ID: 440-262437-11

Date Collected: 03/09/20 19:54

Matrix: Water

Date Received: 03/10/20 17:15

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.08				SU			03/09/20 19:54	1
Field Temperature	19.90				Celsius			03/09/20 19:54	1

Client Sample ID: Sample Point #2-1664 Composite

Lab Sample ID: 440-262437-12

Date Collected: 03/09/20 19:54

Matrix: Water

Date Received: 03/10/20 17:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		1.3	0.35	mg/L		03/20/20 06:12	03/20/20 11:45	1

Method Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	TAL IRV
245.1	Mercury (CVAA)	EPA	TAL IRV
1664A	HEM and SGT-HEM	1664A	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
SM5210B	BOD, 5 Day	SM	TAL IRV
Field Sampling	Field Sampling	EPA	TAL IRV
1664A	HEM and SGT-HEM (SPE)	1664A	TAL IRV
200.2	Preparation, Total Recoverable Metals	EPA	TAL IRV
245.1	Preparation, Mercury	EPA	TAL IRV

Protocol References:

1664A = EPA-821-98-002
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Client Sample ID: Sample Point #1-composite

Lab Sample ID: 440-262437-1

Date Collected: 03/09/20 20:18

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	599919	03/11/20 10:13	EP	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			600051	03/11/20 19:54	P1R	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	600263	03/12/20 17:07	DB	TAL IRV
Total/NA	Analysis	245.1		1			600380	03/13/20 04:58	MEM	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	600400	03/13/20 09:38	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	100 mL	1000 mL	599982	03/11/20 15:45	KL	TAL IRV
Total/NA	Analysis	SM5210B		1	80 mL	300 mL	599880	03/11/20 08:55	KYP	TAL IRV

Client Sample ID: Sample Point #1-First Grab

Lab Sample ID: 440-262437-2

Date Collected: 03/09/20 04:43

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 04:43	A1W	TAL IRV

Client Sample ID: Sample Point #1-Second Grab

Lab Sample ID: 440-262437-3

Date Collected: 03/09/20 09:59

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 09:59	A1W	TAL IRV

Client Sample ID: Sample Point #1-Third Grab

Lab Sample ID: 440-262437-4

Date Collected: 03/09/20 15:12

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 15:12	A1W	TAL IRV

Client Sample ID: Sample Point #1-Fourth Grab

Lab Sample ID: 440-262437-5

Date Collected: 03/09/20 19:46

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 19:46	A1W	TAL IRV

Client Sample ID: Sample Point #1-1664 Composite

Lab Sample ID: 440-262437-6

Date Collected: 03/09/20 19:46

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			3990 mL	1000 mL	601568	03/20/20 06:12	L1A	TAL IRV
Total/NA	Analysis	1664A		1			601657	03/20/20 11:45	JC1	TAL IRV

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Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Client Sample ID: Sample Point #2-composite

Lab Sample ID: 440-262437-7

Date Collected: 03/09/20 20:30

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	599919	03/11/20 10:13	EP	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			602001	03/23/20 18:54	P1R	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	600263	03/12/20 17:07	DB	TAL IRV
Total/NA	Analysis	245.1		1			600380	03/13/20 05:05	MEM	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	600400	03/13/20 09:38	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	599982	03/11/20 15:45	KL	TAL IRV
Total/NA	Analysis	SM5210B		1	300 mL	300 mL	599880	03/11/20 08:55	KYP	TAL IRV

Client Sample ID: Sample Point #2-First Grab

Lab Sample ID: 440-262437-8

Date Collected: 03/09/20 04:54

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 04:54	A1W	TAL IRV

Client Sample ID: Sample Point #2-Second Grab

Lab Sample ID: 440-262437-9

Date Collected: 03/09/20 10:08

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 10:08	A1W	TAL IRV

Client Sample ID: Sample Point #2-Third Grab

Lab Sample ID: 440-262437-10

Date Collected: 03/09/20 15:22

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 15:22	A1W	TAL IRV

Client Sample ID: Sample Point #2-Fourth Grab

Lab Sample ID: 440-262437-11

Date Collected: 03/09/20 19:54

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			600033	03/09/20 19:54	A1W	TAL IRV

Client Sample ID: Sample Point #2-1664 Composite

Lab Sample ID: 440-262437-12

Date Collected: 03/09/20 19:54

Matrix: Water

Date Received: 03/10/20 17:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			3965 mL	1000 mL	601568	03/20/20 06:12	L1A	TAL IRV
Total/NA	Analysis	1664A		1			601657	03/20/20 11:45	JC1	TAL IRV

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Eurofins Calscience Irvine

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-599919/1-A
Matrix: Water
Analysis Batch: 600051

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 599919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		03/11/20 10:13	03/11/20 19:49	1
Cadmium	ND		0.0050	0.0025	mg/L		03/11/20 10:13	03/11/20 19:49	1
Chromium	ND		0.0050	0.0025	mg/L		03/11/20 10:13	03/11/20 19:49	1
Copper	ND		0.010	0.0050	mg/L		03/11/20 10:13	03/11/20 19:49	1
Lead	ND		0.0050	0.0038	mg/L		03/11/20 10:13	03/11/20 19:49	1
Molybdenum	ND		0.020	0.010	mg/L		03/11/20 10:13	03/11/20 19:49	1
Nickel	ND		0.010	0.0050	mg/L		03/11/20 10:13	03/11/20 19:49	1
Selenium	ND		0.010	0.0087	mg/L		03/11/20 10:13	03/11/20 19:49	1
Silver	ND		0.010	0.0050	mg/L		03/11/20 10:13	03/11/20 19:49	1
Zinc	ND		0.020	0.012	mg/L		03/11/20 10:13	03/11/20 19:49	1

Lab Sample ID: LCS 440-599919/2-A
Matrix: Water
Analysis Batch: 600051

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 599919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.496		mg/L		99	85 - 115
Cadmium	0.500	0.497		mg/L		99	85 - 115
Chromium	0.500	0.495		mg/L		99	85 - 115
Copper	0.500	0.494		mg/L		99	85 - 115
Lead	0.500	0.495		mg/L		99	85 - 115
Molybdenum	0.500	0.456		mg/L		91	85 - 115
Nickel	0.500	0.501		mg/L		100	85 - 115
Selenium	0.500	0.499		mg/L		100	85 - 115
Silver	0.250	0.246		mg/L		98	85 - 115
Zinc	0.500	0.499		mg/L		100	85 - 115

Lab Sample ID: 440-262437-1 MS
Matrix: Water
Analysis Batch: 600051

Client Sample ID: Sample Point #1-composite
Prep Type: Total Recoverable
Prep Batch: 599919

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.018		0.500	0.517		mg/L		100	70 - 130
Cadmium	ND		0.500	0.491		mg/L		98	70 - 130
Chromium	ND		0.500	0.503		mg/L		101	70 - 130
Copper	0.097		0.500	0.626		mg/L		106	70 - 130
Lead	ND		0.500	0.496		mg/L		99	70 - 130
Molybdenum	0.022		0.500	0.508		mg/L		97	70 - 130
Nickel	ND		0.500	0.498		mg/L		100	70 - 130
Selenium	ND		0.500	0.491		mg/L		98	70 - 130
Silver	ND		0.250	0.252		mg/L		101	70 - 130
Zinc	1.2		0.500	1.69		mg/L		100	70 - 130

Lab Sample ID: 440-262437-1 MSD
Matrix: Water
Analysis Batch: 600051

Client Sample ID: Sample Point #1-composite
Prep Type: Total Recoverable
Prep Batch: 599919

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.018		0.500	0.519		mg/L		100	70 - 130	1	20

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-262437-1 MSD

Matrix: Water

Analysis Batch: 600051

Client Sample ID: Sample Point #1-composite

Prep Type: Total Recoverable

Prep Batch: 599919

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.493		mg/L		99	70 - 130	0	20
Chromium	ND		0.500	0.506		mg/L		101	70 - 130	1	20
Copper	0.097		0.500	0.631		mg/L		107	70 - 130	1	20
Lead	ND		0.500	0.500		mg/L		100	70 - 130	1	20
Molybdenum	0.022		0.500	0.519		mg/L		100	70 - 130	2	20
Nickel	ND		0.500	0.503		mg/L		101	70 - 130	1	20
Selenium	ND		0.500	0.493		mg/L		99	70 - 130	0	20
Silver	ND		0.250	0.253		mg/L		101	70 - 130	0	20
Zinc	1.2		0.500	1.73		mg/L		106	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-600263/1-A

Matrix: Water

Analysis Batch: 600380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 600263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		03/12/20 17:07	03/13/20 04:54	1

Lab Sample ID: LCS 440-600263/2-A

Matrix: Water

Analysis Batch: 600380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 600263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00400	0.00383		mg/L		96	85 - 115

Lab Sample ID: 440-262437-1 MS

Matrix: Water

Analysis Batch: 600380

Client Sample ID: Sample Point #1-composite

Prep Type: Total/NA

Prep Batch: 600263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00400	0.00350		mg/L		88	75 - 125

Lab Sample ID: 440-262437-1 MSD

Matrix: Water

Analysis Batch: 600380

Client Sample ID: Sample Point #1-composite

Prep Type: Total/NA

Prep Batch: 600263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00400	0.00336		mg/L		84	75 - 125	4	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-601568/1-A

Matrix: Water

Analysis Batch: 601657

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 601568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		5.0	1.4	mg/L		03/20/20 06:12	03/20/20 11:45	1

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 440-601568/2-A
Matrix: Water
Analysis Batch: 601657

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601568
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	40.0	33.60		mg/L		84	78 - 114

Lab Sample ID: LCSD 440-601568/3-A
Matrix: Water
Analysis Batch: 601657

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 601568
%Rec. RPD

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
HEM	40.0	33.90		mg/L		85	78 - 114	1	11

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-600400/1
Matrix: Water
Analysis Batch: 600400

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			03/13/20 09:38	1

Lab Sample ID: LCS 440-600400/2
Matrix: Water
Analysis Batch: 600400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	960		mg/L		96	90 - 110

Lab Sample ID: 440-262437-1 DU
Matrix: Water
Analysis Batch: 600400

Client Sample ID: Sample Point #1-composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	430		448		mg/L		4	5

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-599982/1
Matrix: Water
Analysis Batch: 599982

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			03/11/20 15:45	1

Lab Sample ID: LCS 440-599982/2
Matrix: Water
Analysis Batch: 599982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	906		mg/L		91	85 - 115

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 440-262437-1 DU

Matrix: Water

Analysis Batch: 599982

Client Sample ID: Sample Point #1-composite

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	34		33.0		mg/L		3	10

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 440-599880/3

Matrix: Water

Analysis Batch: 599880

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			03/11/20 08:55	1

Lab Sample ID: LCS 440-599880/7

Matrix: Water

Analysis Batch: 599880

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	199	188		mg/L		95	85 - 115

Lab Sample ID: LCSD 440-599880/8

Matrix: Water

Analysis Batch: 599880

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biochemical Oxygen Demand	199	189		mg/L		95	85 - 115	1	20

Lab Sample ID: LCSD 440-599880/9

Matrix: Water

Analysis Batch: 599880

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biochemical Oxygen Demand	199	193		mg/L		97	85 - 115	3	20

Lab Sample ID: 440-262437-1 DU

Matrix: Water

Analysis Batch: 599880

Client Sample ID: Sample Point #1-composite

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	28		27.8		mg/L		1	20

QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Metals

Prep Batch: 599919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-1	Sample Point #1-composite	Total Recoverable	Water	200.2	
440-262437-7	Sample Point #2-composite	Total Recoverable	Water	200.2	
MB 440-599919/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 440-599919/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
440-262437-1 MS	Sample Point #1-composite	Total Recoverable	Water	200.2	
440-262437-1 MSD	Sample Point #1-composite	Total Recoverable	Water	200.2	

Analysis Batch: 600051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-1	Sample Point #1-composite	Total Recoverable	Water	200.7 Rev 4.4	599919
MB 440-599919/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	599919
LCS 440-599919/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	599919
440-262437-1 MS	Sample Point #1-composite	Total Recoverable	Water	200.7 Rev 4.4	599919
440-262437-1 MSD	Sample Point #1-composite	Total Recoverable	Water	200.7 Rev 4.4	599919

Prep Batch: 600263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-1	Sample Point #1-composite	Total/NA	Water	245.1	
440-262437-7	Sample Point #2-composite	Total/NA	Water	245.1	
MB 440-600263/1-A	Method Blank	Total/NA	Water	245.1	
LCS 440-600263/2-A	Lab Control Sample	Total/NA	Water	245.1	
440-262437-1 MS	Sample Point #1-composite	Total/NA	Water	245.1	
440-262437-1 MSD	Sample Point #1-composite	Total/NA	Water	245.1	

Analysis Batch: 600380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-1	Sample Point #1-composite	Total/NA	Water	245.1	600263
440-262437-7	Sample Point #2-composite	Total/NA	Water	245.1	600263
MB 440-600263/1-A	Method Blank	Total/NA	Water	245.1	600263
LCS 440-600263/2-A	Lab Control Sample	Total/NA	Water	245.1	600263
440-262437-1 MS	Sample Point #1-composite	Total/NA	Water	245.1	600263
440-262437-1 MSD	Sample Point #1-composite	Total/NA	Water	245.1	600263

Analysis Batch: 602001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-7	Sample Point #2-composite	Total Recoverable	Water	200.7 Rev 4.4	599919

General Chemistry

Analysis Batch: 599880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-1	Sample Point #1-composite	Total/NA	Water	SM5210B	
440-262437-7	Sample Point #2-composite	Total/NA	Water	SM5210B	
USB 440-599880/3	Method Blank	Total/NA	Water	SM5210B	
LCS 440-599880/7	Lab Control Sample	Total/NA	Water	SM5210B	
LCSD 440-599880/8	Lab Control Sample Dup	Total/NA	Water	SM5210B	
LCSD 440-599880/9	Lab Control Sample Dup	Total/NA	Water	SM5210B	
440-262437-1 DU	Sample Point #1-composite	Total/NA	Water	SM5210B	

QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

General Chemistry

Analysis Batch: 599982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-1	Sample Point #1-composite	Total/NA	Water	SM 2540D	
440-262437-7	Sample Point #2-composite	Total/NA	Water	SM 2540D	
MB 440-599982/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 440-599982/2	Lab Control Sample	Total/NA	Water	SM 2540D	
440-262437-1 DU	Sample Point #1-composite	Total/NA	Water	SM 2540D	

Analysis Batch: 600400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-1	Sample Point #1-composite	Total/NA	Water	SM 2540C	
440-262437-7	Sample Point #2-composite	Total/NA	Water	SM 2540C	
MB 440-600400/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-600400/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-262437-1 DU	Sample Point #1-composite	Total/NA	Water	SM 2540C	

Prep Batch: 601568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-6	Sample Point #1-1664 Composite	Total/NA	Water	1664A	
440-262437-12	Sample Point #2-1664 Composite	Total/NA	Water	1664A	
MB 440-601568/1-A	Method Blank	Total/NA	Water	1664A	
LCS 440-601568/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 440-601568/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 601657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-6	Sample Point #1-1664 Composite	Total/NA	Water	1664A	601568
440-262437-12	Sample Point #2-1664 Composite	Total/NA	Water	1664A	601568
MB 440-601568/1-A	Method Blank	Total/NA	Water	1664A	601568
LCS 440-601568/2-A	Lab Control Sample	Total/NA	Water	1664A	601568
LCSD 440-601568/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	601568

Field Service / Mobile Lab

Analysis Batch: 600033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-262437-2	Sample Point #1-First Grab	Total/NA	Water	Field Sampling	
440-262437-3	Sample Point #1-Second Grab	Total/NA	Water	Field Sampling	
440-262437-4	Sample Point #1-Third Grab	Total/NA	Water	Field Sampling	
440-262437-5	Sample Point #1-Fourth Grab	Total/NA	Water	Field Sampling	
440-262437-8	Sample Point #2-First Grab	Total/NA	Water	Field Sampling	
440-262437-9	Sample Point #2-Second Grab	Total/NA	Water	Field Sampling	
440-262437-10	Sample Point #2-Third Grab	Total/NA	Water	Field Sampling	
440-262437-11	Sample Point #2-Fourth Grab	Total/NA	Water	Field Sampling	

Definitions/Glossary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Qualifiers

Metals

Qualifier

Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-262437-1

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.2	Water	Arsenic
Field Sampling		Water	Field pH
Field Sampling		Water	Field Temperature

Eurofins TestAmerica, Irvine

17461 Denan Avenue

Suite 100

Irvine, CA 92614-5843

phone 949 261.1022 fax 949 260.3299

Chain of Custody Record

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact		Project Manager: Anthony Kalis		Site Contact: Anthony Kalis		Date: 3/9/2020		COC No:	
Carlsbad Energy Center		Email: anthony.kalis@nrg.com		Lab Contact: Rossina Tomova		Carrier:		1 of 1 COCs	
4950 Avenida Encinas		Tel/Fax: 760-427-2382 / Fax #: None		Analysis Turnaround Time		TALS Project #		Sampler: Anthony Kalis	
Carlsbad, CA 92008		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS		TAT if different from Below		For Lab Use Only:		Walk-in Client:	
Phone (760) 427-2382		<input type="checkbox"/> 2 weeks		<input checked="" type="checkbox"/> 1 week		Lab Sampling:		Job / SDG No.:	
FAX - None		<input type="checkbox"/> 2 days		<input checked="" type="checkbox"/> 1 day		Sample Specific Notes:		00 3/10/20	
Project Name: EWA Quarterly Sampling									
Site: Carlsbad Energy Center									
PO # 4501864911									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	2007 - (WOC) California Air Resources Board	245.1 - H ₂ O	2540D - TSS	SM6210B - BOD Calc-BOD, 5 Day	2540C - Calcd-TDS	1664A - Oil & Grease (HEM Only)	Field pH
Sample Point # Point # 1 - composite	3/9/2020	20 18	C	H2O	8	N	Y	X	X	X	X	X		
Sample Point # 1 - First Grab	3/9/2020	4:43	G	H2O	3								X	X
Sample Point # 1 - Second Grab	3/9/2020	9:59	G	H2O	3								X	X
Sample Point # 1 - Third Grab	3/9/2020	15 12	G	H2O	3								X	X
Sample Point # 1 - Fourth Grab	3/9/2020	19:46	G	H2O	3								X	X
Sample Point # 2 - composite	3/9/2020	20:30	C	H2O	4	N	N	X	X	X				
Sample Point # 2 - First Grab	3/9/2020	4.54	G	H2O	3								X	X
Sample Point # 2 - Second Grab	3/9/2020	10.08	G	H2O	3								X	X
Sample Point # 2 - Third Grab	3/9/2020	15:22	G	H2O	3								X	X
Sample Point # 2 - Fourth Grab	3/9/2020	19 54	G	H2O	3								X	X

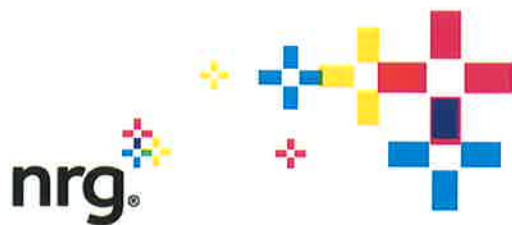
Sample Point # 1/ Time	Sample Point # 2/ Time
Field pH 1 6.69 pH/19.3°C @ 0443	7.08 pH/19.3°C @ 0454
Field pH 2 6.56 pH/20.5°C @ 0959	7.01 pH/19.9°C @ 1008
Field pH 3 6.74 pH/20.7°C @ 1512	7.13 pH/20.8°C @ 1522
Field pH 4 6.70 pH/19.8°C @ 1946	7.08 pH/19.9°C @ 1954

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other		1/4 1 1 1/2	
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months	

Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temp (°C) Obs'd 1.5/1.5	Cor'd 1.2	Therm ID No 3R89
Relinquished by: Anthony Kalis	Company: NRV	Date/Time: 3/10/20 0750	Received by: [Signature]	Company: E-T-R-V
Relinquished by: [Signature]	Company: E-T-R-V	Date/Time: 3/10/20 1715	Received by: [Signature]	Company: E-T-R-V
Relinquished by: [Signature]	Company: E-T-R-V	Date/Time: 3/10/20 1715	Received in Laboratory by: [Signature]	Company: E-T-R-V

Form No. CA-C-WI-002, Rev. 4.25, dated 7/8/2019

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Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

June 24, 2020

Mr. Don Little
Compliance Project Manager
Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, California 92011

RE: CARLSBAD ENERGY CENTER PROJECT, FIRST QUARTER OF 2020 WASTE WATER SAMPLES

Dear Mr. Little:

Carlsbad Energy Center LLC ("Project Owner") submits the results for the required samples for the Second Quarter of 2020 (2Q2020). This report is submitted in compliance with the table in condition 2 of permit number 2405. The samples were taken on Thursday, May 28, 2020. The following table summarizes the results:

Constituent	Limit	Units	Results		Notes
			Sample Point 1	Sample Point 2	
Arsenic, Total	1.5	mg/L	ND	ND	
Cadmium, Total	0.77	mg/L	ND	ND	
Chromium, Total	3.5	mg/L	ND	ND	
Copper, Total	11	mg/L	0.022	0.10	
Lead, Total	5.1	mg/L	ND	ND	
Mercury, Total	0.27	mg/L	ND	ND	
Molybdenum, Total	4.1	mg/L	ND	0.021	
Nickel, Total	15	mg/L	ND	ND	
Selenium, Total	2.5	mg/L	ND	ND	
Silver, Total	4.2	mg/L	ND	ND	
Zinc, Total	29	mg/L	0.44	0.88	
Oil and Grease (HEM)	400	mg/L	2.0	ND	
BOD	500	lb/day	0.189	0	Flow - SP1: 4440 gal, SP2: 3065 gal
BOD	N/A	mg/L	5.1	ND	Sample Results for Calc
TDS	N/A	mg/L	12	930	
TSS	500	lb/day	0.100	0.043	Flow - SP1: 4440 gal, SP2: 3065 gal
TSS	N/A	mg/L	2.7	1.7	Sample Results for Calc

If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 573-3802.

Sincerely,

A handwritten signature in blue ink, consisting of a series of loops and a long horizontal stroke.

Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: TestAmerica Lab Report for Waste Water Samples – June 8, 2020
 EWA Report Certification dated June 24, 2020

Cc: File



ENCINA WASTEWATER AUTHORITY

6200 AVENIDA ENCINAS, CARLSBAD, CA 92011-0195 TEL:(760)438-3941 FAX:(760)476-9852

REPORT CERTIFICATION

I. INDUSTRIAL USER INFORMATION:

Carlsbad Energy Center LLC

Industrial User Name	Carlsbad	92008	760-710-3943
4950 Avenida Encinas	City	Zip Code	(Area Code) Phone
Facility Address			
Carlsbad Energy Center LLC			
Owner		Plant Manager	
Paul Mattesich		Title	
IU Contact			
City of Carlsbad	2405		
Member Agency	Permit #		

II. CERTIFICATION STATEMENT:

All applications, reports or information submitted to the Encina Wastewater Authority must include the following certification statement and be signed as required by a responsible corporate officer, President, Vice President, Manager, CEO or an authorized representative.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

PRESIDENT/VP/GENERAL MGR/CEO
(Print and sign name)

6/24/20
DATE

CARLSBAD

CITY OR COUNTY

ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-266640-1

Client Project/Site: EWA Waste Water Permit

For:

Carlsbad Energy Center
4950 Avenida Encinas
Carlsbad, California 92008

Attn: Anthony Kalis



Authorized for release by:
6/8/2020 4:50:31 PM

Rossina Tomova, Project Manager I
(949)260-3276
rossina.tomova@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-266640-1	Sample Point # Point # 1 - composite	Water	05/28/20 20:18	05/29/20 16:25	
440-266640-2	Sample Point #1 - First Grab	Water	05/28/20 06:50	05/29/20 16:25	
440-266640-3	Sample Point #1 - Second Grab	Water	05/28/20 11:00	05/29/20 16:25	
440-266640-4	Sample Point #1 - Third Grab	Water	05/28/20 15:15	05/29/20 16:25	
440-266640-5	Sample Point #1 - Fourth Grab	Water	05/28/20 19:46	05/29/20 16:25	
440-266640-6	Sample Point #1 - 1664A COMPOSITE	Water	05/28/20 19:46	05/29/20 16:25	
440-266640-7	Sample Point #2 - Composite	Water	05/28/20 20:30	05/29/20 16:25	
440-266640-8	Sample Point #2 - First Grab	Water	05/28/20 06:58	05/29/20 16:25	
440-266640-9	Sample Point #2 - Second Grab	Water	05/28/20 11:14	05/29/20 16:25	
440-266640-10	Sample Point #2 - Third Grab	Water	05/28/20 15:27	05/29/20 16:25	
440-266640-11	Sample Point #2 - Fourth Grab	Water	05/28/20 19:54	05/29/20 16:25	
440-266640-12	Sample Point #2 - 1664A COMPOSITE	Water	05/28/20 19:54	05/29/20 16:25	

Case Narrative

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Job ID: 440-266640-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative 440-266640-1

Comments

No additional comments.

Receipt

The samples were received on 5/29/2020 4:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.3° C and 0.6° C.

Except:

The COC lists sampling date as 5/8/20 while the containers list 5/28/20. A revised COC received via email.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method SM 2540D: Sample 440-266640-1 is viscous and hard to filter. Analyst can filter only 600 ml and this volume produces less than 2.5 mg required dried residue. Sample Point # Point # 1 - composite (440-266640-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Lab Admin

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Client Sample ID: Sample Point # Point # 1 - composite

Lab Sample ID: 440-266640-1

Date Collected: 05/28/20 20:18

Matrix: Water

Date Received: 05/29/20 16:25

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		06/01/20 07:45	06/01/20 13:17	1
Cadmium	ND		0.0050	0.0025	mg/L		06/01/20 07:45	06/01/20 13:17	1
Chromium	ND		0.0050	0.0025	mg/L		06/01/20 07:45	06/01/20 13:17	1
Copper	0.022		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:17	1
Lead	ND		0.0050	0.0038	mg/L		06/01/20 07:45	06/01/20 13:17	1
Molybdenum	ND		0.020	0.010	mg/L		06/01/20 07:45	06/01/20 13:17	1
Nickel	ND		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:17	1
Selenium	ND		0.010	0.0087	mg/L		06/01/20 07:45	06/01/20 13:17	1
Silver	ND		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:17	1
Zinc	0.44		0.020	0.012	mg/L		06/01/20 07:45	06/01/20 13:17	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/04/20 10:35	06/04/20 17:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	12		10	5.0	mg/L			06/02/20 09:04	1
Total Suspended Solids	2.7		1.7	0.83	mg/L			06/01/20 14:09	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	5.1		2.0	2.0	mg/L			05/30/20 10:11	1

Client Sample ID: Sample Point #1 - First Grab

Lab Sample ID: 440-266640-2

Date Collected: 05/28/20 06:50

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.08				SU			05/28/20 06:50	1
Field Temperature	25.80				Celsius			05/28/20 06:50	1

Client Sample ID: Sample Point #1 - Second Grab

Lab Sample ID: 440-266640-3

Date Collected: 05/28/20 11:00

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.02				SU			05/28/20 11:00	1
Field Temperature	26.80				Celsius			05/28/20 11:00	1

Client Sample ID: Sample Point #1 - Third Grab

Lab Sample ID: 440-266640-4

Date Collected: 05/28/20 15:15

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.11				SU			05/28/20 15:15	1
Field Temperature	27.6				Celsius			05/28/20 15:15	1

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Client Sample ID: Sample Point #1 - Fourth Grab

Lab Sample ID: 440-266640-5

Date Collected: 05/28/20 19:46

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.70				SU			05/28/20 19:46	1
Field Temperature	19.80				Celsius			05/28/20 19:46	1

Client Sample ID: Sample Point #1 - 1664A COMPOSITE

Lab Sample ID: 440-266640-6

Date Collected: 05/28/20 19:46

Matrix: Water

Date Received: 05/29/20 16:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	2.0	J	5.3	1.5	mg/L		06/01/20 05:29	06/01/20 09:15	1

Method: Composite - Sample Composite for Organic Extraction

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes				NONE			06/01/20 05:30	1

Client Sample ID: Sample Point #2 - Composite

Lab Sample ID: 440-266640-7

Date Collected: 05/28/20 20:30

Matrix: Water

Date Received: 05/29/20 16:25

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		06/01/20 07:45	06/01/20 13:24	1
Cadmium	ND		0.0050	0.0025	mg/L		06/01/20 07:45	06/01/20 13:24	1
Chromium	ND		0.0050	0.0025	mg/L		06/01/20 07:45	06/01/20 13:24	1
Copper	0.10		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:24	1
Lead	ND		0.0050	0.0038	mg/L		06/01/20 07:45	06/01/20 13:24	1
Molybdenum	0.021		0.020	0.010	mg/L		06/01/20 07:45	06/01/20 13:24	1
Nickel	ND		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:24	1
Selenium	ND		0.010	0.0087	mg/L		06/01/20 07:45	06/01/20 13:24	1
Silver	ND		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:24	1
Zinc	0.88		0.020	0.012	mg/L		06/01/20 07:45	06/01/20 13:24	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/04/20 10:35	06/04/20 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	930		10	5.0	mg/L			06/02/20 09:04	1
Total Suspended Solids	1.7		1.0	0.50	mg/L			06/01/20 14:09	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			05/30/20 10:11	1

Client Sample ID: Sample Point #2 - First Grab

Lab Sample ID: 440-266640-8

Date Collected: 05/28/20 06:58

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.23				SU			05/28/20 06:58	1
Field Temperature	24.30				Celsius			05/28/20 06:58	1

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Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Client Sample ID: Sample Point #2 - Second Grab

Lab Sample ID: 440-266640-9

Date Collected: 05/28/20 11:14

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.30				SU			05/28/20 11:14	1
Field Temperature	25.50				Celsius			05/28/20 11:14	1

Client Sample ID: Sample Point #2 - Third Grab

Lab Sample ID: 440-266640-10

Date Collected: 05/28/20 15:27

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.31				SU			05/28/20 15:27	1
Field Temperature	28.00				Celsius			05/28/20 15:27	1

Client Sample ID: Sample Point #2 - Fourth Grab

Lab Sample ID: 440-266640-11

Date Collected: 05/28/20 19:54

Matrix: Water

Date Received: 05/29/20 16:25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.08				SU			05/28/20 19:54	1
Field Temperature	19.90				Celsius			05/28/20 19:54	1

Client Sample ID: Sample Point #2 - 1664A COMPOSITE

Lab Sample ID: 440-266640-12

Date Collected: 05/28/20 19:54

Matrix: Water

Date Received: 05/29/20 16:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		5.2	1.5	mg/L		06/01/20 05:29	06/01/20 09:15	1

Method: Composite - Sample Composite for Organic Extraction

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes				NONE			06/01/20 05:30	1

Method Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	TAL IRV
245.1	Mercury (CVAA)	EPA	TAL IRV
1664A	HEM and SGT-HEM	1664A	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
SM5210B	BOD, 5 Day	SM	TAL IRV
Field Sampling	Field Sampling	EPA	TAL IRV
Composite	Sample Composite for Organic Extraction	None	TAL IRV
1664A	HEM and SGT-HEM (SPE)	1664A	TAL IRV
200.2	Preparation, Total Recoverable Metals	EPA	TAL IRV
245.1	Preparation, Mercury	EPA	TAL IRV

Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Client Sample ID: Sample Point # Point # 1 - composite

Lab Sample ID: 440-266640-1

Date Collected: 05/28/20 20:18

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	610701	06/01/20 07:45	A1M	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			610811	06/01/20 13:17	TQN	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	611228	06/04/20 10:35	MEM	TAL IRV
Total/NA	Analysis	245.1		1			611450	06/04/20 17:25	MEM	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	610913	06/02/20 09:04	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	600 mL	1000 mL	610813	06/01/20 14:09	HTL	TAL IRV
Total/NA	Analysis	SM5210B		1	300 mL	300 mL	610690	05/30/20 10:11	MMP	TAL IRV

Client Sample ID: Sample Point #1 - First Grab

Lab Sample ID: 440-266640-2

Date Collected: 05/28/20 06:50

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 06:50	P1A	TAL IRV

Client Sample ID: Sample Point #1 - Second Grab

Lab Sample ID: 440-266640-3

Date Collected: 05/28/20 11:00

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 11:00	P1A	TAL IRV

Client Sample ID: Sample Point #1 - Third Grab

Lab Sample ID: 440-266640-4

Date Collected: 05/28/20 15:15

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 15:15	P1A	TAL IRV

Client Sample ID: Sample Point #1 - Fourth Grab

Lab Sample ID: 440-266640-5

Date Collected: 05/28/20 19:46

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 19:46	P1A	TAL IRV

Client Sample ID: Sample Point #1 - 1664A COMPOSITE

Lab Sample ID: 440-266640-6

Date Collected: 05/28/20 19:46

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			945 mL	1000 mL	610718	06/01/20 05:29	L1A	TAL IRV
Total/NA	Analysis	1664A		1			610755	06/01/20 09:15	L1A	TAL IRV
Total/NA	Analysis	Composite		1			610719	06/01/20 05:30	L1A	TAL IRV

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Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Client Sample ID: Sample Point #2 - Composite

Lab Sample ID: 440-266640-7

Date Collected: 05/28/20 20:30

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	610701	06/01/20 07:45	A1M	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			610811	06/01/20 13:24	TQN	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	611228	06/04/20 10:35	MEM	TAL IRV
Total/NA	Analysis	245.1		1			611450	06/04/20 17:32	MEM	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	610913	06/02/20 09:04	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	610813	06/01/20 14:09	HTL	TAL IRV
Total/NA	Analysis	SM5210B		1	300 mL	300 mL	610690	05/30/20 10:11	MMP	TAL IRV

Client Sample ID: Sample Point #2 - First Grab

Lab Sample ID: 440-266640-8

Date Collected: 05/28/20 06:58

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 06:58	P1A	TAL IRV

Client Sample ID: Sample Point #2 - Second Grab

Lab Sample ID: 440-266640-9

Date Collected: 05/28/20 11:14

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 11:14	P1A	TAL IRV

Client Sample ID: Sample Point #2 - Third Grab

Lab Sample ID: 440-266640-10

Date Collected: 05/28/20 15:27

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 15:27	P1A	TAL IRV

Client Sample ID: Sample Point #2 - Fourth Grab

Lab Sample ID: 440-266640-11

Date Collected: 05/28/20 19:54

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			611026	05/28/20 19:54	P1A	TAL IRV

Client Sample ID: Sample Point #2 - 1664A COMPOSITE

Lab Sample ID: 440-266640-12

Date Collected: 05/28/20 19:54

Matrix: Water

Date Received: 05/29/20 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			965 mL	1000 mL	610718	06/01/20 05:29	L1A	TAL IRV
Total/NA	Analysis	1664A		1			610755	06/01/20 09:15	L1A	TAL IRV
Total/NA	Analysis	Composite		1			610719	06/01/20 05:30	L1A	TAL IRV

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Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-610701/1-A

Matrix: Water

Analysis Batch: 610811

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 610701

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		06/01/20 07:45	06/01/20 13:13	1
Cadmium	ND		0.0050	0.0025	mg/L		06/01/20 07:45	06/01/20 13:13	1
Chromium	ND		0.0050	0.0025	mg/L		06/01/20 07:45	06/01/20 13:13	1
Copper	ND		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:13	1
Lead	ND		0.0050	0.0038	mg/L		06/01/20 07:45	06/01/20 13:13	1
Molybdenum	ND		0.020	0.010	mg/L		06/01/20 07:45	06/01/20 13:13	1
Nickel	ND		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:13	1
Selenium	ND		0.010	0.0087	mg/L		06/01/20 07:45	06/01/20 13:13	1
Silver	ND		0.010	0.0050	mg/L		06/01/20 07:45	06/01/20 13:13	1
Zinc	ND		0.020	0.012	mg/L		06/01/20 07:45	06/01/20 13:13	1

Lab Sample ID: LCS 440-610701/2-A

Matrix: Water

Analysis Batch: 610811

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 610701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.476		mg/L		95	85 - 115
Cadmium	0.500	0.484		mg/L		97	85 - 115
Chromium	0.500	0.486		mg/L		97	85 - 115
Copper	0.500	0.474		mg/L		95	85 - 115
Lead	0.500	0.483		mg/L		97	85 - 115
Molybdenum	0.500	0.442		mg/L		88	85 - 115
Nickel	0.500	0.487		mg/L		97	85 - 115
Selenium	0.500	0.471		mg/L		94	85 - 115
Silver	0.250	0.230		mg/L		92	85 - 115
Zinc	0.500	0.483		mg/L		97	85 - 115

Lab Sample ID: 440-266640-1 MS

Matrix: Water

Analysis Batch: 610811

Client Sample ID: Sample Point # Point # 1 - composite

Prep Type: Total Recoverable

Prep Batch: 610701

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.500	0.465		mg/L		93	70 - 130
Cadmium	ND		0.500	0.477		mg/L		95	70 - 130
Chromium	ND		0.500	0.479		mg/L		96	70 - 130
Copper	0.022		0.500	0.478		mg/L		91	70 - 130
Lead	ND		0.500	0.477		mg/L		95	70 - 130
Molybdenum	ND		0.500	0.458		mg/L		92	70 - 130
Nickel	ND		0.500	0.486		mg/L		97	70 - 130
Selenium	ND		0.500	0.473		mg/L		95	70 - 130
Silver	ND		0.250	0.229		mg/L		91	70 - 130
Zinc	0.44		0.500	0.920		mg/L		97	70 - 130

Lab Sample ID: 440-266640-1 MSD

Matrix: Water

Analysis Batch: 610811

Client Sample ID: Sample Point # Point # 1 - composite

Prep Type: Total Recoverable

Prep Batch: 610701

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.500	0.479		mg/L		96	70 - 130	3	20

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-266640-1 MSD

Matrix: Water

Analysis Batch: 610811

Client Sample ID: Sample Point # Point # 1 - composite

Prep Type: Total Recoverable

Prep Batch: 610701

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.488		mg/L		98	70 - 130	2	20
Chromium	ND		0.500	0.492		mg/L		98	70 - 130	3	20
Copper	0.022		0.500	0.488		mg/L		93	70 - 130	2	20
Lead	ND		0.500	0.491		mg/L		98	70 - 130	3	20
Molybdenum	ND		0.500	0.473		mg/L		95	70 - 130	3	20
Nickel	ND		0.500	0.497		mg/L		99	70 - 130	2	20
Selenium	ND		0.500	0.477		mg/L		95	70 - 130	1	20
Silver	ND		0.250	0.234		mg/L		93	70 - 130	2	20
Zinc	0.44		0.500	0.921		mg/L		97	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-611228/1-A

Matrix: Water

Analysis Batch: 611450

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 611228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/04/20 10:35	06/04/20 17:21	1

Lab Sample ID: LCS 440-611228/2-A

Matrix: Water

Analysis Batch: 611450

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 611228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00400	0.00419		mg/L		105	85 - 115

Lab Sample ID: 440-266640-1 MS

Matrix: Water

Analysis Batch: 611450

Client Sample ID: Sample Point # Point # 1 - composite

Prep Type: Total/NA

Prep Batch: 611228

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00400	0.00424		mg/L		106	75 - 125

Lab Sample ID: 440-266640-1 MSD

Matrix: Water

Analysis Batch: 611450

Client Sample ID: Sample Point # Point # 1 - composite

Prep Type: Total/NA

Prep Batch: 611228

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00400	0.00432		mg/L		108	75 - 125	2	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-610718/1-A

Matrix: Water

Analysis Batch: 610755

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 610718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		5.0	1.4	mg/L		06/01/20 05:29	06/01/20 09:15	1

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 440-610718/2-A
Matrix: Water
Analysis Batch: 610755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 610718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	40.0	33.50		mg/L		84	78 - 114

Lab Sample ID: LCSD 440-610718/3-A
Matrix: Water
Analysis Batch: 610755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 610718

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
HEM	40.0	36.40		mg/L		91	78 - 114	8	11

Lab Sample ID: 440-266640-6 MS
Matrix: Water
Analysis Batch: 610755

Client Sample ID: Sample Point #1 - 1664A COMPOSITE
Prep Type: Total/NA
Prep Batch: 610718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	2.0	J	41.7	42.40		mg/L		97	78 - 114

Lab Sample ID: 440-266640-6 MSD
Matrix: Water
Analysis Batch: 610755

Client Sample ID: Sample Point #1 - 1664A COMPOSITE
Prep Type: Total/NA
Prep Batch: 610718

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
HEM	2.0	J	42.6	40.96		mg/L		92	78 - 114	3	18

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-610913/1
Matrix: Water
Analysis Batch: 610913

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			06/02/20 09:04	1

Lab Sample ID: LCS 440-610913/2
Matrix: Water
Analysis Batch: 610913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	962		mg/L		96	90 - 110

Lab Sample ID: 440-266640-1 DU
Matrix: Water
Analysis Batch: 610913

Client Sample ID: Sample Point # Point # 1 - composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	12		12.0		mg/L		0	5

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-610813/1
Matrix: Water
Analysis Batch: 610813

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			06/01/20 14:09	1

Lab Sample ID: LCS 440-610813/2
Matrix: Water
Analysis Batch: 610813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	961		mg/L		96	85 - 115

Lab Sample ID: 440-266640-1 DU
Matrix: Water
Analysis Batch: 610813

Client Sample ID: Sample Point # Point # 1 - composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2.7		2.83		mg/L		6	10

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 440-610690/3
Matrix: Water
Analysis Batch: 610690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			05/30/20 10:11	1

Lab Sample ID: LCS 440-610690/7
Matrix: Water
Analysis Batch: 610690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	199	204		mg/L		103	85 - 115

Lab Sample ID: LCSD 440-610690/8
Matrix: Water
Analysis Batch: 610690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biochemical Oxygen Demand	199	207		mg/L		104	85 - 115	1	20

Lab Sample ID: LCSD 440-610690/9
Matrix: Water
Analysis Batch: 610690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biochemical Oxygen Demand	199	211		mg/L		106	85 - 115	3	20

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Method: SM5210B - BOD, 5 Day (Continued)

Lab Sample ID: 440-266640-1 DU
Matrix: Water
Analysis Batch: 610690

Client Sample ID: Sample Point # Point # 1 - composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	5.1		4.74		mg/L		8	20

QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Metals

Prep Batch: 610701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-1	Sample Point # Point # 1 - composite	Total Recoverable	Water	200.2	
440-266640-7	Sample Point #2 - Composite	Total Recoverable	Water	200.2	
MB 440-610701/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 440-610701/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
440-266640-1 MS	Sample Point # Point # 1 - composite	Total Recoverable	Water	200.2	
440-266640-1 MSD	Sample Point # Point # 1 - composite	Total Recoverable	Water	200.2	

Analysis Batch: 610811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-1	Sample Point # Point # 1 - composite	Total Recoverable	Water	200.7 Rev 4.4	610701
440-266640-7	Sample Point #2 - Composite	Total Recoverable	Water	200.7 Rev 4.4	610701
MB 440-610701/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	610701
LCS 440-610701/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	610701
440-266640-1 MS	Sample Point # Point # 1 - composite	Total Recoverable	Water	200.7 Rev 4.4	610701
440-266640-1 MSD	Sample Point # Point # 1 - composite	Total Recoverable	Water	200.7 Rev 4.4	610701

Prep Batch: 611228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-1	Sample Point # Point # 1 - composite	Total/NA	Water	245.1	
440-266640-7	Sample Point #2 - Composite	Total/NA	Water	245.1	
MB 440-611228/1-A	Method Blank	Total/NA	Water	245.1	
LCS 440-611228/2-A	Lab Control Sample	Total/NA	Water	245.1	
440-266640-1 MS	Sample Point # Point # 1 - composite	Total/NA	Water	245.1	
440-266640-1 MSD	Sample Point # Point # 1 - composite	Total/NA	Water	245.1	

Analysis Batch: 611450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-1	Sample Point # Point # 1 - composite	Total/NA	Water	245.1	611228
440-266640-7	Sample Point #2 - Composite	Total/NA	Water	245.1	611228
MB 440-611228/1-A	Method Blank	Total/NA	Water	245.1	611228
LCS 440-611228/2-A	Lab Control Sample	Total/NA	Water	245.1	611228
440-266640-1 MS	Sample Point # Point # 1 - composite	Total/NA	Water	245.1	611228
440-266640-1 MSD	Sample Point # Point # 1 - composite	Total/NA	Water	245.1	611228

General Chemistry

Analysis Batch: 610690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-1	Sample Point # Point # 1 - composite	Total/NA	Water	SM5210B	
440-266640-7	Sample Point #2 - Composite	Total/NA	Water	SM5210B	
USB 440-610690/3	Method Blank	Total/NA	Water	SM5210B	
LCS 440-610690/7	Lab Control Sample	Total/NA	Water	SM5210B	
LCSD 440-610690/8	Lab Control Sample Dup	Total/NA	Water	SM5210B	
LCSD 440-610690/9	Lab Control Sample Dup	Total/NA	Water	SM5210B	
440-266640-1 DU	Sample Point # Point # 1 - composite	Total/NA	Water	SM5210B	

Prep Batch: 610718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-6	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	1664A	
440-266640-12	Sample Point #2 - 1664A COMPOSITE	Total/NA	Water	1664A	
MB 440-610718/1-A	Method Blank	Total/NA	Water	1664A	

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QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

General Chemistry (Continued)

Prep Batch: 610718 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-610718/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 440-610718/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
440-266640-6 MS	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	1664A	
440-266640-6 MSD	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	1664A	

Analysis Batch: 610755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-6	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	1664A	610718
440-266640-12	Sample Point #2 - 1664A COMPOSITE	Total/NA	Water	1664A	610718
MB 440-610718/1-A	Method Blank	Total/NA	Water	1664A	610718
LCS 440-610718/2-A	Lab Control Sample	Total/NA	Water	1664A	610718
LCSD 440-610718/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	610718
440-266640-6 MS	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	1664A	610718
440-266640-6 MSD	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	1664A	610718

Analysis Batch: 610813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-1	Sample Point # Point # 1 - composite	Total/NA	Water	SM 2540D	
440-266640-7	Sample Point #2 - Composite	Total/NA	Water	SM 2540D	
MB 440-610813/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 440-610813/2	Lab Control Sample	Total/NA	Water	SM 2540D	
440-266640-1 DU	Sample Point # Point # 1 - composite	Total/NA	Water	SM 2540D	

Analysis Batch: 610913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-1	Sample Point # Point # 1 - composite	Total/NA	Water	SM 2540C	
440-266640-7	Sample Point #2 - Composite	Total/NA	Water	SM 2540C	
MB 440-610913/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-610913/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-266640-1 DU	Sample Point # Point # 1 - composite	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 611026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-2	Sample Point #1 - First Grab	Total/NA	Water	Field Sampling	
440-266640-3	Sample Point #1 - Second Grab	Total/NA	Water	Field Sampling	
440-266640-4	Sample Point #1 - Third Grab	Total/NA	Water	Field Sampling	
440-266640-5	Sample Point #1 - Fourth Grab	Total/NA	Water	Field Sampling	
440-266640-8	Sample Point #2 - First Grab	Total/NA	Water	Field Sampling	
440-266640-9	Sample Point #2 - Second Grab	Total/NA	Water	Field Sampling	
440-266640-10	Sample Point #2 - Third Grab	Total/NA	Water	Field Sampling	
440-266640-11	Sample Point #2 - Fourth Grab	Total/NA	Water	Field Sampling	

Organic Prep

Analysis Batch: 610719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-266640-6	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	Composite	
440-266640-12	Sample Point #2 - 1664A COMPOSITE	Total/NA	Water	Composite	
440-266640-6 MS	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	Composite	
440-266640-6 MSD	Sample Point #1 - 1664A COMPOSITE	Total/NA	Water	Composite	

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Definitions/Glossary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Carlsbad Energy Center
Project/Site: EWA Waste Water Permit

Job ID: 440-266640-1

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.2	Water	Arsenic
Composite		Water	Composited
Field Sampling		Water	Field pH
Field Sampling		Water	Field Temperature

Form No. CA-C-WI-002. Rev. 4.25. dated 7/8/2019

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 5/28/20

Start Time: 0625
0835

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/22	A0070	10.01	21.9 °C
7 Buffer	Hach	4/23	A0098	7.00	22.1 °C
4 Buffer	Hach	4/24	A0111	4.01	22.6 °C
Slope = <u>-58.93</u> mv/pH		mv/pH reading / 59 mv/pH = <u>100</u> % slope			
off set mv = <u>-23.1 mV</u>					

Potable Water pH		<u>7.52</u>	<u>24.9</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>0650</u>	<u>6.08</u>	<u>25.8</u> °C
Sample Point #2	<u>0658</u>	<u>7.23</u>	<u>24.3</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>0711</u>	<u>7.58</u>	<u>23.2</u> °C
pH 7.0	<u>0711</u>	<u>7.58</u>	<u>23.2</u> °C
	<u>0713</u>	<u>6.99</u>	<u>21.6</u>

Comments: _____

End Time: 0713

Sampling and Analyses by: P. Lopez / A. Kalis

Approved by: Anthony Kalis

2

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 5/28/20

Start Time: 1035

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/22	A0070	10.01	21.0 °C
7 Buffer	Hach	4/23	A0098	7.00	21.0 °C
4 Buffer	Hach	4/24	A0111	4.01	21.2 °C
Slope = <u>58.31</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99.0</u> % slope			
off set mv = <u>-20.5</u>					

Potable Water pH		<u>7.54</u>	<u>21.8</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1100</u>	<u>6.02</u>	<u>26.8</u> °C
Sample Point #2	<u>1114</u>	<u>7.30</u>	<u>25.5</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1157</u>	<u>7.51</u>	<u>22.3</u> °C
pH 7.0	<u>1200</u>	<u>7.02</u>	<u>21.4</u> °C

Comments: _____

End Time: 1200

Sampling and Analyses by: Pedro Lopez

Approved by: Anthony Kalis

3

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 5/28/20

Start Time: 1445

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/22/20	A0070	10.01	22.2 °C
7 Buffer	Hach	4/23	A0098	7.00	22.2 °C
4 Buffer	Hach	4/29	A0111	4.01	22.2 °C
Slope = -58.29 mv/pH		mv/pH reading / 59 mv/pH = 99 % slope			
off set mv = -20.7					

Potable Water pH		7.52	24.3 °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	1515	6.11	27.6 °C
Sample Point #2	1527	7.31	28.0 °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	1556	7.58	25.7 °C
pH 7.0	1559	7.02	23.6 °C

Comments: _____

End Time: 1559

Sampling and Analyses by: Pedro Lopez

Approved by: Anthony Kalis

④

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 5/29/20

Start Time: 0626 ^{AL} 1826

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/22	A0070	10.01	°C
7 Buffer	Hach	4/23	A0098	7.00	°C
4 Buffer	Hach	4/24	A0111	4.01	°C
Slope = <u>-58.29</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99</u> % slope			
off set mv = <u>-20.5</u> mV					

Potable Water pH		<u>7.51</u>	<u>26.0</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>0648</u> ^{AL} 1848	<u>6.21</u>	<u>25.7</u> °C
Sample Point #2	<u>0653</u> 1853	<u>7.21</u>	<u>26.4</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>0658</u>	<u>7.50</u>	<u>24.0</u> °C
pH 7.0	<u>0659</u>	<u>7.02</u>	<u>22.7</u> °C

Comments: _____

End Time: 0659 ^{AL} 1859

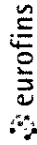
Sampling and Analyses by: Anthony Kalis / Pedro Lopez

Approved by: Anthony Kalis

Chain of Custody Record

Eurofins TestAmerica, Irvine
17461 Derian Avenue
Suite 100

Irvine, CA 92614-5843
phone 949.261.1022 fax 949.260.3299



TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: _____

Project Manager: Anthony Kalis

Client Contact
Carlsbad Energy Center
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: (760) 427-2382
FAX: None
Project Name EWA Quarterly Sampling
Site: Carlsbad Energy Center
PO # - Credit Card

Project Manager: Anthony Kalis
Email: anthony.kalis@nrg.com
Tel/Fax: 760-427-2382 / Fax #: None
Analysis Turnaround Time
☐ CALENDAR DAYS ☒ WORKING DAYS
TAT if different from Below _____
☐ 2 weeks
☒ 1 week
☐ 2 days
☒ 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
Sample Point # 1 - composite	5/8/2020	20:18	C	H2O	8
Sample Point # 1 - First Grab	5/8/2020	6:50	G	H2O	3
Sample Point # 1 - Second Grab	5/8/2020	11:00	G	H2O	3
Sample Point # 1 - Third Grab	5/8/2020	15:15	G	H2O	3
Sample Point # 1 - Fourth Grab	5/8/2020	19:46	G	H2O	3
Sample Point # 2 - composite	5/8/2020	20:30	C	H2O	4
Sample Point # 2 - First Grab	5/8/2020	6:58	G	H2O	3
Sample Point # 2 - Second Grab	5/8/2020	11:14	G	H2O	3
Sample Point # 2 - Third Grab	5/8/2020	15:27	G	H2O	3
Sample Point # 2 - Fourth Grab	5/8/2020	19:54	G	H2O	3

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Custody Seals Intact ☐ Yes ☐ No
Relinquished by: *Anthony Kalis* Date/Time: 5/29/20 12:43
Relinquished by: *EC-JAV* Date/Time: 5/29/20 12:43
Relinquished by: *EC-JAV* Date/Time: 5/29/20 12:43

Form No. CA-C-WI-002, Rev. 4.25, dated 7/8/2019

Login Sample Receipt Checklist

Client: Carlsbad Energy Center

Job Number: 440-266640-1

Login Number: 266640

List Number: 1

Creator: Dolidze, Lado

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

①

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 5/28/20

Start Time: 0625
0835

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/22	A0070	10.01	21.9 °C
7 Buffer	Hach	4/23	A0098	7.00	22.1 °C
4 Buffer	Hach	4/24	A0111	4.01	22.6 °C
Slope = <u>-58.93</u> mv/pH		mv/pH reading / 59 mv/pH = <u>100</u> % slope			
off set mv = <u>-23.1 mV</u>					

Potable Water pH		<u>7.52</u>	<u>24.9</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>0650</u>	<u>6.08</u>	<u>25.8</u> °C
Sample Point #2	<u>0658</u>	<u>7.23</u>	<u>24.3</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>0711</u>	<u>7.58</u>	<u>23.2</u> °C
pH 7.0	<u>0711</u>	<u>7.58</u>	<u>23.2</u> °C
	<u>0713</u>	<u>6.99</u>	<u>21.6</u>

Comments: _____

End Time: 0713

Sampling and Analyses by: P. Lopez / A. Kalis

Approved by: Anthony Kalis

2

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 5/28/20

Start Time: 1035

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/22	A0070	10.01	21.0 °C
7 Buffer	Hach	4/23	A0098	7.00	21.0 °C
4 Buffer	Hach	4/24	A0111	4.01	21.2 °C
Slope = <u>58.31</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99.0</u> % slope			
off set mv = <u>-20.5</u>					

Potable Water pH		<u>7.54</u>	<u>21.8</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1100</u>	<u>6.02</u>	<u>26.8</u> °C
Sample Point #2	<u>1114</u>	<u>7.30</u>	<u>25.5</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1157</u>	<u>7.51</u>	<u>22.3</u> °C
pH 7.0	<u>1200</u>	<u>7.02</u>	<u>21.4</u> °C

Comments: _____

End Time: 1200

Sampling and Analyses by: Pedro Lopez

Approved by: Anthony Kalis

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA SamplingMeter: HACH HQ 40dDate: 5/28/20Start Time: 1445

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/227	A0070	10.01	22.2 °C
7 Buffer	Hach	4/23	A0098	7.00	22.2 °C
4 Buffer	Hach	4/29	A0111	4.01	22.2 °C
Slope = <u>-58.29</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99</u> % slope			
off set mv = <u>-20.7</u>					

Potable Water pH		<u>7.52</u>	<u>24.3</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1515</u>	<u>6.11</u>	<u>27.6</u> °C
Sample Point #2	<u>1527</u>	<u>7.31</u>	<u>28.0</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1556</u>	<u>7.58</u>	<u>25.7</u> °C
pH 7.0	<u>1559</u>	<u>7.02</u>	<u>23.6</u> °C

 Comments: _____

End Time: 1559Sampling and Analyses by: Pedro LopezApproved by: Anthony Kalis

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

4

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 5/29/20

Start Time: 0626 ^{AL} 1826

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	3/22	A0070	10.01	°C
7 Buffer	Hach	4/23	A0098	7.00	°C
4 Buffer	Hach	4/24	A0111	4.01	°C
Slope = <u>-58.29</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99</u> % slope			
off set mv = <u>-20.5</u> mV					

Potable Water pH		<u>7.51</u>	<u>26.0</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>0648</u> ^{AL} 1848	<u>6.21</u>	<u>25.7</u> °C
Sample Point #2	<u>0653</u> 1853	<u>7.21</u>	<u>26.4</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>0658</u>	<u>7.50</u>	<u>24.0</u> °C
pH 7.0	<u>0659</u>	<u>7.02</u>	<u>22.7</u> °C

Comments: _____

End Time: 0659 ^{AL} 1859

Sampling and Analyses by: Anthony Kalis / Pedro Lopez

Approved by: Anthony Kalis



ENCINA WASTEWATER AUTHORITY

6200 AVENIDA ENCINAS, CARLSBAD, CA 92011-0195 TEL:(760)438-3941 FAX:(760)476-9852

REPORT CERTIFICATION

I. INDUSTRIAL USER INFORMATION:

Carlsbad Energy Center LLC



Industrial User Name	4950 Avenida Encinas	Carlsbad	92008	760-710-3943
Facility Address	Carlsbad Energy Center LLC	City	Zip Code	(Area Code) Phone
Owner	Paul Mattesich		Plant Manager	
IU Contact	City of Carlsbad	2405	Title	
Member Agency		Permit #		

II. CERTIFICATION STATEMENT:

All applications, reports or information submitted to the Encina Wastewater Authority must include the following certification statement and be signed as required by a responsible corporate officer, President, Vice President, Manager, CEO or an authorized representative.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

		8/12/20	CARLSBAD
PRESIDENT/VP/GENERAL MGR/CEO		DATE	CITY OR COUNTY
(Print and sign name)			

Carlsbad Energy Center LLC
 4950 Avenida Encinas
 Carlsbad, CA 92008
 Phone: 760-710-3970

August 11, 2020

Mr. Don Little
 Compliance Project Manager
 Encina Wastewater Authority
 6200 Avenida Encinas
 Carlsbad, California 92011

RE: CARLSBAD ENERGY CENTER PROJECT, THIRD QUARTER OF 2020 WASTE WATER SAMPLES

Dear Mr. Little:

Carlsbad Energy Center LLC ("Project Owner") submits the results for the required samples for the Third Quarter of 2020 (3Q2020). This report is submitted in compliance with the table in condition 2 of permit number 2405. The samples were taken on Thursday, July 27, 2020. The following table summarizes the results:

Constituent	Limit	Units	Results		Notes
			Sample Point 1	Sample Point 2	
Arsenic, Total	1.5	mg/L	ND	ND	
Cadmium, Total	0.77	mg/L	ND	ND	
Chromium, Total	3.5	mg/L	ND	ND	
Copper, Total	11	mg/L	0.0084	0.12	
Lead, Total	5.1	mg/L	ND	ND	
Mercury, Total	0.27	mg/L	ND	ND	
Molybdenum, Total	4.1	mg/L	ND	ND	
Nickel, Total	15	mg/L	ND	ND	
Selenium, Total	2.5	mg/L	ND	ND	
Silver, Total	4.2	mg/L	ND	ND	
Zinc, Total	29	mg/L	0.72	0.62	
Oil and Grease (HEM)	400	mg/L	1.5	1.5	
BOD	500	lb/day	0.7	0	Flow - SP1: 3503 gal, SP2: 3944 gal
BOD	N/A	mg/L	2.4	ND	Sample Results for Calc
TDS	N/A	mg/L	46	690	
TSS	500	lb/day	0.117	0.128	Flow - SP1: 3503 gal, SP2: 3944 gal
TSS	N/A	mg/L	4.0	3.9	Sample Results for Calc

If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 573-3802.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'P' followed by a long horizontal stroke.

Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: TestAmerica Lab Report for Waste Water Samples – August 5, 2020
 EWA Report Certification dated August 10, 2020

Cc: File

ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-269530-1

Client Project/Site: EWA Quarterly Sampling

For:

Carlsbad Energy Center
4950 Avenida Encinas
Carlsbad, California 92008

Attn: Anthony Kalis



Authorized for release by:
8/5/2020 4:47:40 PM

Rossina Tomova, Project Manager I
(949)260-3276

Rossina.Tomova@Eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-269530-1	Sample Point # 1-composite	Water	07/27/20 19:40	07/28/20 17:00	
440-269530-2	Sample Point # 1-First Grab	Water	07/27/20 06:18	07/28/20 17:00	
440-269530-3	Sample Point # 1-Second Grab	Water	07/27/20 10:33	07/28/20 17:00	
440-269530-4	Sample Point # 1-Third Grab	Water	07/27/20 14:14	07/28/20 17:00	
440-269530-5	Sample Point # 1-Fourth Grab	Water	07/27/20 18:23	07/28/20 17:00	
440-269530-6	Sample Point # 1-composite 1664	Water	07/27/20 18:23	07/28/20 17:00	
440-269530-7	Sample Point # 2-composite	Water	07/27/20 19:33	07/28/20 17:00	
440-269530-8	Sample Point # 2-First Grab	Water	07/27/20 06:27	07/28/20 17:00	
440-269530-9	Sample Point # 2-Second Grab	Water	07/27/20 10:42	07/28/20 17:00	
440-269530-10	Sample Point # 2-Third Grab	Water	07/27/20 14:24	07/28/20 17:00	
440-269530-11	Sample Point # 2-Fourth Grab	Water	07/27/20 18:31	07/28/20 17:00	
440-269530-12	Sample Point # 2-composite 1664	Water	07/27/20 18:31	07/28/20 17:00	

Case Narrative

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Job ID: 440-269530-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-269530-1

Comments

No additional comments.

Receipt

The samples were received on 7/28/2020 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.0° C and 1.3° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method SM5210B: The method blank result associated with batch 440-618655 was higher than the method-required limit of 0.2 mg/L.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Lab Admin

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Client Sample ID: Sample Point # 1-composite

Date Collected: 07/27/20 19:40

Date Received: 07/28/20 17:00

Lab Sample ID: 440-269530-1

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		08/03/20 08:13	08/03/20 14:09	1
Cadmium	ND		0.0050	0.0025	mg/L		08/03/20 08:13	08/03/20 14:09	1
Chromium	ND		0.0050	0.0025	mg/L		08/03/20 08:13	08/03/20 14:09	1
Copper	0.0084	J	0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:09	1
Lead	ND		0.0050	0.0038	mg/L		08/03/20 08:13	08/03/20 14:09	1
Molybdenum	ND		0.020	0.010	mg/L		08/03/20 08:13	08/03/20 14:09	1
Nickel	ND		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:09	1
Selenium	ND		0.010	0.0087	mg/L		08/03/20 08:13	08/03/20 14:09	1
Silver	ND		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:09	1
Zinc	0.72		0.020	0.012	mg/L		08/03/20 08:13	08/03/20 14:09	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/29/20 13:32	07/29/20 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	46		10	5.0	mg/L			07/31/20 09:18	1
Total Suspended Solids	4.0		1.3	0.67	mg/L			07/28/20 20:26	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.4	b	2.0	2.0	mg/L			07/29/20 15:34	1

Client Sample ID: Sample Point # 1-First Grab

Date Collected: 07/27/20 06:18

Date Received: 07/28/20 17:00

Lab Sample ID: 440-269530-2

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.12				SU			07/27/20 06:18	1
Field Temperature	27.10				Celsius			07/27/20 06:18	1

Client Sample ID: Sample Point # 1-Second Grab

Date Collected: 07/27/20 10:33

Date Received: 07/28/20 17:00

Lab Sample ID: 440-269530-3

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.04				SU			07/27/20 10:33	1
Field Temperature	27.60				Celsius			07/27/20 10:33	1

Client Sample ID: Sample Point # 1-Third Grab

Date Collected: 07/27/20 14:14

Date Received: 07/28/20 17:00

Lab Sample ID: 440-269530-4

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.23				SU			07/27/20 14:14	1
Field Temperature	27.90				Celsius			07/27/20 14:14	1

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Client Sample ID: Sample Point # 1-Fourth Grab

Lab Sample ID: 440-269530-5

Date Collected: 07/27/20 18:23

Matrix: Water

Date Received: 07/28/20 17:00

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.10				SU			07/27/20 18:23	1
Field Temperature	27.40				Celsius			07/27/20 18:23	1

Client Sample ID: Sample Point # 1-composite 1664

Lab Sample ID: 440-269530-6

Date Collected: 07/27/20 18:23

Matrix: Water

Date Received: 07/28/20 17:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	1.5	J	5.2	1.5	mg/L		08/03/20 05:57	08/03/20 08:07	1

Method: Composite - Sample Composite for Organic Extraction

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes				NONE			08/03/20 05:32	1

Client Sample ID: Sample Point # 2-composite

Lab Sample ID: 440-269530-7

Date Collected: 07/27/20 19:33

Matrix: Water

Date Received: 07/28/20 17:00

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		08/03/20 08:13	08/03/20 14:16	1
Cadmium	ND		0.0050	0.0025	mg/L		08/03/20 08:13	08/03/20 14:16	1
Chromium	ND		0.0050	0.0025	mg/L		08/03/20 08:13	08/03/20 14:16	1
Copper	0.12		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:16	1
Lead	ND		0.0050	0.0038	mg/L		08/03/20 08:13	08/03/20 14:16	1
Molybdenum	ND		0.020	0.010	mg/L		08/03/20 08:13	08/03/20 14:16	1
Nickel	ND		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:16	1
Selenium	ND		0.010	0.0087	mg/L		08/03/20 08:13	08/03/20 14:16	1
Silver	ND		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:16	1
Zinc	0.62		0.020	0.012	mg/L		08/03/20 08:13	08/03/20 14:16	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/29/20 13:32	07/29/20 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	690		10	5.0	mg/L			07/31/20 09:18	1
Total Suspended Solids	3.9		1.0	0.50	mg/L			07/28/20 20:26	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			07/29/20 15:34	1

Client Sample ID: Sample Point # 2-First Grab

Lab Sample ID: 440-269530-8

Date Collected: 07/27/20 06:27

Matrix: Water

Date Received: 07/28/20 17:00

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.28				SU			07/27/20 06:27	1
Field Temperature	28.30				Celsius			07/27/20 06:27	1

Eurofins Calscience Irvine

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Client Sample ID: Sample Point # 2-Second Grab

Lab Sample ID: 440-269530-9

Date Collected: 07/27/20 10:42

Matrix: Water

Date Received: 07/28/20 17:00

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.08				SU			07/27/20 10:42	1
Field Temperature	28.90				Celsius			07/27/20 10:42	1

Client Sample ID: Sample Point # 2-Third Grab

Lab Sample ID: 440-269530-10

Date Collected: 07/27/20 14:24

Matrix: Water

Date Received: 07/28/20 17:00

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.03				SU			07/27/20 14:24	1
Field Temperature	29.40				Celsius			07/27/20 14:24	1

Client Sample ID: Sample Point # 2-Fourth Grab

Lab Sample ID: 440-269530-11

Date Collected: 07/27/20 18:31

Matrix: Water

Date Received: 07/28/20 17:00

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.03				SU			07/27/20 18:31	1
Field Temperature	28.40				Celsius			07/27/20 18:31	1

Client Sample ID: Sample Point # 2-composite 1664

Lab Sample ID: 440-269530-12

Date Collected: 07/27/20 18:31

Matrix: Water

Date Received: 07/28/20 17:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	1.5	J	5.1	1.4	mg/L		08/03/20 05:57	08/03/20 08:07	1

Method: Composite - Sample Composite for Organic Extraction

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes				NONE			08/03/20 05:32	1

Method Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	TAL IRV
245.1	Mercury (CVAA)	EPA	TAL IRV
1664A	HEM and SGT-HEM	1664A	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
SM5210B	BOD, 5 Day	SM	TAL IRV
Field Sampling	Field Sampling	EPA	TAL IRV
Composite	Sample Composite for Organic Extraction	None	TAL IRV
1664A	HEM and SGT-HEM (SPE)	1664A	TAL IRV
200.2	Preparation, Total Recoverable Metals	EPA	TAL IRV
245.1	Preparation, Mercury	EPA	TAL IRV

Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Client Sample ID: Sample Point # 1-composite

Lab Sample ID: 440-269530-1

Date Collected: 07/27/20 19:40

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	619093	08/03/20 08:13	M1G	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			619190	08/03/20 14:09	VS	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	618638	07/29/20 13:32	MEM	TAL IRV
Total/NA	Analysis	245.1		1			618788	07/29/20 16:50	EMS	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	618938	07/31/20 09:18	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	750 mL	1000 mL	618509	07/28/20 20:26	HTL	TAL IRV
Total/NA	Analysis	SM5210B		1	300 mL	300 mL	618655	07/29/20 15:34	KYP	TAL IRV

Client Sample ID: Sample Point # 1-First Grab

Lab Sample ID: 440-269530-2

Date Collected: 07/27/20 06:18

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 06:18	P1R	TAL IRV

Client Sample ID: Sample Point # 1-Second Grab

Lab Sample ID: 440-269530-3

Date Collected: 07/27/20 10:33

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 10:33	P1R	TAL IRV

Client Sample ID: Sample Point # 1-Third Grab

Lab Sample ID: 440-269530-4

Date Collected: 07/27/20 14:14

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 14:14	P1R	TAL IRV

Client Sample ID: Sample Point # 1-Fourth Grab

Lab Sample ID: 440-269530-5

Date Collected: 07/27/20 18:23

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 18:23	P1R	TAL IRV

Client Sample ID: Sample Point # 1-composite 1664

Lab Sample ID: 440-269530-6

Date Collected: 07/27/20 18:23

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			955 mL	1000 mL	619071	08/03/20 05:57	L1A	TAL IRV
Total/NA	Analysis	1664A		1			619092	08/03/20 08:07	L1A	TAL IRV
Total/NA	Analysis	Composite		1			619067	08/03/20 05:32	L1A	TAL IRV

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Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Client Sample ID: Sample Point # 2-composite

Lab Sample ID: 440-269530-7

Date Collected: 07/27/20 19:33

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	619093	08/03/20 08:13	M1G	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			619190	08/03/20 14:16	VS	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	618638	07/29/20 13:32	MEM	TAL IRV
Total/NA	Analysis	245.1		1			618788	07/29/20 17:03	EMS	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	618938	07/31/20 09:18	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	618509	07/28/20 20:26	HTL	TAL IRV
Total/NA	Analysis	SM5210B		1	300 mL	300 mL	618655	07/29/20 15:34	KYP	TAL IRV

Client Sample ID: Sample Point # 2-First Grab

Lab Sample ID: 440-269530-8

Date Collected: 07/27/20 06:27

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 06:27	P1R	TAL IRV

Client Sample ID: Sample Point # 2-Second Grab

Lab Sample ID: 440-269530-9

Date Collected: 07/27/20 10:42

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 10:42	P1R	TAL IRV

Client Sample ID: Sample Point # 2-Third Grab

Lab Sample ID: 440-269530-10

Date Collected: 07/27/20 14:24

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 14:24	P1R	TAL IRV

Client Sample ID: Sample Point # 2-Fourth Grab

Lab Sample ID: 440-269530-11

Date Collected: 07/27/20 18:31

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			618870	07/27/20 18:31	P1R	TAL IRV

Client Sample ID: Sample Point # 2-composite 1664

Lab Sample ID: 440-269530-12

Date Collected: 07/27/20 18:31

Matrix: Water

Date Received: 07/28/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			985 mL	1000 mL	619071	08/03/20 05:57	L1A	TAL IRV
Total/NA	Analysis	1664A		1			619092	08/03/20 08:07	L1A	TAL IRV
Total/NA	Analysis	Composite		1			619067	08/03/20 05:32	L1A	TAL IRV

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Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-619093/1-A

Matrix: Water

Analysis Batch: 619190

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 619093

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		08/03/20 08:13	08/03/20 14:04	1
Cadmium	ND		0.0050	0.0025	mg/L		08/03/20 08:13	08/03/20 14:04	1
Chromium	ND		0.0050	0.0025	mg/L		08/03/20 08:13	08/03/20 14:04	1
Copper	ND		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:04	1
Lead	ND		0.0050	0.0038	mg/L		08/03/20 08:13	08/03/20 14:04	1
Molybdenum	ND		0.020	0.010	mg/L		08/03/20 08:13	08/03/20 14:04	1
Nickel	ND		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:04	1
Selenium	ND		0.010	0.0087	mg/L		08/03/20 08:13	08/03/20 14:04	1
Silver	ND		0.010	0.0050	mg/L		08/03/20 08:13	08/03/20 14:04	1
Zinc	ND		0.020	0.012	mg/L		08/03/20 08:13	08/03/20 14:04	1

Lab Sample ID: LCS 440-619093/2-A

Matrix: Water

Analysis Batch: 619190

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 619093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.496		mg/L		99	85 - 115
Cadmium	0.500	0.494		mg/L		99	85 - 115
Chromium	0.500	0.495		mg/L		99	85 - 115
Copper	0.500	0.492		mg/L		98	85 - 115
Lead	0.500	0.493		mg/L		99	85 - 115
Molybdenum	0.500	0.483		mg/L		97	85 - 115
Nickel	0.500	0.498		mg/L		100	85 - 115
Selenium	0.500	0.495		mg/L		99	85 - 115
Silver	0.250	0.244		mg/L		97	85 - 115
Zinc	0.500	0.493		mg/L		99	85 - 115

Lab Sample ID: 440-269530-1 MS

Matrix: Water

Analysis Batch: 619190

Client Sample ID: Sample Point # 1-composite

Prep Type: Total Recoverable

Prep Batch: 619093

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.500	0.483		mg/L		97	70 - 130
Cadmium	ND		0.500	0.486		mg/L		97	70 - 130
Chromium	ND		0.500	0.488		mg/L		98	70 - 130
Copper	0.0084	J	0.500	0.503		mg/L		99	70 - 130
Lead	ND		0.500	0.486		mg/L		97	70 - 130
Molybdenum	ND		0.500	0.484		mg/L		97	70 - 130
Nickel	ND		0.500	0.492		mg/L		98	70 - 130
Selenium	ND		0.500	0.486		mg/L		97	70 - 130
Silver	ND		0.250	0.242		mg/L		97	70 - 130
Zinc	0.72		0.500	1.20		mg/L		96	70 - 130

Lab Sample ID: 440-269530-1 MSD

Matrix: Water

Analysis Batch: 619190

Client Sample ID: Sample Point # 1-composite

Prep Type: Total Recoverable

Prep Batch: 619093

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.500	0.487		mg/L		97	70 - 130	1	20

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-269530-1 MSD

Matrix: Water

Analysis Batch: 619190

Client Sample ID: Sample Point # 1-composite

Prep Type: Total Recoverable

Prep Batch: 619093

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.486		mg/L		97	70 - 130	0	20
Chromium	ND		0.500	0.494		mg/L		99	70 - 130	1	20
Copper	0.0084	J	0.500	0.503		mg/L		99	70 - 130	0	20
Lead	ND		0.500	0.487		mg/L		97	70 - 130	0	20
Molybdenum	ND		0.500	0.485		mg/L		97	70 - 130	0	20
Nickel	ND		0.500	0.489		mg/L		98	70 - 130	1	20
Selenium	ND		0.500	0.493		mg/L		99	70 - 130	1	20
Silver	ND		0.250	0.241		mg/L		97	70 - 130	0	20
Zinc	0.72		0.500	1.20		mg/L		98	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-618638/1-A

Matrix: Water

Analysis Batch: 618788

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 618638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/29/20 13:32	07/29/20 16:46	1

Lab Sample ID: LCS 440-618638/2-A

Matrix: Water

Analysis Batch: 618788

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 618638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00400	0.00411		mg/L		103	85 - 115

Lab Sample ID: 440-269530-1 MS

Matrix: Water

Analysis Batch: 618788

Client Sample ID: Sample Point # 1-composite

Prep Type: Total/NA

Prep Batch: 618638

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00400	0.00414		mg/L		103	75 - 125

Lab Sample ID: 440-269530-1 MSD

Matrix: Water

Analysis Batch: 618788

Client Sample ID: Sample Point # 1-composite

Prep Type: Total/NA

Prep Batch: 618638

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00400	0.00396		mg/L		99	75 - 125	4	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-619071/1-A

Matrix: Water

Analysis Batch: 619092

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 619071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		5.0	1.4	mg/L		08/03/20 05:57	08/03/20 08:07	1

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 440-619071/2-A
Matrix: Water
Analysis Batch: 619092

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 619071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	40.0	37.40		mg/L		93	78 - 114

Lab Sample ID: LCSD 440-619071/3-A
Matrix: Water
Analysis Batch: 619092

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 619071

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
HEM	40.0	36.90		mg/L		92	78 - 114	1	11

Lab Sample ID: 440-269530-6 MS
Matrix: Water
Analysis Batch: 619092

Client Sample ID: Sample Point # 1-composite 1664
Prep Type: Total/NA
Prep Batch: 619071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	1.5	J	41.9	39.27		mg/L		94	78 - 114

Lab Sample ID: 440-269530-6 MSD
Matrix: Water
Analysis Batch: 619092

Client Sample ID: Sample Point # 1-composite 1664
Prep Type: Total/NA
Prep Batch: 619071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
HEM	1.5	J	43.0	39.57		mg/L		92	78 - 114	1	18

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-618938/1
Matrix: Water
Analysis Batch: 618938

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			07/31/20 09:18	1

Lab Sample ID: LCS 440-618938/2
Matrix: Water
Analysis Batch: 618938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	972		mg/L		97	90 - 110

Lab Sample ID: 440-269530-1 DU
Matrix: Water
Analysis Batch: 618938

Client Sample ID: Sample Point # 1-composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	46		45.0		mg/L		2	5

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-618509/1
Matrix: Water
Analysis Batch: 618509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			07/28/20 20:26	1

Lab Sample ID: LCS 440-618509/2
Matrix: Water
Analysis Batch: 618509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	944		mg/L		94	85 - 115

Lab Sample ID: 440-269530-1 DU
Matrix: Water
Analysis Batch: 618509

Client Sample ID: Sample Point # 1-composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	4.0		4.13		mg/L		3	10

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 440-618655/3
Matrix: Water
Analysis Batch: 618655

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			07/29/20 15:34	1

Lab Sample ID: LCS 440-618655/7
Matrix: Water
Analysis Batch: 618655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	199	171		mg/L		86	85 - 115

Lab Sample ID: LCSD 440-618655/8
Matrix: Water
Analysis Batch: 618655

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biochemical Oxygen Demand	199	190		mg/L		96	85 - 115	11	20

Lab Sample ID: LCSD 440-618655/9
Matrix: Water
Analysis Batch: 618655

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biochemical Oxygen Demand	199	191		mg/L		96	85 - 115	11	20

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Method: SM5210B - BOD, 5 Day (Continued)

Lab Sample ID: 440-269530-1 DU

Matrix: Water

Analysis Batch: 618655

Client Sample ID: Sample Point # 1-composite

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	2.4	b	2.34		mg/L		2	20

QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Metals

Prep Batch: 618638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-1	Sample Point # 1-composite	Total/NA	Water	245.1	
440-269530-7	Sample Point # 2-composite	Total/NA	Water	245.1	
MB 440-618638/1-A	Method Blank	Total/NA	Water	245.1	
LCS 440-618638/2-A	Lab Control Sample	Total/NA	Water	245.1	
440-269530-1 MS	Sample Point # 1-composite	Total/NA	Water	245.1	
440-269530-1 MSD	Sample Point # 1-composite	Total/NA	Water	245.1	

Analysis Batch: 618788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-1	Sample Point # 1-composite	Total/NA	Water	245.1	618638
440-269530-7	Sample Point # 2-composite	Total/NA	Water	245.1	618638
MB 440-618638/1-A	Method Blank	Total/NA	Water	245.1	618638
LCS 440-618638/2-A	Lab Control Sample	Total/NA	Water	245.1	618638
440-269530-1 MS	Sample Point # 1-composite	Total/NA	Water	245.1	618638
440-269530-1 MSD	Sample Point # 1-composite	Total/NA	Water	245.1	618638

Prep Batch: 619093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-1	Sample Point # 1-composite	Total Recoverable	Water	200.2	
440-269530-7	Sample Point # 2-composite	Total Recoverable	Water	200.2	
MB 440-619093/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 440-619093/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
440-269530-1 MS	Sample Point # 1-composite	Total Recoverable	Water	200.2	
440-269530-1 MSD	Sample Point # 1-composite	Total Recoverable	Water	200.2	

Analysis Batch: 619190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-1	Sample Point # 1-composite	Total Recoverable	Water	200.7 Rev 4.4	619093
440-269530-7	Sample Point # 2-composite	Total Recoverable	Water	200.7 Rev 4.4	619093
MB 440-619093/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	619093
LCS 440-619093/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	619093
440-269530-1 MS	Sample Point # 1-composite	Total Recoverable	Water	200.7 Rev 4.4	619093
440-269530-1 MSD	Sample Point # 1-composite	Total Recoverable	Water	200.7 Rev 4.4	619093

General Chemistry

Analysis Batch: 618509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-1	Sample Point # 1-composite	Total/NA	Water	SM 2540D	
440-269530-7	Sample Point # 2-composite	Total/NA	Water	SM 2540D	
MB 440-618509/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 440-618509/2	Lab Control Sample	Total/NA	Water	SM 2540D	
440-269530-1 DU	Sample Point # 1-composite	Total/NA	Water	SM 2540D	

Analysis Batch: 618655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-1	Sample Point # 1-composite	Total/NA	Water	SM5210B	
440-269530-7	Sample Point # 2-composite	Total/NA	Water	SM5210B	
USB 440-618655/3	Method Blank	Total/NA	Water	SM5210B	
LCS 440-618655/7	Lab Control Sample	Total/NA	Water	SM5210B	
LCSD 440-618655/8	Lab Control Sample Dup	Total/NA	Water	SM5210B	

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QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

General Chemistry (Continued)

Analysis Batch: 618655 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 440-618655/9	Lab Control Sample Dup	Total/NA	Water	SM5210B	
440-269530-1 DU	Sample Point # 1-composite	Total/NA	Water	SM5210B	

Analysis Batch: 618938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-1	Sample Point # 1-composite	Total/NA	Water	SM 2540C	
440-269530-7	Sample Point # 2-composite	Total/NA	Water	SM 2540C	
MB 440-618938/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-618938/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-269530-1 DU	Sample Point # 1-composite	Total/NA	Water	SM 2540C	

Prep Batch: 619071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-6	Sample Point # 1-composite 1664	Total/NA	Water	1664A	
440-269530-12	Sample Point # 2-composite 1664	Total/NA	Water	1664A	
MB 440-619071/1-A	Method Blank	Total/NA	Water	1664A	
LCS 440-619071/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 440-619071/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
440-269530-6 MS	Sample Point # 1-composite 1664	Total/NA	Water	1664A	
440-269530-6 MSD	Sample Point # 1-composite 1664	Total/NA	Water	1664A	

Analysis Batch: 619092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-6	Sample Point # 1-composite 1664	Total/NA	Water	1664A	619071
440-269530-12	Sample Point # 2-composite 1664	Total/NA	Water	1664A	619071
MB 440-619071/1-A	Method Blank	Total/NA	Water	1664A	619071
LCS 440-619071/2-A	Lab Control Sample	Total/NA	Water	1664A	619071
LCSD 440-619071/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	619071
440-269530-6 MS	Sample Point # 1-composite 1664	Total/NA	Water	1664A	619071
440-269530-6 MSD	Sample Point # 1-composite 1664	Total/NA	Water	1664A	619071

Field Service / Mobile Lab

Analysis Batch: 618870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-2	Sample Point # 1-First Grab	Total/NA	Water	Field Sampling	
440-269530-3	Sample Point # 1-Second Grab	Total/NA	Water	Field Sampling	
440-269530-4	Sample Point # 1-Third Grab	Total/NA	Water	Field Sampling	
440-269530-5	Sample Point # 1-Fourth Grab	Total/NA	Water	Field Sampling	
440-269530-8	Sample Point # 2-First Grab	Total/NA	Water	Field Sampling	
440-269530-9	Sample Point # 2-Second Grab	Total/NA	Water	Field Sampling	
440-269530-10	Sample Point # 2-Third Grab	Total/NA	Water	Field Sampling	
440-269530-11	Sample Point # 2-Fourth Grab	Total/NA	Water	Field Sampling	

Organic Prep

Analysis Batch: 619067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-269530-6	Sample Point # 1-composite 1664	Total/NA	Water	Composite	
440-269530-12	Sample Point # 2-composite 1664	Total/NA	Water	Composite	
440-269530-6 MS	Sample Point # 1-composite 1664	Total/NA	Water	Composite	
440-269530-6 MSD	Sample Point # 1-composite 1664	Total/NA	Water	Composite	

Eurofins Calscience Irvine

Definitions/Glossary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-269530-1

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.


Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Composite		Water	Composited
Field Sampling		Water	Field pH
Field Sampling		Water	Field Temperature


$$V = \{f_1, \dots, f_n, f_{n+1}, \dots, f_{n+m}\} \quad (1)$$
Regulatory Program: ☐ DOW ☐ NPDES ☐ RCRA ☒ Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact		Project Manager: Anthony Kalis		Site Contact: Anthony Kalis		Date: 7/27/2020		COC No:	
Carlsbad Energy Center		Email: anthony.kalis@nrg.com		Lab Contact: Rossina Tomova		Carrier:		1 of 1 COCs	
4950 Avenida Encinas		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y / N) 2007 - (WOD) California Permit Manual 245.1 - Hg 2640D - TSS; SM5210B_BOD Calc-BOD, 5 Day 2640C_Calcd-TDS 1664A - Oil & Grease (HEM Only) Field pH		 440-269530 Chain of Custody		TALS Project #	
Carlsbad, CA 92008		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS						Sampler: Anthony Kalis	
Phone (760) 427-2382		TAT if different from Below _____						For Lab Use Only:	
FAX - None		<input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day						Walk-in Client: Lab Sampling:	
Project Name EWA Quarterly Sampling		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix	
Site Carlsbad Energy Center		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix	
PO #		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix	
Sample Point # Point # 1 - composite		7/27/2020		19:40		C		H2O	
Sample Point # 1 - First Grab		7/27/2020		6:18		G		H2O	
Sample Point # 1 - Second Grab		7/27/2020		10:33		G		H2O	
Sample Point # 1 - Third Grab		7/27/2020		14:14		G		H2O	
Sample Point # 1 - Fourth Grab		7/27/2020		18:23		G		H2O	
Sample Point # 2 - composite		7/27/2020		19:33		C		H2O	
Sample Point # 2 - First Grab		7/27/2020		6:27		G		H2O	
Sample Point # 2 - Second Grab		7/27/2020		10:42		G		H2O	
Sample Point # 2 - Third Grab		7/27/2020		14:24		G		H2O	
Sample Point # 2 - Fourth Grab		7/27/2020		18:31		G		H2O	
Sample Point # 1 Time		Sample Point # 2 Time		Sample Point # 1 Time		Sample Point # 2 Time		Sample Point # 1 Time	
Field pH 1		6.12 pH/27 1°C @ 0618		7.28 pH/28 3°C @ 0627		7.08 pH/28.9°C @ 1042		7.03 pH/29.4°C @ 1424	
Field pH 2		6.04 pH/27 6°C @ 1033		7.08 pH/28.9°C @ 1042		7.03 pH/29.4°C @ 1424		7.03 pH/28.4°C @ 1831	
Field pH 3		6.23 pH/27 9°C @ 1414		7.03 pH/29.4°C @ 1424		7.03 pH/28.4°C @ 1831			
Field pH 4		6.10 pH/27 4°C @ 1823		7.03 pH/28.4°C @ 1831					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other		1/4		1		1		1/2	
Possible Hazard Identification:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return to Client		Disposal by Lab		Archive for _____ Months	
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.									
<input checked="" type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No		Cooler Temp (°C): Obs'd		Corr'd:		Therm ID No.	
Relinquished by: Anthony Kalis		Company: NRG		Date/Time: 7/28/20 1140		Received by: William Rivera		Company: EC-IRV	
Relinquished by: William Rivera		Company: EC-IRV		Date/Time: 7/28/20 1700		Received by: [Signature]		Company: EC-IRV	
Relinquished by:		Company:		Date/Time:		Received in Laboratory:		Company: EC-IRV	

Login Sample Receipt Checklist

Client: Carlsbad Energy Center

Job Number: 440-269530-1

SDG Number:

Login Number: 269530

List Number: 1

Creator: Escalante, Maria I

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins TestAmerica, Irvine

17461 Derian Avenue

Suite 100

Irvine, CA 92614-5843

phone 949.261.1022 fax 949.260.3299

Chain of Custody Record

Environment Testing
TestAmericaRegulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact		Project Manager: Anthony Kalis		Site Contact: Anthony Kalis		Date: 7/27/2020		COC No:												
Carlsbad Energy Center		Email: anthony.kalis@nrg.com		Lab Contact: Rossina Tomova		Carrier:		1 of 1 COCs												
4950 Avenida Encinas		Tel/Fax: 760-427-2382 / Fax #: None						TALS Project #:												
Carlsbad, CA 92008		Analysis Turnaround Time						Sampler: Anthony Kalis												
Phone: (760) 427-2382		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS						For Lab Use Only:												
FAX - None		TAT if different from Below _____						Walk-in Client:												
Project Name: EWA Quarterly Sampling		<input type="checkbox"/> 2 weeks						Lab Sampling:												
Site: Carlsbad Energy Center		<input checked="" type="checkbox"/> 1 week																		
PO #		<input type="checkbox"/> 2 days						Job / SDG No.:												
		<input checked="" type="checkbox"/> 1 day																		
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.1 - (WOB) California Admin Manual	245.1 - Hg	2540D - TSS;	SM5210B_BOD Calc-BOD, 5 Day	2540C_Calc-TDS	1664A - Oil & Grease (HEM Only)	Field pH	Sample Specific Notes:				
Sample Point # Point # 1 - composite		7/27/2020	19:40	C	H2O	8	N	Y	X - 2	X - 4	X - 2									
Sample Point # 1 - First Grab		7/27/2020	6:18	G	H2O	3								X	X		Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.			
Sample Point # 1 - Second Grab		7/27/2020	10:33	G	H2O	3								X	X					
Sample Point # 1 - Third Grab		7/27/2020	14:14	G	H2O	3								X	X					
Sample Point # 1 - Fourth Grab		7/27/2020	18:23	G	H2O	3								X	X					
Sample Point # 2 - composite		7/27/2020	19:33	C	H2O	4	N	N	X	X - 2	X									
Sample Point # 2 - First Grab		7/27/2020	6:27	G	H2O	3								X	X		Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.			
Sample Point # 2 - Second Grab		7/27/2020	10:42	G	H2O	3								X	X					
Sample Point # 2 - Third Grab		7/27/2020	14:24	G	H2O	3								X	X					
Sample Point # 2 - Fourth Grab		7/27/2020	18:31	G	H2O	3								X	X					
																	Sample Point # 1/ Time			
																	Sample Point # 2/ time			
																	Field pH 1 6.12 pH/27.1°C @ 0618 7.28 pH/28.3°C @ 0627			
																	Field pH 2 6.04 pH/27.6°C @ 1033 7.08 pH/28.9°C @ 1042			
																	Field pH 3 6.23 pH/27.9°C @ 1414 7.03 pH/29.4°C @ 1424			
																	Field pH 4 6.10 pH/27.4°C @ 1823 7.03 pH/28.4°C @ 1831			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								1/4	1	1	1/2									
Possible Hazard Identification:								Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.																				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown								<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months												
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No																				
Relinquished by: Anthony Kalis				Custody Seal No.: NR6				Date/Time: 7/28/20 1140				Received by: William Rivera				Company: EC-IRV				
Relinquished by:				Company:				Date/Time:				Received by:				Company:				
Relinquished by:				Company:				Date/Time:				Received in Laboratory by:				Company:				

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 7/27/20

Start Time: 0530

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	Feb / 21	A0044	10.01	21.1 ^{°C}
7 Buffer	Hach	Feb / 22	A0058	7.00	21.9 ^{°C}
4 Buffer	Hach	March / 24	A0062	4.01	21.4 ^{°C}
Slope = <u>-58.50</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99</u> % slope			
off set mv = <u>5.1 mV</u>					

Potable Water pH		<u>7.41</u>	<u>24.1</u> °C
------------------	--	-------------	----------------

Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>0618</u>	<u>6.12</u>	<u>27.1</u> °C
Sample Point #2	<u>0627</u>	<u>7.28</u>	<u>28.3</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>0633</u>	<u>7.33</u>	<u>29.3</u> °C
pH 7.0	<u>0635</u>	<u>7.01</u>	<u>21.5</u> °C

Comments: _____

End Time: 0636

Sampling and Analyses by: Anthony Kalis

Approved by: Anthony Kalis

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 7/27/20

Start Time: 1008

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	Feb/21	A0044	10.01	20.8 °C
7 Buffer	Hach	Feb/22	A0058	7.00	21.2 °C
4 Buffer	Hach	march/24	A0062	4.01	20.9 °C
Slope = <u>-58.35</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99</u> % slope			
off set mv = <u>5.1 mV</u>					

Potable Water pH		<u>7.57</u>	<u>24.1</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1033</u>	<u>6.04</u>	<u>27.6</u> °C
Sample Point #2	<u>1042</u>	<u>7.08</u>	<u>28.9</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1049</u>	<u>7.53</u>	<u>24.4</u> °C
pH 7.0	<u>1051</u>	<u>7.02</u>	<u>20.9</u> °C

Comments: _____

End Time: 1052

Sampling and Analyses by: Anthony Kalis

Approved by: Anthony Kalis

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 7/27/20

Start Time: 1350

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	<u>Feb/21</u>	<u>A0044</u>	<u>10.01</u>	<u>20.4</u> °C
7 Buffer	Hach	<u>Feb/22</u>	<u>A0058</u>	<u>7.00</u>	<u>20.7</u> °C
4 Buffer	Hach	<u>March/24</u>	<u>A0062</u>	<u>4.01</u>	<u>20.6</u> °C
Slope = <u>58.43</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99</u> % slope			
off set mv = <u>6.0</u>					

Potable Water pH		<u>7.50</u>	<u>23.5</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1414</u>	<u>6.23</u>	<u>27.9</u> °C
Sample Point #2	<u>1424</u>	<u>7.03</u>	<u>29.4</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1435</u>	<u>7.52</u>	<u>23.9</u> °C
pH 7.0	<u>1437</u>	<u>7.02</u>	<u>21.4</u> °C

Comments: _____

End Time: 1437

Sampling and Analyses by: Pedro Lopez

Approved by: Anthony Valis

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 07/27/20

Start Time: 1745

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	Feb/21	A0044	10.01	22.2 °C
7 Buffer	Hach	Feb/22	A0058	7.00	21.9 °C
4 Buffer	Hach	March/24	A0062	4.01	22.2 °C
Slope = <u>58.23</u> mv/pH		mv/pH reading / 59 mv/pH = <u>98</u> % slope			
off set mv = <u>5.4</u>					

Potable Water pH		<u>7.58</u>	<u>22.9</u> °C
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Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1823</u>	<u>6.10</u>	<u>22.4</u> °C
Sample Point #2	<u>1831</u>	<u>7.03</u>	<u>28.4</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1838</u>	<u>7.53</u>	<u>28.5</u> °C
pH 7.0	<u>1840</u>	<u>7.02</u>	<u>22.3</u> °C

Comments: _____

End Time: 1840

Sampling and Analyses by: Anthony Kalis

Approved by: Anthony Kalis

November 6, 2020

Carlsbad Energy Center LLC

4950 Avenida Encinas

Carlsbad, CA 92008

Phone: 760-710-3970

Mr. Don Little

Compliance Project Manager

Encina Wastewater Authority

6200 Avenida Encinas

Carlsbad, California 92011

RE: CARLSBAD ENERGY CENTER PROJECT, FOURTH QUARTER OF 2020 WASTE WATER SAMPLES

Dear Mr. Little:

Carlsbad Energy Center LLC ("Project Owner") submits the results for the required samples for the Fourth Quarter of 2020 (4Q2020). This report is submitted in compliance with the table in condition 2 of permit number 2405. The samples were taken on Wednesday, October 21, 2020. The following table summarizes the results:

Constituent	Limit	Units	Results		Notes
			Sample Point 1	Sample Point 2	
Arsenic, Total	1.5	mg/L	ND	ND	
Cadmium, Total	0.77	mg/L	ND	ND	
Chromium, Total	3.5	mg/L	ND	ND	
Copper, Total	11	mg/L	ND	0.018	
Lead, Total	5.1	mg/L	ND	ND	
Mercury, Total	0.27	mg/L	ND	ND	
Molybdenum, Total	4.1	mg/L	ND	ND	
Nickel, Total	15	mg/L	ND	ND	
Selenium, Total	2.5	mg/L	ND	ND	
Silver, Total	4.2	mg/L	ND	ND	
Zinc, Total	29	mg/L	0.15	0.22	
Oil and Grease (HEM)	400	mg/L	2.7	ND	
BOD	500	lb/day	0.095	0	Flow - SP1: 3464 gal, SP2: 2607 gal
BOD	N/A	mg/L	3.3	ND	Sample Results for Calc
TDS	N/A	mg/L	ND	97	
TSS	500	lb/day	0.072	0.013	Flow - SP1: 3464 gal, SP2: 2607 gal
TSS	N/A	mg/L	2.5	0.6	Sample Results for Calc
pH	5.5- 12		5.76	6.85	
pH	5.5- 12		5.69	6.80	
pH	5.5- 12		5.82	6.87	
pH	5.5- 12		5.79	6.90	

If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 573-3802.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'P' followed by a long horizontal stroke that loops back to the left.

Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: TestAmerica Lab Report for Waste Water Samples – October 29, 2020
 EWA Report Certification dated November 6, 2020

Cc: File



ENCINA WASTEWATER AUTHORITY

6200 AVENIDA ENCINAS, CARLSBAD, CA 92011-0195 TEL: (760) 438-3941 FAX: (760) 476-9852

REPORT CERTIFICATION

I. INDUSTRIAL USER INFORMATION:

Carlsbad Energy Center LLC

Industrial User Name 4950 Avenida Encinas	Carlsbad	92008	760-710-3943
Facility Address Carlsbad Energy Center LLC	City	Zip Code	(Area Code) Phone
Owner Paul Mattesich		Plant Manager	
IU Contact City of Carlsbad	2405	Title	
Member Agency	Permit #		

II. CERTIFICATION STATEMENT:

All applications, reports or information submitted to the Encina Wastewater Authority must include the following certification statement and be signed as required by a responsible corporate officer, President, Vice President, Manager, CEO or an authorized representative.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

PRESIDENT/VP/GENERAL MGR/CEO
(Print and sign name)

11/9/20

DATE

CARLSBAD

CITY OR COUNTY

ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-273653-1

Client Project/Site: EWA Quarterly Sampling

For:

Carlsbad Energy Center
4950 Avenida Encinas
Carlsbad, California 92008

Attn: Anthony Kalis



Authorized for release by:
10/29/2020 11:56:51 AM

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LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-273653-1	Sample Point #1-Composite	Water	10/21/20 18:15	10/22/20 17:22	
440-273653-2	Sample Point #1-First Grab	Water	10/21/20 05:50	10/22/20 17:22	
440-273653-3	Sample Point #1-Second Grab	Water	10/21/20 10:13	10/22/20 17:22	
440-273653-4	Sample Point #1-Third Grab	Water	10/21/20 13:52	10/22/20 17:22	
440-273653-5	Sample Point #1-Fourth Grab	Water	10/21/20 17:10	10/22/20 17:22	
440-273653-6	Sample Point #1-Composite 1664	Water	10/21/20 17:10	10/22/20 17:22	
440-273653-7	Sample Point #2-Composite	Water	10/21/20 18:22	10/22/20 17:22	
440-273653-8	Sample Point #2--First Grab	Water	10/21/20 06:10	10/22/20 17:22	
440-273653-9	Sample Point #2--Second Grab	Water	10/21/20 10:21	10/22/20 17:22	
440-273653-10	Sample Point #2--Third Grab	Water	10/21/20 14:00	10/22/20 17:22	
440-273653-11	Sample Point #2--Fourth Grab	Water	10/21/20 17:23	10/22/20 17:22	
440-273653-12	Sample Point #2-Composite 1664	Water	10/21/20 17:23	10/22/20 17:22	

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Client Sample ID: Sample Point #1-Composite

Lab Sample ID: 440-273653-1

Date Collected: 10/21/20 18:15

Matrix: Water

Date Received: 10/22/20 17:22

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		10/26/20 08:17	10/26/20 14:15	1
Cadmium	ND		0.0050	0.0025	mg/L		10/26/20 08:17	10/26/20 14:15	1
Chromium	ND		0.0050	0.0025	mg/L		10/26/20 08:17	10/26/20 14:15	1
Copper	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:15	1
Lead	ND		0.0050	0.0038	mg/L		10/26/20 08:17	10/26/20 14:15	1
Molybdenum	ND		0.020	0.010	mg/L		10/26/20 08:17	10/26/20 14:15	1
Nickel	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:15	1
Selenium	ND		0.010	0.0087	mg/L		10/26/20 08:17	10/26/20 14:15	1
Silver	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:15	1
Zinc	0.15		0.020	0.012	mg/L		10/26/20 08:17	10/26/20 14:15	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		10/27/20 12:10	10/27/20 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			10/27/20 10:01	1
Total Suspended Solids	2.5		1.0	0.50	mg/L			10/23/20 16:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	3.3		2.0	2.0	mg/L			10/22/20 18:17	1

Client Sample ID: Sample Point #1-First Grab

Lab Sample ID: 440-273653-2

Date Collected: 10/21/20 05:50

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.76				SU			10/21/20 05:50	1
Field Temperature	29.00				Celsius			10/21/20 05:50	1

Client Sample ID: Sample Point #1-Second Grab

Lab Sample ID: 440-273653-3

Date Collected: 10/21/20 10:13

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.69				SU			10/21/20 10:13	1
Field Temperature	29.30				Celsius			10/21/20 10:13	1

Client Sample ID: Sample Point #1-Third Grab

Lab Sample ID: 440-273653-4

Date Collected: 10/21/20 13:52

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.82				SU			10/21/20 13:52	1
Field Temperature	30.20				Celsius			10/21/20 13:52	1

Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Client Sample ID: Sample Point #1-Fourth Grab

Lab Sample ID: 440-273653-5

Date Collected: 10/21/20 17:10

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.79				SU			10/21/20 17:10	1
Field Temperature	29.20				Celsius			10/21/20 17:10	1

Client Sample ID: Sample Point #1-Composite 1664

Lab Sample ID: 440-273653-6

Date Collected: 10/21/20 17:10

Matrix: Water

Date Received: 10/22/20 17:22

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	2.7	J	5.1	1.4	mg/L		10/23/20 05:48	10/23/20 05:48	1

Method: Composite - Sample Composite for Organic Extraction

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes				NONE			10/23/20 05:31	1

Client Sample ID: Sample Point #2-Composite

Lab Sample ID: 440-273653-7

Date Collected: 10/21/20 18:22

Matrix: Water

Date Received: 10/22/20 17:22

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		10/26/20 08:17	10/26/20 14:23	1
Cadmium	ND		0.0050	0.0025	mg/L		10/26/20 08:17	10/26/20 14:23	1
Chromium	ND		0.0050	0.0025	mg/L		10/26/20 08:17	10/26/20 14:23	1
Copper	0.018		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:23	1
Lead	ND		0.0050	0.0038	mg/L		10/26/20 08:17	10/26/20 14:23	1
Molybdenum	ND		0.020	0.010	mg/L		10/26/20 08:17	10/26/20 14:23	1
Nickel	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:23	1
Selenium	ND		0.010	0.0087	mg/L		10/26/20 08:17	10/26/20 14:23	1
Silver	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:23	1
Zinc	0.22		0.020	0.012	mg/L		10/26/20 08:17	10/26/20 14:23	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		10/27/20 12:10	10/27/20 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	97		10	5.0	mg/L			10/27/20 10:01	1
Total Suspended Solids	0.60	J	1.0	0.50	mg/L			10/23/20 16:53	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			10/22/20 20:10	1

Client Sample ID: Sample Point #2--First Grab

Lab Sample ID: 440-273653-8

Date Collected: 10/21/20 06:10

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.85				SU			10/21/20 06:10	1
Field Temperature	31.70				Celsius			10/21/20 06:10	1

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Client Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Client Sample ID: Sample Point #2--Second Grab

Lab Sample ID: 440-273653-9

Date Collected: 10/21/20 10:21

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.80				SU			10/21/20 10:21	1
Field Temperature	30.80				Celsius			10/21/20 10:21	1

Client Sample ID: Sample Point #2--Third Grab

Lab Sample ID: 440-273653-10

Date Collected: 10/21/20 14:00

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.87				SU			10/21/20 14:00	1
Field Temperature	32.50				Celsius			10/21/20 14:00	1

Client Sample ID: Sample Point #2--Fourth Grab

Lab Sample ID: 440-273653-11

Date Collected: 10/21/20 17:23

Matrix: Water

Date Received: 10/22/20 17:22

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.90				SU			10/21/20 17:23	1
Field Temperature	30.60				Celsius			10/21/20 17:23	1

Client Sample ID: Sample Point #2-Composite 1664

Lab Sample ID: 440-273653-12

Date Collected: 10/21/20 17:23

Matrix: Water

Date Received: 10/22/20 17:22

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		5.0	1.4	mg/L		10/23/20 05:48	10/23/20 05:48	1

Method: Composite - Sample Composite for Organic Extraction

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes				NONE			10/23/20 05:33	1

Method Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	TAL IRV
245.1	Mercury (CVAA)	EPA	TAL IRV
1664A	HEM and SGT-HEM	1664A	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
SM5210B	BOD, 5 Day	SM	TAL IRV
Field Sampling	Field Sampling	EPA	TAL IRV
Composite	Sample Composite for Organic Extraction	None	TAL IRV
1664A	HEM and SGT-HEM (SPE)	1664A	TAL IRV
200.2	Preparation, Total Recoverable Metals	EPA	TAL IRV
245.1	Preparation, Mercury	EPA	TAL IRV

Protocol References:

1664A = EPA-821-98-002
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Client Sample ID: Sample Point #1-Composite

Lab Sample ID: 440-273653-1

Date Collected: 10/21/20 18:15

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	628694	10/26/20 08:17	M1G	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			628794	10/26/20 14:15	P1R	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	628902	10/27/20 12:10	EMS	TAL IRV
Total/NA	Analysis	245.1		1			629005	10/27/20 16:26	ST	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	628869	10/27/20 10:01	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	628617	10/23/20 16:52	HTL	TAL IRV
Total/NA	Analysis	SM5210B		1	300 mL	300 mL	628423	10/22/20 18:17	KYP	TAL IRV

Client Sample ID: Sample Point #1-First Grab

Lab Sample ID: 440-273653-2

Date Collected: 10/21/20 05:50

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 05:50	P1R	TAL IRV

Client Sample ID: Sample Point #1-Second Grab

Lab Sample ID: 440-273653-3

Date Collected: 10/21/20 10:13

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 10:13	P1R	TAL IRV

Client Sample ID: Sample Point #1-Third Grab

Lab Sample ID: 440-273653-4

Date Collected: 10/21/20 13:52

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 13:52	P1R	TAL IRV

Client Sample ID: Sample Point #1-Fourth Grab

Lab Sample ID: 440-273653-5

Date Collected: 10/21/20 17:10

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 17:10	P1R	TAL IRV

Client Sample ID: Sample Point #1-Composite 1664

Lab Sample ID: 440-273653-6

Date Collected: 10/21/20 17:10

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			985 mL	1000 mL	628512	10/23/20 05:48	H1SH	TAL IRV
Total/NA	Analysis	1664A		1			628557	10/23/20 05:48	H1SH	TAL IRV
Total/NA	Analysis	Composite		1			628508	10/23/20 05:31	H1SH	TAL IRV

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Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Client Sample ID: Sample Point #2-Composite

Lab Sample ID: 440-273653-7

Date Collected: 10/21/20 18:22

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	628694	10/26/20 08:17	M1G	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			628794	10/26/20 14:23	P1R	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	628902	10/27/20 12:10	EMS	TAL IRV
Total/NA	Analysis	245.1		1			629005	10/27/20 16:37	ST	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	628869	10/27/20 10:01	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	628617	10/23/20 16:53	HTL	TAL IRV
Total/NA	Analysis	SM5210B		1	300 mL	300 mL	628423	10/22/20 20:10	KYP	TAL IRV

Client Sample ID: Sample Point #2--First Grab

Lab Sample ID: 440-273653-8

Date Collected: 10/21/20 06:10

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 06:10	P1R	TAL IRV

Client Sample ID: Sample Point #2--Second Grab

Lab Sample ID: 440-273653-9

Date Collected: 10/21/20 10:21

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 10:21	P1R	TAL IRV

Client Sample ID: Sample Point #2--Third Grab

Lab Sample ID: 440-273653-10

Date Collected: 10/21/20 14:00

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 14:00	P1R	TAL IRV

Client Sample ID: Sample Point #2--Fourth Grab

Lab Sample ID: 440-273653-11

Date Collected: 10/21/20 17:23

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			628661	10/21/20 17:23	P1R	TAL IRV

Client Sample ID: Sample Point #2-Composite 1664

Lab Sample ID: 440-273653-12

Date Collected: 10/21/20 17:23

Matrix: Water

Date Received: 10/22/20 17:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1005 mL	1000 mL	628512	10/23/20 05:48	H1SH	TAL IRV
Total/NA	Analysis	1664A		1			628557	10/23/20 05:48	H1SH	TAL IRV
Total/NA	Analysis	Composite		1			628508	10/23/20 05:33	H1SH	TAL IRV

Eurofins Calscience Irvine

Lab Chronicle

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-628694/1-A

Matrix: Water

Analysis Batch: 628794

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 628694

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0089	mg/L		10/26/20 08:17	10/26/20 14:10	1
Cadmium	ND		0.0050	0.0025	mg/L		10/26/20 08:17	10/26/20 14:10	1
Chromium	ND		0.0050	0.0025	mg/L		10/26/20 08:17	10/26/20 14:10	1
Copper	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:10	1
Lead	ND		0.0050	0.0038	mg/L		10/26/20 08:17	10/26/20 14:10	1
Molybdenum	ND		0.020	0.010	mg/L		10/26/20 08:17	10/26/20 14:10	1
Nickel	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:10	1
Selenium	ND		0.010	0.0087	mg/L		10/26/20 08:17	10/26/20 14:10	1
Silver	ND		0.010	0.0050	mg/L		10/26/20 08:17	10/26/20 14:10	1
Zinc	ND		0.020	0.012	mg/L		10/26/20 08:17	10/26/20 14:10	1

Lab Sample ID: LCS 440-628694/2-A

Matrix: Water

Analysis Batch: 628794

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 628694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.495		mg/L		99	85 - 115
Cadmium	0.500	0.499		mg/L		100	85 - 115
Chromium	0.500	0.502		mg/L		100	85 - 115
Copper	0.500	0.489		mg/L		98	85 - 115
Lead	0.500	0.496		mg/L		99	85 - 115
Molybdenum	0.500	0.470		mg/L		94	85 - 115
Nickel	0.500	0.509		mg/L		102	85 - 115
Selenium	0.500	0.492		mg/L		98	85 - 115
Silver	0.250	0.246		mg/L		98	85 - 115
Zinc	0.500	0.545		mg/L		109	85 - 115

Lab Sample ID: 440-273653-1 MS

Matrix: Water

Analysis Batch: 628794

Client Sample ID: Sample Point #1-Composite

Prep Type: Total Recoverable

Prep Batch: 628694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.500	0.500		mg/L		100	70 - 130
Cadmium	ND		0.500	0.499		mg/L		100	70 - 130
Chromium	ND		0.500	0.505		mg/L		101	70 - 130
Copper	ND		0.500	0.494		mg/L		99	70 - 130
Lead	ND		0.500	0.496		mg/L		99	70 - 130
Molybdenum	ND		0.500	0.474		mg/L		95	70 - 130
Nickel	ND		0.500	0.505		mg/L		101	70 - 130
Selenium	ND		0.500	0.490		mg/L		98	70 - 130
Silver	ND		0.250	0.247		mg/L		99	70 - 130
Zinc	0.15		0.500	0.651		mg/L		99	70 - 130

Lab Sample ID: 440-273653-1 MSD

Matrix: Water

Analysis Batch: 628794

Client Sample ID: Sample Point #1- Composite

Prep Type: Total Recoverable

Prep Batch: 628694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.500	0.492		mg/L		98	70 - 130	2	20

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-273653-1 MSD

Matrix: Water

Analysis Batch: 628794

Client Sample ID: Sample Point #1- Composite

Prep Type: Total Recoverable

Prep Batch: 628694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.496		mg/L		99	70 - 130	1	20
Chromium	ND		0.500	0.498		mg/L		100	70 - 130	1	20
Copper	ND		0.500	0.494		mg/L		99	70 - 130	0	20
Lead	ND		0.500	0.494		mg/L		99	70 - 130	0	20
Molybdenum	ND		0.500	0.486		mg/L		97	70 - 130	2	20
Nickel	ND		0.500	0.501		mg/L		100	70 - 130	1	20
Selenium	ND		0.500	0.485		mg/L		97	70 - 130	1	20
Silver	ND		0.250	0.246		mg/L		98	70 - 130	1	20
Zinc	0.15		0.500	0.656		mg/L		100	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-628902/1-A

Matrix: Water

Analysis Batch: 629005

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 628902

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		10/27/20 12:10	10/27/20 16:22	1

Lab Sample ID: LCS 440-628902/2-A

Matrix: Water

Analysis Batch: 629005

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00400	0.00385		mg/L		96	85 - 115

Lab Sample ID: 440-273653-1 MS

Matrix: Water

Analysis Batch: 629005

Client Sample ID: Sample Point #1-Composite

Prep Type: Total/NA

Prep Batch: 628902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00400	0.00355		mg/L		89	75 - 125

Lab Sample ID: 440-273653-1 MSD

Matrix: Water

Analysis Batch: 629005

Client Sample ID: Sample Point #1- Composite

Prep Type: Total/NA

Prep Batch: 628902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00400	0.00359		mg/L		90	75 - 125	1	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-628512/1-A

Matrix: Water

Analysis Batch: 628557

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 628512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		5.0	1.4	mg/L		10/23/20 05:48	10/23/20 05:48	1

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QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 440-628512/2-A
Matrix: Water
Analysis Batch: 628557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	40.0	38.00		mg/L		95	78 - 114

Lab Sample ID: LCSD 440-628512/3-A
Matrix: Water
Analysis Batch: 628557

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628512

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM	40.0	37.60		mg/L		94	78 - 114	0	11

Lab Sample ID: 440-273653-6 MS
Matrix: Water
Analysis Batch: 628557

Client Sample ID: Sample Point #1-Composite 1664
Prep Type: Total/NA
Prep Batch: 628512

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	2.7	J	42.1	44.53		mg/L		99	78 - 114

Lab Sample ID: 440-273653-6 MSD
Matrix: Water
Analysis Batch: 628557

Client Sample ID: Sample Point #1-Composite 1664
Prep Type: Total/NA
Prep Batch: 628512

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM	2.7	J	41.5	43.21		mg/L		98	78 - 114	3	18

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-628869/1
Matrix: Water
Analysis Batch: 628869

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			10/27/20 10:01	1

Lab Sample ID: LCS 440-628869/2
Matrix: Water
Analysis Batch: 628869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1010		mg/L		101	90 - 110

Lab Sample ID: 440-273653-1 DU
Matrix: Water
Analysis Batch: 628869

Client Sample ID: Sample Point #1-Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	ND		ND		mg/L		NC	5

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-628617/1
Matrix: Water
Analysis Batch: 628617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			10/23/20 16:52	1

Lab Sample ID: LCS 440-628617/2
Matrix: Water
Analysis Batch: 628617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	943		mg/L		94	85 - 115

Lab Sample ID: 440-273653-1 DU
Matrix: Water
Analysis Batch: 628617

Client Sample ID: Sample Point #1-Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	2.5		2.60		mg/L			10

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 440-628423/1
Matrix: Water
Analysis Batch: 628423

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			10/22/20 11:53	1

Lab Sample ID: LCS 440-628423/5
Matrix: Water
Analysis Batch: 628423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	199	199		mg/L		100	85 - 115

Lab Sample ID: LCSD 440-628423/6
Matrix: Water
Analysis Batch: 628423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Biochemical Oxygen Demand	199	198		mg/L		100	85 - 115	1	20

Lab Sample ID: LCSD 440-628423/7
Matrix: Water
Analysis Batch: 628423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Biochemical Oxygen Demand	199	193		mg/L		97	85 - 115	3	20

QC Sample Results

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Method: SM5210B - BOD, 5 Day (Continued)

Lab Sample ID: 440-273653-1 DU

Matrix: Water

Analysis Batch: 628423

Client Sample ID: Sample Point #1-Composite

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	3.3		3.08		mg/L		8	20

QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Metals

Prep Batch: 628694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-1	Sample Point #1-Composite	Total Recoverable	Water	200.2	
440-273653-7	Sample Point #2-Composite	Total Recoverable	Water	200.2	
MB 440-628694/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 440-628694/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
440-273653-1 MS	Sample Point #1-Composite	Total Recoverable	Water	200.2	
440-273653-1 MSD	Sample Point #1- Composite	Total Recoverable	Water	200.2	

Analysis Batch: 628794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-1	Sample Point #1-Composite	Total Recoverable	Water	200.7 Rev 4.4	628694
440-273653-7	Sample Point #2-Composite	Total Recoverable	Water	200.7 Rev 4.4	628694
MB 440-628694/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	628694
LCS 440-628694/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	628694
440-273653-1 MS	Sample Point #1-Composite	Total Recoverable	Water	200.7 Rev 4.4	628694
440-273653-1 MSD	Sample Point #1- Composite	Total Recoverable	Water	200.7 Rev 4.4	628694

Prep Batch: 628902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-1	Sample Point #1-Composite	Total/NA	Water	245.1	
440-273653-7	Sample Point #2-Composite	Total/NA	Water	245.1	
MB 440-628902/1-A	Method Blank	Total/NA	Water	245.1	
LCS 440-628902/2-A	Lab Control Sample	Total/NA	Water	245.1	
440-273653-1 MS	Sample Point #1-Composite	Total/NA	Water	245.1	
440-273653-1 MSD	Sample Point #1- Composite	Total/NA	Water	245.1	

Analysis Batch: 629005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-1	Sample Point #1-Composite	Total/NA	Water	245.1	628902
440-273653-7	Sample Point #2-Composite	Total/NA	Water	245.1	628902
MB 440-628902/1-A	Method Blank	Total/NA	Water	245.1	628902
LCS 440-628902/2-A	Lab Control Sample	Total/NA	Water	245.1	628902
440-273653-1 MS	Sample Point #1-Composite	Total/NA	Water	245.1	628902
440-273653-1 MSD	Sample Point #1- Composite	Total/NA	Water	245.1	628902

General Chemistry

Analysis Batch: 628423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-1	Sample Point #1-Composite	Total/NA	Water	SM5210B	
440-273653-7	Sample Point #2-Composite	Total/NA	Water	SM5210B	
USB 440-628423/1	Method Blank	Total/NA	Water	SM5210B	
LCS 440-628423/5	Lab Control Sample	Total/NA	Water	SM5210B	
LCSD 440-628423/6	Lab Control Sample Dup	Total/NA	Water	SM5210B	
LCSD 440-628423/7	Lab Control Sample Dup	Total/NA	Water	SM5210B	
440-273653-1 DU	Sample Point #1-Composite	Total/NA	Water	SM5210B	

Prep Batch: 628512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-6	Sample Point #1-Composite 1664	Total/NA	Water	1664A	
440-273653-12	Sample Point #2-Composite 1664	Total/NA	Water	1664A	
MB 440-628512/1-A	Method Blank	Total/NA	Water	1664A	

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QC Association Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

General Chemistry (Continued)

Prep Batch: 628512 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-628512/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 440-628512/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
440-273653-6 MS	Sample Point #1-Composite 1664	Total/NA	Water	1664A	
440-273653-6 MSD	Sample Point #1-Composite 1664	Total/NA	Water	1664A	

Analysis Batch: 628557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-6	Sample Point #1-Composite 1664	Total/NA	Water	1664A	628512
440-273653-12	Sample Point #2-Composite 1664	Total/NA	Water	1664A	628512
MB 440-628512/1-A	Method Blank	Total/NA	Water	1664A	628512
LCS 440-628512/2-A	Lab Control Sample	Total/NA	Water	1664A	628512
LCSD 440-628512/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	628512
440-273653-6 MS	Sample Point #1-Composite 1664	Total/NA	Water	1664A	628512
440-273653-6 MSD	Sample Point #1-Composite 1664	Total/NA	Water	1664A	628512

Analysis Batch: 628617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-1	Sample Point #1-Composite	Total/NA	Water	SM 2540D	
440-273653-7	Sample Point #2-Composite	Total/NA	Water	SM 2540D	
MB 440-628617/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 440-628617/2	Lab Control Sample	Total/NA	Water	SM 2540D	
440-273653-1 DU	Sample Point #1-Composite	Total/NA	Water	SM 2540D	

Analysis Batch: 628869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-1	Sample Point #1-Composite	Total/NA	Water	SM 2540C	
440-273653-7	Sample Point #2-Composite	Total/NA	Water	SM 2540C	
MB 440-628869/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-628869/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-273653-1 DU	Sample Point #1-Composite	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 628661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-2	Sample Point #1-First Grab	Total/NA	Water	Field Sampling	
440-273653-3	Sample Point #1-Second Grab	Total/NA	Water	Field Sampling	
440-273653-4	Sample Point #1-Third Grab	Total/NA	Water	Field Sampling	
440-273653-5	Sample Point #1-Fourth Grab	Total/NA	Water	Field Sampling	
440-273653-8	Sample Point #2--First Grab	Total/NA	Water	Field Sampling	
440-273653-9	Sample Point #2--Second Grab	Total/NA	Water	Field Sampling	
440-273653-10	Sample Point #2--Third Grab	Total/NA	Water	Field Sampling	
440-273653-11	Sample Point #2--Fourth Grab	Total/NA	Water	Field Sampling	

Organic Prep

Analysis Batch: 628508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-273653-6	Sample Point #1-Composite 1664	Total/NA	Water	Composite	
440-273653-12	Sample Point #2-Composite 1664	Total/NA	Water	Composite	
440-273653-6 MS	Sample Point #1-Composite 1664	Total/NA	Water	Composite	
440-273653-6 MSD	Sample Point #1-Composite 1664	Total/NA	Water	Composite	

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Definitions/Glossary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Carlsbad Energy Center
Project/Site: EWA Quarterly Sampling

Job ID: 440-273653-1

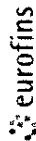
Laboratory: Eurofins Calscience Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska	State	CA01531	06-30-21
Arizona	State	AZ0671	10-14-21
California	Los Angeles County Sanitation Districts	10256	06-30-21
California	State	2706	06-30-21
Guam	State	20-004R	01-23-21
Hawaii	State	CA01531	01-29-21
Kansas	NELAP	E-10420	07-31-21
Nevada	State	CA015312021-1	07-31-21
Oregon	NELAP	4028 - 008	01-29-21
USDA	US Federal Programs	P330-18-00214	07-09-21
Washington	State	C900	09-03-21

Chain of Custody Record

Eurofins TestAmerica, Irvine
17461 Denian Avenue
Suite 100
Irvine, CA 92614-5843
phone 949 261.1022 fax 949 260 3299



TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other

Project Manager: Anthony Kalis
Email: anthony.kalis@irg.com
Tel/Fax: 760-427-2382 / Fax #: None

COC No: 1 of 1 COCs

Client Contact		Site Contact: Anthony Kalis		10/21/2020		COC No: 1 of 1 COCs	
Carlsbad Energy Center		Lab Contact: Rossina Tomova		Carrier: Eurofins		TALS Project #:	
4950 Avenida Encinas						Sampler: Anthony Kalis	
Carlsbad, CA 92008						For Lab Use Only:	
Phone: (760) 427-2382						Walk-in Client.	
FAX: None						Lab Sampling:	
Project Name EWA Quarterly Sampling							
Site: Carlsbad Energy Center							
PO # Use Credit Card						Job / SDG No	

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Analysis Turnaround Time	Field pH	Sample Specific Notes
Sample Point # 1 - composite	10/21/2020	18:15	C	H2O	8	2540C - Calcd - TDS	1664A - Oil & Grease (HEM Only)	Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 1 - First Grab	10/21/2020	5:50	G	H2O	3	2540D - TSS		Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 1 - Second Grab	10/21/2020	10:13	G	H2O	3	2540E - BOD Calc-BOD, 5 Day		Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 1 - Third Grab	10/21/2020	13:52	G	H2O	3			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 1 - Fourth Grab	10/21/2020	17:10	G	H2O	3			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 2 - composite	10/21/2020	18:22	C	H2O	4			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 2 - First Grab	10/21/2020	6:10	G	H2O	3			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 2 - Second Grab	10/21/2020	10:21	G	H2O	3			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 2 - Third Grab	10/21/2020	14:00	G	H2O	3			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.
Sample Point # 2 - Fourth Grab	10/21/2020	17:23	G	H2O	3			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.	Company: N/A	Received by: William Rivera	Date/Time: 10/22/20 13:12	Corr'd	Therm ID No
Relinquished by: Anthony Kalis	Company: N/A	Received by: William Rivera	Date/Time: 10/22/20 17:22	Corr'd	Therm ID No	
Relinquished by: William Rivera	Company: EC-IRV	Received by: William Rivera	Date/Time: 10/22/20 17:22	Corr'd	Therm ID No	
Relinquished by:	Company:	Received by:	Date/Time:	Corr'd	Therm ID No	

1.0/0.9; 0.8/0.7 #89

Form No. CA-C-WI-002, Rev. 4.25, dated 7/8/2019

Login Sample Receipt Checklist

Client: Carlsbad Energy Center

Job Number: 440-273653-1

Login Number: 273653

List Number: 1

Creator: Escalante, Maria I

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins TestAmerica, Irvine

17461 Derian Avenue

Suite 100

Irvine, CA 92614-5843

phone 949.261.1022 fax 949.260.3299

Chain of Custody Record

Environment Testing
TestAmericaRegulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact		Project Manager: Anthony Kalis		Site Contact: Anthony Kalis		10/21/2020		COC No:												
Carlsbad Energy Center		Email: anthony.kalis@nrg.com		Lab Contact: Rossina Tomova		Carrier: Eurofins		1 of 1 COCs												
4950 Avenida Encinas		Tel/Fax: 760-427-2382 / Fax #: None						TALS Project #:												
Carlsbad, CA 92008		Analysis Turnaround Time						Sampler: Anthony Kalis												
Phone: (760) 427-2382		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS						For Lab Use Only:												
FAX - None		TAT if different from Below _____						Walk-in Client:												
Project Name: EWA Quarterly Sampling		<input type="checkbox"/> 2 weeks						Lab Sampling:												
Site: Carlsbad Energy Center		<input checked="" type="checkbox"/> 1 week																		
PO #: Use Credit Card		<input type="checkbox"/> 2 days						Job / SDG No.:												
		<input checked="" type="checkbox"/> 1 day																		
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.7 - (WCD) Carlsbad Energy Center	245.1 - Hg	2540D - TSS	SM6210B_BOD Calc-BOD, 5 Day	2540C_Calc-TDS	1664A - Oil & Grease (HEM Only)	Field pH	Sample Specific Notes:				
Sample Point # 1 - composite		10/21/2020	18:15	C	H2O	8	N	Y	X - 2	X - 4	X - 2						Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.			
Sample Point # 1 - First Grab		10/21/2020	5:50	G	H2O	3							X	X						
Sample Point # 1 - Second Grab		10/21/2020	10:13	G	H2O	3							X	X						
Sample Point # 1 - Third Grab		10/21/2020	13:52	G	H2O	3							X	X						
Sample Point # 1 - Fourth Grab		10/21/2020	17:10	G	H2O	3							X	X			Composite the 4 Oil & Grease samples of each Sump into one composite sample. Analyse the composite only.			
Sample Point # 2 - composite		10/21/2020	18:22	C	H2O	4	N	N	X	X - 2	X									
Sample Point # 2 - First Grab		10/21/2020	6:10	G	H2O	3							X	X						
Sample Point # 2 - Second Grab		10/21/2020	10:21	G	H2O	3							X	X						
Sample Point # 2 - Third Grab		10/21/2020	14:00	G	H2O	3							X	X						
Sample Point # 2 - Fourth Grab		10/21/2020	17:23	G	H2O	3							X	X						
																	Sample Point # 1/ Time			
																	Sample Point # 2/ time			
																	Field pH 1 5.76 pH/29.0°C @ 0550 6.85 pH/31.7°C @ 0610			
																	Field pH 2 5.69 pH/29.3°C @ 1013 6.80 pH/30.8°C @ 1021			
																	Field pH 3 5.82 pH/30.2°C @ 1352 6.87 pH/32.5°C @ 1400			
																	Field pH 4 5.79 pH/29.2°C @ 1710 6.90 pH/30.6°C @ 1723			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							1/4	1	1	1/2										
Possible Hazard Identification:							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)													
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.																				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months													
Custody Seals Intact:		<input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:				Cooler Temp. (°C):		Obs'd:		Corr'd:		Therm ID No.:						
Relinquished by:		<i>Anthony Kalis</i>		Company:		<i>NRG</i>		Date/Time:		<i>10/22/20 1312</i>		Received by:		<i>William Rivera</i>		Company:		<i>FC-IRV</i>		
Relinquished by:				Company:				Date/Time:				Received by:				Company:		Date/Time:		
Relinquished by:				Company:				Date/Time:				Received in Laboratory by:				Company:		Date/Time:		

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 10/21/20

Start Time: 0500

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	Feb, 21	A0044	4.01	21.8 °C
7 Buffer	Hach	Feb, 22	A0058	7.00	21.7 °C
4 Buffer	Hach	March, 24	A0062	4.01	21.8 °C
Slope = -58.41 mv/pH		mv/pH reading / 59 mv/pH = 99 % slope			
off set mv = 7.5					

Potable Water pH		7.49	21.1 °C
------------------	--	------	---------

Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	0550	5.76	29.0 °C
Sample Point #2	0610	6.85	31.7 °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	0620	7.43	21.2 °C
pH 7.0	0621	7.04	20.6 °C

Comments: _____

End Time: 0622

Sampling and Analyses by: *Paul Lopez*

Approved by: *Anthony Kalis*

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 10/21/20

Start Time: 0945

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	<u>Feb, 21</u>	<u>A0044</u>	<u>10.01</u>	<u>20.3</u> °C
7 Buffer	Hach	<u>Feb, 22</u>	<u>A0058</u>	<u>7.00</u>	<u>20.5</u> °C
4 Buffer	Hach	<u>March, 24</u>	<u>A0062</u>	<u>4.01</u>	<u>20.6</u> °C
Slope = <u>58.53</u> mv/pH		mv/pH reading / 59 mv/pH = <u>99</u> % slope			
off set mv = <u>7.2</u>					

Potable Water pH		<u>7.43</u>	<u>20.8</u> °C
------------------	--	-------------	----------------

Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1013</u>	<u>5.69</u>	<u>29.3</u> °C
Sample Point #2	<u>1021</u>	<u>6.80</u>	<u>30.8</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1028</u>	<u>7.37</u>	<u>20.5</u> °C
pH 7.0	<u>1030</u>	<u>7.03</u>	<u>20.7</u> °C

Comments: _____

End Time: 1030

Sampling and Analyses by: Rob Lora

Approved by: Anthony Kalis

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 10/21/20

Start Time: 1337

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	Feb, 21	A0044	10.01	20.7 °C
7 Buffer	Hach	Feb, 22	A0050	7.00	20.8 °C
4 Buffer	Hach	March, 24	A0062	4.01	20.9 °C
Slope = <u>-58.15</u> mv/pH		mv/pH reading / 59 mv/pH = <u>98%</u> % slope			
off set mv = <u>7.1</u>					

Potable Water pH		<u>7.47</u>	<u>22.4</u> °C
------------------	--	-------------	----------------

Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>1352</u>	<u>5.82</u>	<u>30.2</u> °C
Sample Point #2	<u>1400</u>	<u>6.87</u>	<u>32.5</u> °C

Standards Check After Analysis
pH Standards

pH Buffer	Time	pH	Temperature
Potable Water	<u>1406</u>	<u>7.42</u>	<u>23.3</u> °C
pH 7.0	<u>1407</u>	<u>7.03</u>	<u>21.1</u> °C

Comments: _____

End Time: 1408

Sampling and Analyses by: 

Approved by: Anthony Kalis

Carlsbad Energy Center
pH METER CALIBRATION AND ANALYSIS
 Method SM 4500-H+B

Project: EWA Sampling

Meter: HACH HQ 40d

Date: 10/21/20

Start Time: 1654

pH Standards

	MFR	Exp. Date	Lot No.	pH	Temperature
10 Buffer	Hach	Feb, 21	A0044	10.01	21.5 °C
7 Buffer	Hach	Feb, 22	A0058	7.00	21.5 °C
4 Buffer	Hach	March, 24	A0062	4.01	21.7 °C
Slope = <u>-58.24</u> mv/pH		mv/pH reading / 59 mv/pH = <u>98</u> % slope			
off set mv = <u>6.6</u>					

Potable Water pH		<u>7.45</u>	<u>23.7</u> °C
------------------	--	-------------	----------------

Sampling and Analysis

Sample Point	Time	pH	Temperature
Sample Point #1	<u>0710 0510 PM</u>	<u>5.79</u>	<u>29.2</u> °C
Sample Point #2	<u>1723</u>	<u>6.90</u>	<u>30.6</u> °C

Standards Check After Analysis
pH Standards

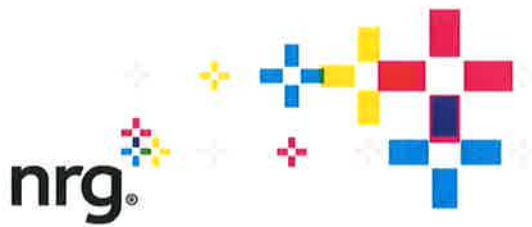
pH Buffer	Time	pH	Temperature
Potable Water	<u>1729</u>	<u>7.40</u>	<u>23.4</u> °C
pH 7.0	<u>1730</u>	<u>7.02</u>	<u>21.7</u> °C

Comments: _____

End Time: 1731

Sampling and Analyses by: 

Approved by: Anthony Kalis



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

July 9, 2020

Mr. Don Little
Compliance Project Manager
Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, California 92011

**RE: CARLSBAD ENERGY CENTER PROJECT, SEMI ANNUAL COMPLIANCE STATUS REPORT –
JANUARY-JUNE 2020**

Dear Mr. Little:

Carlsbad Energy Center LLC ("Project Owner") submits the attached semi-annual compliance status report cover the time period of January 2020 to June 2020. This report is submitted in compliance with Section B, Condition 2 of permit number 2405. The results for the self-monitoring sampling events are not included with this report because the First and Second Quarter reports for 2020 have already been submitted to the Encina Wastewater Authority.

If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 573-3802.

Sincerely,

Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: 1SA2020 EWA Compliance Status Report

Cc: File



ENCINA WASTEWATER AUTHORITY

6200 AVENIDA ENCINAS, CARLSBAD, CA 92011-0195 TEL: (760) 438-3941 FAX: (760) 476-9852

REPORTING PERIOD:

JANUARY 1 – JUNE 30

JULY 1 – DECEMBER 31

COMPLIANCE STATUS REPORT (CSR)

I. INDUSTRIAL USER INFORMATION:

Carlsbad Energy Center

Industrial User Name	Carlsbad	CA	760-710-3943
4950 Avenida Encinas	City	Zip Code	(Area Code) Phone
Facility Address			
Carlsbad Energy Center LLC			
Owner		Plant Manager	
Paul Mattesich			
IU Contact		Title	
City of Carlsbad	2405	4941	
Member Agency	Permit #	SIC Code	

II. ARE PROCESS OR OPERATIONAL CHANGES BEING PLANNED OR IMPLEMENTED?

YES ☐ NO ☒

If yes, explain:

III. LIST OF ALL ACTIVE ENVIRONMENTAL PERMIT(S), PERMIT #(S), DATE ISSUED AND EXPIRATION DATE:

See Attached

IV. FLOW SUMMARY

→ INCOMING WATER SOURCE

AVERAGE DAILY FLOW RATE: 26354 gpd
MAXIMUM DAILY FLOW RATE: 256,710 gpd

→ PROCESS DISCHARGE TO SANITARY SEWER

AVERAGE DAILY FLOW RATE: 2833 gpd
MAXIMUM DAILY FLOW RATE: 55228 gpd

CONSUMPTION HAS STAYED THE SAME INCREASED OR DECREASED BY MORE THAN 10% FROM THE LAST CSR.

If change indicated, explain: Flow has changed from previous CSR due to the operation of the power plant.

Atmospheric conditions also contribute to the discharge flow rate with more discharge with increased humidity.

V. THE FOLLOWING HAS BEEN INCLUDED:

YES ☒ NO ☐ NA

RESULTS OF SELF MONITORING PERFORMED ON

Results for each monitoring event were sent prior.

VI. COMPLIANCE STATUS REPORT CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PRESIDENT/VP/GENERAL MGR/CEO

(Print and sign name)

DATE

CITY OR COUNTY

Permit List for Carlsbad Energy Center:

San Diego Air Pollution Control District: Startup Authorization APCD2014-APP-003480-003486, Issued May 2019, Expires April 24, 2020.

San Diego Department of Environmental Health: DEH2018-HUPFP-004698, Issued April 2020, Expires April 30, 2021

California Energy Commission: License 07-AFC-06C, Issued August 2015, Expires N/A

Encina WasteWater Authority: Permit# 2405, Issued August 2019, Expires August 1, 2023

Industrial Stormwater Permit: State Water Resources Board (SWRCB) Order 2014-0057-DWQ. Storm Water Pollution Prevention Plan dated July 2019, requires revision before July 2024.

January 14, 2021

Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

Mr. William Svec
Compliance Project Manager
Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, California 92011

RE: CARLSBAD ENERGY CENTER PROJECT, SEMI ANNUAL COMPLIANCE STATUS REPORT – JULY-DECEMBER 2020

Dear Mr. Svec:

Carlsbad Energy Center LLC ("Project Owner") submits the attached semi-annual compliance status report cover the time period of July 2020 to December 2020. This report is submitted in compliance with Section B, Condition 2 of permit number 2405. The results for the self-monitoring sampling events are not included with this report because the Third and Fourth Quarter reports for 2020 have already been submitted to the Encina Wastewater Authority on August 12, 2020 and November 9, 2020 respectively.

If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 573-3802.

Sincerely,



Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: 2SA2020 EWA Compliance Status Report

Cc: File



ENCINA WASTEWATER AUTHORITY

6200 AVENIDA ENCINAS, CARLSBAD, CA 92011-0195 TEL: (760) 438-3941 FAX: (760) 476-9852

REPORTING PERIOD:

JANUARY 1 – JUNE 30

JULY 1 – DECEMBER 31

COMPLIANCE STATUS REPORT (CSR)

I. INDUSTRIAL USER INFORMATION:

Carlsbad Energy Center			
Industrial User Name	Carlsbad	CA	760-710-3943
4950 Avenida Encinas	City	Zip Code	(Area Code) Phone
Facility Address	Carlsbad Energy Center LLC		
Owner	Paul Mattesich		
IU Contact	City of Carlsbad		
City of Carlsbad	2405	4941	
Member Agency	Permit #	SIC Code	
		Plant Manager	
		Title	

II. ARE PROCESS OR OPERATIONAL CHANGES BEING PLANNED OR IMPLEMENTED?

YES ☐ NO ☒

If yes, explain:

III. LIST OF ALL ACTIVE ENVIRONMENTAL PERMIT(S), PERMIT #(S), DATE ISSUED AND EXPIRATION DATE:

See Attached

IV. FLOW SUMMARY

→ INCOMING WATER SOURCE

AVERAGE DAILY FLOW RATE: 47,760 gpd
MAXIMUM DAILY FLOW RATE: 216,578 gpd

→ PROCESS DISCHARGE TO SANITARY SEWER

AVERAGE DAILY FLOW RATE: 7,399 gpd
MAXIMUM DAILY FLOW RATE: 28,350 gpd

CONSUMPTION HAS STAYED THE SAME INCREASED OR DECREASED BY MORE THAN 10% FROM THE LAST CSR.

If change indicated, explain: Flow has changed from previous CSR due to the operation of the power plant.

Atmospheric conditions also contribute to the discharge flow rate with more discharge with increased humidity.
12 Month average was 5,129 as indicated in prior correspondence to EWA.

V. THE FOLLOWING HAS BEEN INCLUDED:


YES ☐ NO ☒ NA

RESULTS OF SELF MONITORING PERFORMED ON

Results for each monitoring event were sent prior.

VI. COMPLIANCE STATUS REPORT CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


PRESIDENT/VP/GENERAL MGR/CEO
(Print and sign name)

1/15/21
DATE

CARLSBAD, CA
CITY OR COUNTY

Permit List for Carlsbad Energy Center:

San Diego Air Pollution Control District: Startup Authorization APCD2014-APP-003480-003486, Issued/Revised Nov 2020, Expires May 24, 2021.

San Diego Department of Environmental Health: DEH2018-HUPFP-004698, Issued April 2020, Expires April 30, 2021

California Energy Commission: License 07-AFC-06C, Issued August 2015, Expires N/A

Encina WasteWater Authority: Permit# 2405, Issued August 2019, Expires August 1, 2023

Industrial Stormwater Permit: State Water Resources Board (SWRCB) Order 2014-0057-DWQ. Storm Water Pollution Prevention Plan dated July 2019, requires revision before July 2024.

Attachment H TLSN-3: Transmission Line Activities

Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

March 30, 2021

Subject: CARLSBAD ENERGY CENTER COM-8 REPORT – TLSN-3: Transmission Line Activities

Through visual inspection, Carlsbad Energy Center has determined that all transmission equipment is compliance with section 2492 of the Public Resources Code and Section 1250 of Title 14 of the California Code of Regulations.

Attachment I VIS-1: Surface Treatment Summary

Carlsbad Energy Center Project - Major Surface Treatment					
Unit	Equipment/System	Color/Finish	Current Condition	2020 Maintenance Activities	Planned 2021 Maintenance Activities
6	Selective Catalytic Reduction	Gray	Good	None	None Planned
6	Stack	Gray	Good	None	None Planned
6	Intercooler	Black	Good	None	None Planned
6	VBV Stack	Gray	Good	None	None Planned
6	Combustion Turbine Enclosure	Gray	Good	None	None Planned
6	CT Air Inlet	Gray	Visible Rusting on West Side	None	Rust Mitigation Activities Planned for 2021
6	PCM	Gray	Good	None	None Planned
6/7	PDC	Gray	Good	None	None Planned
6/7	CEMS Shack	Gray	Good	None	None Planned
7	Selective Catalytic Reduction	Gray	Good	None	None Planned
7	Stack	Gray	Good	None	None Planned
7	Intercooler	Black	Good	None	None Planned
7	VBV Stack	Gray	Good	None	None Planned
7	Combustion Turbine Enclosure	Gray	Good	None	None Planned
7	CT Air Inlet	Gray	Visible Rusting on West Side	None	Rust Mitigation Activities Planned for 2021
7	PCM	Gray	Good	None	None Planned
8	Selective Catalytic Reduction	Gray	Good	None	None Planned
8	Stack	Gray	Good	None	None Planned
8	Intercooler	Black	Good	None	None Planned
8	VBV Stack	Gray	Good	None	None Planned
8	Combustion Turbine Enclosure	Gray	Good	None	None Planned
8	CT Air Inlet	Gray	Visible Rusting on West Side	None	Rust Mitigation Activities Planned for 2021

8	PCM	Gray	Good	None	None Planned
8/9	PDC	Gray	Good	None	None Planned
8/9	CEMS Shack	Gray	Good	None	None Planned
9	Selective Catalytic Reduction	Gray	Good	None	None Planned
9	Stack	Gray	Good	None	None Planned
9	Intercooler	Black	Good	None	None Planned
9	VBV Stack	Gray	Good	None	None Planned
9	Combustion Turbine Enclosure	Gray	Good	None	None Planned
9	CT Air Inlet	Gray	Visible Rusting on West Side	None	Rust Mitigation Activities Planned for 2021
9	PCM	Gray	Good	None	None Planned
10	Selective Catalytic Reduction	Gray	Good	None	None Planned
10	Stack	Gray	Good	None	None Planned
10	Intercooler	Black	Good	None	None Planned
10	VBV Stack	Gray	Good	None	None Planned
10	Combustion Turbine Enclosure	Gray	Good	None	None Planned
10	CT Air Inlet	Gray	Visible Rusting on West Side	None	Rust Mitigation Activities Planned for 2021
10	PCM	Gray	Good	None	None Planned
10	CEMS Shack	Gray	Good	None	None Planned
10/BOP	PDC	Gray	Good	None	None Planned
BOP	Fuel Gas Compressor A	Gray	Good	None	None Planned
BOP	Fuel Gas Compressor B	Gray	Good	None	None Planned
BOP	Fuel Gas Compressor C	Gray	Good	None	None Planned
BOP	Fuel Gas Compressor D	Gray	Good	None	None Planned
BOP	Raw Water Tank	Gray	Good	None	None Planned
BOP	Demin Water Tank	Gray	Good	None	None Planned
BOP	Fire Pump Structure	Gray	Good	None	None Planned
Common	Administrative Building	Tate Olive	Good	None	None Planned
Common	Warehouse	Tate Olive	Good	None	None Planned

Common	Existing Control House	Galvanized Steel	Minor surface rust	None	None Planned
Common	Transmission Poles	Galvanized	Good	None	None Planned
Common	Transmission Conductor Lines	Non-Reflective	Good	None	None Planned
Common	Transmission Line Insulators	Non-Reflective	Good	None	None Planned
Common	Perimeter Fence	Galvanized	Good	None	None Planned

Attachment J VIS-2/VIS-3: Landscape Maintenance Summary

Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

March 30, 2021

Subject: CARLSBAD ENERGY CENTER COM-8 REPORT – VIS-2/VIS-3: Landscape Maintenance Summary

Carlsbad Energy Center contracts with Brightview for routine landscape activities. The activities include weekly maintenance for weeding services and removal of any downed branches found on the site.

Several eucalyptus trees were found to be dead or dying on the east side of the facility along the fence-line by Interstate 5. Details of these trees were sent to the California Energy Commission throughout 2020. As of the date of this report, Carlsbad Energy Center has now begun coordinating between our landscape contractor and the biologist to have these dead trees removed.

Attachment L Compliance Matrix

**Carlsbad Energy Center Project
Compliance Matrix: 2020**

Technical Area	COC Number	Subtask	Deliverable Req.	Description	Verification/Action/Submittal Required	Required Prior to Start of Construction?	Action Days	Submittal Timing	Submittal Trigger Event	Compliance Status	Comments
AQ	5		N	This equipment shall be properly maintained and kept in good operating condition at all times and, to the extent practicable, the project owner shall maintain and operate the equipment and any associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. [Rule 21 and 40 CFR §60.11]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	6		N	The project owner shall operate the project in accordance with all data and specifications submitted with the application under which this license is issued and District Application Nos. 2014-APP-003480, 2014-APP- 003481, 2014-APP-003482, 2014-APP-003483, 2014-APP-003484, 2014- APP-003485, 2014-APP-003486, and 2014-APP-003487. [Rule 14]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	7		N	The project owner shall provide access, facilities, utilities, and any necessary safety equipment, with the exception of personal protective equipment requiring individual fitting and specialized training, for source testing and inspection upon request of the Air Pollution Control District. [Rule 19]	The project owner shall provide facilities, utilities, and safety equipment for source testing and inspections upon request of the District, ARB, and the Energy Commission.	N	as needed	N/A	Source Testing/Inspections	Ongoing	
AQ	11		Y	The project owner shall comply with all applicable provisions of 40 CFR Part 73, including requirements to offset, hold and retire sulfur dioxide (SO2) allowances. [40 CFR Part 73]	The project owner shall submit to the CPM and the District the combustion turbine generator (CTG) annual SO2 emission total and SO2 allowance information demonstrating compliance with all applicable provisions of 40 CFR 73 as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	12		N	All records required by this permit shall be maintained on site for a minimum of five years and made available to the District upon request. [Rule 1421]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	N/A			Ongoing	
AQ	22	a	Y	The combustion turbines shall be fired on Public Utility Commission (PUC) quality natural gas. The project owner shall maintain, on site, quarterly records of the natural gas sulfur content expressed in units of grains of sulfur compounds per 100 dscf of natural gas and hourly records of the higher and lower heating values of the natural gas expressed in Btu/scf. These records shall be provided to District personnel upon request. [Rule 20.3(d)(1)] Natural gas sulfur content records must be kept with a minimum reporting limit of 0.25 grains sulfur compounds per 100 dscf of natural gas. [Rule 20.3(d)(1)]	The project owner shall submit the quarterly fuel sulfur content values in the in the Quarterly Operation Reports (AQ-SC8)	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	22	b	N		Make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	23		N	Unless otherwise specified in this permit, all continuous monitoring data shall be collected at least once every clock-minute. [Rules 69.3, 69.3.1, and 20.3(d)(1)]	None required.	N	N/A			Ongoing	
AQ	24		Y	For purposes of determining compliance with emission limits based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on a Continuous Emission Monitoring System (CEMS), data collected in accordance with the CEMS protocol shall be used and the averages for averaging periods specified herein shall be calculated as specified in the CEMS protocol. [Rules 69.3, 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]	Source tests demonstrating compliance with this condition shall be provided to the CPM and are due within the timeframes specified in Conditions AQ-57 and AQ-58. CEMS data summaries shall be submitted to the CPM as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	25		Y	For purposes of determining compliance with emission limits based on CEMS data, all CEMS calculations, averages, and aggregates shall be performed in accordance with the CEMS protocol approved in writing by the District. [Rules 69.3, 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]	CEMS data summaries shall be submitted to the CPM as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	26		Y	For each emission limit expressed as pounds, pounds per hour, or parts per million based on a one-hour or less averaging period or compliance period, compliance shall be based on using data collected at least once every minute when compliance is based on CEMS data except as specified in the District approved CEMS Protocol. [Rules 69.3, 69.3.1, and 20.3(d)(1)]	CEMS data summaries shall be submitted to the CPM as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	27		Y	When a combustion turbine is combusting fuel (operating), the emission concentration of oxides of nitrogen (NOX), calculated as nitrogen dioxide (NO2), shall not exceed 2.5 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen, averaged over a one-clock-hour period, except during commissioning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	28		Y	When a combustion turbine is operating, the emission concentration of carbon monoxide (CO) shall not exceed 4.0 ppmvd corrected to 15 percent oxygen, averaged over a one-clock-hour period, except during commissioning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	

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AQ	29		Y	When a combustion turbine is operating, the volatile organic compound (VOC) concentration, calculated as methane, measured in the exhaust stack, shall not exceed 2.0 ppmvd corrected to 15 percent oxygen, averaged over a one-clock-hour period, except during commissioning, startup, and shutdown periods for that turbine. For purposes of determining compliance based on the CEMS, the District approved VOC/CO surrogate relationship and the CO CEMS data averaged over a one-clock-hour period shall be used. The VOC/CO surrogate relationship shall be verified and/or modified, if necessary, based on source testing. [Rule 20.3(d)(1)]	The project owner shall provide the CEMS data, using the appropriate CO/VOC surrogate relationship, to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	30		Y	When a combustion turbine is operating, the ammonia concentration (ammonia slip), shall not exceed 5.0 ppmvd corrected to 15 percent oxygen and averaged over a one-clock-hour period, except during commissioning, startup, and shutdown periods for that turbine. [Rule 1200]	The project owner shall provide the estimated ammonia concentrations and ammonia emissions based on the annual source test data, the CEMS data and SCR ammonia flow data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	31		Y	When a combustion turbine is operating, the emission concentration of NOX, calculated as nitrogen dioxide (NO2), shall not exceed 42 ppmvd averaged over each one-clock-hour period and corrected to 15 percent oxygen except for startup and shutdown periods for that turbine, as defined in Rule 69.3. [Rule 69.3]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	32		Y	When a combustion turbine is operating with post-combustion air pollution control equipment that controls oxides of nitrogen (NOX) emissions, the emission concentration of NOX, calculated as nitrogen dioxide (NO2), shall not exceed 13.6 ppmvd averaged over each one-clock-hour period and corrected to 15 percent oxygen, except for startup and shutdown periods for that turbine, as defined in Rule 69.3.1. This limit does not apply during any period in which the facility is subject to a variance from the emission limits contained in Rule 69.3.1. [Rule 69.3.1]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	33		Y	When a combustion turbine is operating without any post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration of NOx calculated as nitrogen dioxide (NO2) from each turbine shall not exceed 22.6 parts per million by volume on a dry basis (ppmvd) averaged over each one-clock-hour period and corrected to 15 percent oxygen, except for periods of startup and shutdown, as defined in Rule 69.3.1. This limit does not apply during any period in which the facility is subject to a variance from the emission limits contained in Rule 69.3.1. [Rule 69.3.1]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	34		Y	For each rolling four-unit operating hour period, average emission concentration of oxides of nitrogen (NOx) for each turbine calculated as nitrogen dioxide (NO2) in parts per million by volume dry (ppmvd) corrected to 15 percent oxygen or, alternatively, as elected by the project owner, the average NOx emission rate in pounds per megawatt-hour (lb/MWh) shall not exceed an average emission limit calculated in accordance with 40 CFR Section 60.4380(b)(3). The emission concentration and emission rate averages shall be calculated in accordance with 40 CFR Section 60.4380(b)(1). The average emission concentration limit and emission rate limit shall be based on an average of hourly emission limits over the four-unit operating hour period including the operating-hour and three unit operating-hours immediately preceding. For any unit operating hour where multiple emission standards would apply based on load of the turbine, the applicable standard shall be the higher of the two limits. The hourly emission concentration limit and emission rate limit shall be as follows based on the load of the turbine over the four unit operating hour period: Case Emission Limit, ppmvd at 15 percent O2 Emission Limit, lb/MWh i. All four hrs at or above 75% Load 15 0.43 ii. All four hrs below 75% Load 96 4.7 iii. Combination of hrs (a x 15+b x 96)/4 (a x 0.43+b x 4.7)/4 Where: a = the number of unit operating hrs in four hour period with all operation above 75% load and b = 4-a. The averages shall exclude all clock hours occurring before the Initial Emission Source Test but shall include emissions during all other times that the equipment is operating including, but not limited to, emissions during startup and shutdown periods. For each six-calendar-month period, emissions in excess of these limits and monitor downtime shall be identified in accordance with 40 CFR Sections 60.4350 and 60.4380(b)(2), except that Section 60.4350(c) shall not apply for identifying periods in excess of a NOX concentration limit. For the purposes of this condition, unit operating hours shall have the meaning as defined in 40 CFR 60.4420. [40 CFR Part 60 Subpart KKKK]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	

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AQ	35		Y	The emissions of particulate matter less than or equal to ten microns in diameter (PM10) from the exhaust stacks of the combustion turbine shall not exceed 5.0 pounds per hour for each combustion turbine. [Rule 20.3(d)(1)(2)]	Source tests demonstrating compliance with this condition shall be provided to the CPM and are due within the timeframes specified in Conditions AQ-57 and AQ-58.	N	45	after	Completion of RATA/Source Tests	Ongoing	
AQ	36		Y	The emissions of particulate matter less than or equal to ten microns in diameter (PM10) from the exhaust stacks of the combustion turbines shall not exceed 3.5 pounds per hour per turbine, averaged over all six combustion turbines, calculated as the arithmetic average of the most recent source test for each turbine. [Rule 20.3(d)(1),(2)]	Source tests demonstrating compliance with this condition shall be provided to the CPM and are due within the timeframes specified in Conditions AQ-57 and AQ-58.	N	45	after	Completion of RATA/Source Tests	Ongoing	
AQ	37		Y	The discharge of particulate matter from the exhaust stack of each combustion turbine shall not exceed 0.10 grains per dry standard cubic foot (0.23 grams/dscm) corrected to 12 percent carbon dioxide. The District may require periodic testing to verify compliance with this standard. [Rule 53]	Source tests demonstrating compliance with this condition shall be provided to the CPM and are due within the timeframes specified in Conditions AQ-57 and AQ-58.	N	45	after	Completion of RATA/Source Tests	Ongoing	
AQ	38		N	Visible emissions from the lube oil vents and the exhaust stack of each combustion turbine shall not exceed 20 percent opacity for more than three minutes in any period of 60 consecutive minutes. [Rule 50]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	39		Y	Mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits, except during commissioning, startup and shutdown periods for that turbine. A one-clock-hour averaging period for these limits shall apply to CEMS data. [Rule 20.3(d)(2)] Pollutant Emission Limit, lb/hr a. NOx 9.1 b. CO 8.8 c. VOC 2.5	The project owner shall submit to the CPM operating data demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	40		Y	Excluding any minutes that are coincident with a shutdown period, cumulative mass emissions of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during any startup period, except during that turbine's commissioning period. [Rule 20.3(d)(1)]. Pollutant Emission Limit, lb a. NOx 14.7 b. CO 7.4 c. VOC 2.0 [NOx and VOC: Rule 20.3(d)(1); CO: Rule 20.3(d)(2)]	The project owner shall submit to the CPM operating data demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	Petition to Amend submitted to CEC to update CO limit startup limit to 17.3 lb/hr. PTA approval Processing expected by Q321.
AQ	41		Y	Cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's shutdown periods, except during that turbine's commissioning period. [Rule 20.3(d)(1)] Pollutant Emission Limit, lb a. NO 0.6 b. CO 3.4 c. VOC 2.4	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	Petition to Amend submitted to CEC to update shutdown conditions (AQ-14. AQ-41 and other COCs with shutdown associated language). PTA approval Processing expected by Q321.
AQ	42		Y	Emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO2), from each combustion turbine shall not exceed 90 pounds per hour measured over each one-clock-hour period. In addition, the emission concentration of NOx, calculated as NO2, from each turbine shall not exceed 100 parts per million by volume on a dry basis (ppmvd) averaged over each one-clock-hour period and corrected to 15 percent oxygen. These emission limits shall apply during all times a turbine is operating, including, but not limited to, emissions during commissioning, startup and shutdown for that turbine. [Rule 20.3(d)(2)]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	43		Y	The carbon monoxide (CO) emissions from each combustion turbine shall not exceed 248 pounds per hour measured over each one-clock-hour period. In addition, the emission concentration of CO from each turbine shall not exceed 400 parts per million by volume on a dry basis (ppmvd) averaged over each one-clock-hour period and corrected to 15 percent oxygen. This emission limit shall apply during all times that a turbine is operating, including, but not limited to emissions during commissioning, startup and shutdown periods. [Rule 20.3(d)(2)(i)]	The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	

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AQ	44		Y	Total emissions from the equipment authorized to be constructed under this permit, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d)(1) as it exists on the date the permit to operate for this equipment is approved and except for CO emissions during any rolling 12-calendar-month period in which a turbine commissioning period occurs, shall not exceed the following limits for each rolling 12-calendar-month period, beginning with the 12-calendar-month period beginning with the month in which the earliest initial startup among the equipment authorized to be constructed under this permit occurs: Pollutant Emission Limit, tons per year a. NOx 84.18 b. CO 77.8 c. VOC 24.1 d. PM10 28.4 e. SOx (calculated as SO2) 5.6 The aggregate emissions of each pollutant shall include emissions during all times that the equipment is operating, except for CO emissions during any rolling 12-calendar-month period in which a turbine commissioning period occurs. All calculations performed to show compliance with this limit shall be performed according to a protocol approved in advance by the District. [Rules 20.3(d)(2), 20.3(d)(5), 20.3(d)(8), and 21]	The project owner shall submit to the CPM and the District the facility annual operating and emissions data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing																						
AQ	45		Y	Total emissions of CO during any rolling 12-calendar-month period in which a turbine commissioning period occurs from the equipment authorized to be constructed under this permit except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d)(1) as it exists on the date the permit to operate for this equipment is approved shall not exceed the following limit for each rolling 12-calendar-month period, beginning with the 12-calendar-month period that begins with the month in which the earliest initial startup among the equipment authorized to be constructed under this permit occurs: 77.8 tons per year + N x 4.05 tons/yr Where N=number of turbines with commissioning periods occurring within the 12-calendar-month period. All calculations performed to show compliance with this limit shall be performed according to a protocol approved in advance by the District. [Rules 20.3(d)(2), 20.3(d)(5), 20.3(d)(8), and 21]	The project owner shall submit to the CPM and District the facility annual operating and emissions data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports (AQ-SC8).	N	N/A	4th Quarter	Quarterly Operation Reports	Ongoing																						
AQ	46		Y	Total emissions from each combustion turbine shall not exceed 14.3 tons per year of NOx calculated as nitrogen dioxide and shall not exceed 4.73 tons per year of PM10. For the purposes of this condition emissions shall be calculated on a rolling 12-calendar-month basis beginning with the calendar month in which the initial startup of the turbine occurs. All calculations performed to show compliance with this limit shall be performed according to a protocol approved in advance by the District. [Rules 20.3(d)(2), 20.3(d)(5), 20.3(d)(8), and 21]	The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing																						
AQ	47			Total emissions from the equipment permitted under APCD2003-PTO-001267, APCD2003-PTO-000791, APCD2003-PTO-000792, APCD2003-PTO-000793, APCD2003-PTO-001770 and APCD2003-PTO-005238 shall not exceed any of the following mass emission limits according to the schedule based on the number of turbines that have undergone their initial startup as described in the following table: <table><tr><td>Number of Turbines Started</td><td>NOx (ton/yr)</td><td>PM10 (ton/yr)</td></tr><tr><td>1</td><td>No Limit</td><td>No Limit</td></tr><tr><td>2</td><td>No Limit</td><td>No Limit</td></tr><tr><td>3</td><td>41.57</td><td>No Limit</td></tr><tr><td>4</td><td>27.42</td><td>27.6</td></tr><tr><td>5</td><td>13.27</td><td>22.9</td></tr><tr><td>6</td><td>0.0</td><td>18.2</td></tr></table> For the purposes of this condition, emissions shall be calculated on a rolling 12-calendar-month basis beginning with the calendar month in which 180 days has passed since the latest initial start from among the indicated number of turbines. Once a turbine has undergone its initial startup, it is included in determining the number of turbines started from the initial startup date going forward. All calculations performed to show compliance with this limit shall be performed according to a protocol approved in advance by the District. [Rules 20.3(d)(2), 20.3(d)(5), 20.3(d)(8), and 21]	Number of Turbines Started	NOx (ton/yr)	PM10 (ton/yr)	1	No Limit	No Limit	2	No Limit	No Limit	3	41.57	No Limit	4	27.42	27.6	5	13.27	22.9	6	0.0	18.2	This condition requires the existing Encina boilers and turbine to cease operations once the amended CECP is operational. The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
Number of Turbines Started	NOx (ton/yr)	PM10 (ton/yr)																														
1	No Limit	No Limit																														
2	No Limit	No Limit																														
3	41.57	No Limit																														
4	27.42	27.6																														
5	13.27	22.9																														
6	0.0	18.2																														

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AQ	48		Y	For each calendar month and each rolling 12-calendar-month period, the project owner shall maintain records, as applicable, on a calendar monthly basis, of mass emissions during each calendar month and rolling 12-calendar-month period of NOx (calculated as NO2), CO, VOCs (calculated as methane), PM10, and SOx (calculated as SO2), in tons, from each emission unit located at this stationary source, except for emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d)(1). These records shall be made available for inspection within 15 calendar days after the end of each calendar month. [Rules 20.3(d)(3), 20.3(d)(8) and 21]	The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	49			For each combustion turbine, the number of annual operating hours in each calendar year shall not exceed 2,700. For the purposes of this condition, the number of operating hours shall be calculated as the total number of unit operating minutes divided by 60 rounded to the nearest hundredth of an hour. [Rules 1200, 20.3(d)(2) and 21]	The project owner shall submit facility annual operating data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	50		Y	For each combustion turbine, the number of startup periods occurring in each calendar year shall not exceed 400. When determining compliance with this limit, any startup that occurs during the commissioning period shall not be included. [Rules 1200, 20.3(d)(2) and 21]	The project owner shall submit facility annual operating data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports (AQ-SC8).	N	N/A	4th Quarter	Quarterly Operation Reports	Ongoing	
AQ	51		Y	For each combustion turbine, the number of startup periods occurring during its commissioning period shall not exceed 350. [Rules 1200, 20.3(d)(2) and 21]	The project owner shall submit facility annual operating data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports (AQ-SC8).	N	N/A	4th Quarter	Quarterly Operation Reports	Ongoing	
AQ	53		N	When a combustion turbine is operating, ammonia shall be injected at all times that the associated selective catalytic reduction (SCR) system outlet temperature is 540 degrees Fahrenheit or greater. [Rule 20.3 (d)(1)]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	55		N	Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control for compliance with applicable permit conditions, the automatic ammonia injection system serving the SCR system shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR system. Manufacturer specifications shall be maintained on site and made available to District personnel upon request. [Rule 20.3(d)(1)]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	56	a	N	The concentration of ammonia solution used in the ammonia injection system shall be less than 20 percent ammonia by weight. Records of ammonia solution concentration shall be maintained on site and made available to District personnel upon request. [Rule 14, 21]	The project owner shall maintain on site and provide on request of the CPM or District the ammonia delivery records that demonstrate compliance with this condition.	N	as needed	N/A	Inspections	Ongoing	
AQ	56	b	Y		Testing witnessed by the District, a proposed test protocol shall be submitted to the District for written approval at least 60 days prior to source testing.	N	60	prior to	Source Test	Ongoing	
AQ	56	c	Y		Additionally, the District shall be notified a minimum of 30 days prior to the test so that observers may be present unless otherwise authorized in writing by the District. [Rules 20.3(d)(1) and 1200 and 40 CFR Part60 Subpart KKKK and 40 CFR.	N	30	prior to	Source Test	Ongoing	
AQ	57	a	Y	All source test or other tests required by this permit shall be performed by the District or an independent contractor approved by the District. Unless otherwise specified in this permit or authorized in writing by the District, if testing will be performed by an independent contractor and witnessed by the District, a proposed test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. Additionally, the District shall be notified a minimum of 30 days prior to the test so that observers may be present unless otherwise authorized in writing by the District. [Rules 20.3(d)(1) and 1200 and 40 CFR Part60 Subpart KKKK and 40 CFR §60.8]	The project owner shall submit to the CPM for review and the District for approval the initial source test protocol at least 60 days prior to the initial source test.	N	60	prior to	Initial Source Test	Ongoing	
AQ	57	b	Y		The project owner shall notify the CPM and District no later than 30 days prior to the proposed source test date and time.	N	30	prior to	Source Test	Ongoing	
AQ	58		Y	Unless otherwise specified in this permit or authorized in writing by the District, within 45 days after completion of a source test or Relative Accuracy Test Audit (RATA) performed by an independent contractor, a final test report shall be submitted to the District for review and approval. [Rules 20.3(d)(1) and 1200 and 40 CFR Part 60 Subpart KKKK, 40 CFR §60.8, and 40 CFR Part 75]	The project owner will submit all RATA or source test reports to the CPM for review and the District for approval within 45 days of the completion of those tests.	N	45	after	completion of RATA/Source Tests	Ongoing	
AQ	59		Y	All testing conducted to measure concentrations or emissions of Volatile Organic Compounds (VOCs) shall include measurement of formaldehyde and the result shall be added to the result determined for other VOC concentrations or emissions, as applicable. Measurement of VOC emissions shall be conducted in accordance with EPA Method 18, or alternative methods approved by the District and EPA. Measurement of emissions of formaldehyde shall be conducted in accordance with EPA Method 316 or 323, or an alternative method approved by the District and EPA.	The project owner shall submit to the CPM for review and the District for approval the initial source test protocol and source test report within the timeframes specified in Conditions AQ-57 and AQ-58.	N	60	prior to	Initial Source Test		

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AQ	62		Y	A renewal source test and a NOx and CO Relative Accuracy Test Audit (RATA) shall be periodically conducted on each combustion turbine to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit and applicable relative accuracy requirements for the CEMS systems using District approved methods. The renewal source test and the NOx and CO RATAs shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR75, Appendix B, Sections 2.3.1 and 2.3.3. The renewal source test shall be conducted in accordance with a protocol complying with all the applicable requirements of the source test protocol for the Initial Emissions Source Test. [Rule 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]	The project owner shall submit to the CPM for review and the District for approval the periodic RATA and source test protocols, and RATA source test reports within the timeframes specified in Conditions AQ-57 and AQ-58.	N	45	after	completion of RATA/Source Tests	Ongoing	
AQ	63		Y	Relative Accuracy Test Audit (RATAs) and all other required certification tests shall be performed and completed on the NOx CEMS in accordance with applicable provisions of 40 CFR Part 75 Appendix A and B and 40 CFR §60.4405 and on the CO CEMS in accordance with applicable provisions of 40 CFR Part 60 Appendix B and F. [Rule 21, Rule 20.3 (d)(1), 40 CFR Part 60 Subpart KKKK and 40 CFR Part 75]	The results and field data collected during source tests required by this condition shall be submitted to the CPM for review and the District for approval as required by Condition AQ-58.	N	45	after	completion of RATA/Source Tests	Ongoing	
AQ	65		Y	The District may require one or more of the following compounds, or additional compounds to be quantified through source testing periodically to ensure compliance with Rule 1200 and other conditions of this permit and to quantify toxic emissions: a. Acetaldehyde b. Acrolein c. Benzene d. Formaldehyde e. Toluene f. Xylenes If the District requires the project owner to perform this source testing, the District shall request the testing in writing a reasonable period of time prior to the testing date. [Rule 1200 California H&S Code §41510]	The results and field data collected during source tests required by the District under this condition shall be submitted to the CPM for review and the District for approval within 60 days of testing.	N	60	after	Source Testing	Ongoing	
AQ	66		N	The higher heating value of the combustion turbine fuel shall be measured by ASTM D1826–94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter or ASTM D1945–96, Standard Method for Analysis of Natural Gas by Gas Chromatography or an alternative test method approved by the District and EPA. [Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	67		N	The sulfur content of the combustion turbine fuel shall be sampled not less than once each calendar quarter in accordance with a protocol approved by the District, which shall be submitted to the District for approval not later than 90 days before the earliest initial startup dates for any of the combustion turbines and measured with ASTM D1072–90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases; ASTM D3246–05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry; ASTM D4468–85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry; ASTM D6228–98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection; or ASTM D6667–04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence or an alternative test method approved by the District and EPA. [Rule 20.3 (d)(1), Rule 21, and 40 CFR Part 75]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	90	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	68		N	The project owner shall comply with the applicable continuous emission monitoring requirements of 40 CFR Part 75 and 40 CFR Part 60. [40 CFR Part 75 and 40 CFR Part 60]	The project owner shall maintain a copy of the CEMS protocol required by AQ-70 on site and provide it, other CEMS data, and the CEMS for inspection on request by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	

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AQ	69		Y	A continuous emission monitoring system (CEMS) shall be installed on each combustion turbine and properly maintained and calibrated to measure, calculate and record the following, in accordance with the District approved CEMS protocol: A. Clock-hourly average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) both uncorrected and corrected to 15 percent oxygen; B. Clock-hourly average concentration of carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15 percent oxygen; C. Percent oxygen (O2) in the exhaust gas for each unit operating minute; D. Clock-hourly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds; E. Cumulative mass emissions of oxides of nitrogen (NOx) calculated as NO2, in each startup and shutdown period, in pounds; F. Calendar-daily mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds; G. Calendar monthly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds; H. Rolling four unit operating hour average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) corrected to 15 percent oxygen; I. Rolling four unit operating hour average emission rate of oxides of nitrogen (NOx), calculated as NO2, in pounds per megawatt-hour (lb/MWh). J. Calendar quarter, calendar year, and rolling 12-calendar-month period mass emissions of oxides of nitrogen (NOx) calculated as NO2, in tons; K. Cumulative mass emissions of carbon monoxide (CO) in each startup and shutdown period, in pounds L. Clock-hourly mass emissions of carbon monoxide (CO), in pounds; M. Calendar-daily mass emission of carbon monoxide (CO), in pounds; N. Calendar-monthly mass emission of carbon monoxide (CO), in pounds; O. Rolling 12-calendar-month period mass emission of carbon monoxide (CO), in tons; P. Average concentration of oxides of nitrogen (NOx) and carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15 percent oxygen during each unit operating minute; and	The project owner shall submit to the CPM for review and the District for approval a CEMS protocol, as required by AQ-70, which includes description of the methods of compliance with the requirements of this condition.	N	90	prior to	Initial Startup	Ongoing	
AQ	69		N		The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	72		Y	A monitoring plan in conformance with 40 CFR 75.53 shall be submitted to U.S. EPA Region 9 and the District at least 45 calendar days prior to the Relative Accuracy Test Audit (RATA), as required in 40 CFR 75.62. [40 CFR Part 75]	The project owner shall submit to the CPM for review and the District and the U.S. EPA Region 9 for approval a monitoring plan in compliance with this condition at least 45 days prior to the RATA test.	N	45	prior to	RATA/Source Tests	Ongoing	
AQ	73		Y	The oxides of nitrogen (NOx) and oxygen (O2) components of the CEMS shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of sections 75.10 and 75.12 of title 40, Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the Quality Assurance procedures of Appendix B of 40 CFR 75 and the CEMS protocol approved by the District. The carbon monoxide (CO) components of the CEMS shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit, and the CEMS protocol approved by the District. [Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]	The project owner shall submit to the CPM for review and the District for approval a CEMS protocol, as required by AQ-70, which includes description of the methods of compliance with the requirements of this condition.	N	90	prior to	Initial Startup	Ongoing	
AQ	73		N		The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	74		N	The CEMS shall be in operation in accordance with the District approved CEMS protocol at all times when the turbine is in operation. A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request. [Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	76		N	Any violation of any emission standard as indicated by the CEMS shall be reported to the District's compliance division within 96 hours after such occurrence. [Rule 19.2	The project owner shall notify the District regarding any emission standard violation as required in this condition and	N	96 hours	after	Violation of Emission Standard	Ongoing	
AQ	76		Y		shall document all such occurrences in each Quarterly Operation Report (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	77		Y	The CEMS shall be maintained and operated, and reports submitted, in accordance with the requirements of rule 19.2 Sections (d), (e), (f)(1), (f)(2), (f)(3), (f)(4) and (f)(5), and a CEMS protocol approved by the District. [Rule 19.2]	The project owner shall submit to the District the CEMS reports as required in this condition and shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	

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AQ	78		Y	Except for changes that are specified in the initial approved CEMS protocol or a subsequent revision to that protocol that is approved in advance, in writing by the District, the District shall be notified in writing at least thirty (30) calendar days prior to any planned changes made in the CEMS or Data Acquisition and Handling System (DAHS), including, but not limited to, the programmable logic controller, software which affects the value of data displayed on the CEMS/DAHS monitors with respect to the parameters measured by their respective sensing devices and any planned changes to the software that controls the ammonia flow to the SCR. Unplanned or emergency changes shall be reported within 96 hours. [Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]	The project owner shall submit to the CPM for review and the District for approval any revision to the CEMS/DAHS or ammonia flow control software, as required by this condition, to be approved in advance at least 30 days before any planned changes are made.	N	30	prior to	Revisions to Monitoring Software	Ongoing	
AQ	78		N		The project owner shall notify the District regarding any unplanned emergency changes to these software systems within 96 hours and	N	96 hours	after	Emergency Changes to Monitoring Software	Ongoing	
AQ	78		Y		shall document all such occurrences in each Quarterly Operation Report (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	80		Y	Fuel flowmeters shall be installed and maintained to measure the fuel flow rate, corrected for temperature and pressure, to each combustion turbine. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, and Section 2.1.6. [Rule 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]	The project owner shall submit to the CPM the natural gas usage data from the fuel flow meters as part of the Quarterly Operation Report (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	83		N	Operating logs or Data Acquisition and Handling System (DAHS) records shall be maintained to record the beginning and end times and durations of all startup and shutdown periods to the nearest minute, quantity of fuel used in each clock minute, clock hour, calendar month, and 12-calendar-month period in standard cubic feet; hours of operation each day; and hours of operation during each calendar year. For purposes of this condition, the hours of turbine operation is defined as the total minutes the turbine is combusting fuel during the calendar year divided by 60 rounded to the nearest hundredth of an hour. [Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	87		Y	The project owner shall file semiannual reports in accordance with 40 CFR §60.4375. [40 CFR Part 60 Subpart KKKK]	None Required	N				Ongoing	
AQ	88	a	Y	Each semiannual report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each such semiannual compliance report shall be postmarked or delivered no later than January 30 or July 30, whichever date is the first date following the end of the semiannual reporting period. [40 CFR Part 60 Subpart KKKK and Rule 21]	The project owner shall provide the District's Compliance Division the semi-annual reports required in this condition within the due dates specified in this condition,	N	N/A	Semi-Annual	Semi-Annual Report	Ongoing	
AQ	88	b	Y		shall provide summaries of these semi-annual reports in the Quarterly Operation Reports (AQ-SC8) following each semi-annual report, and shall provide full copies of these reports to the CPM upon request.	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	89		N	All semiannual compliance reports shall be submitted to the District Compliance Division [40 CFR §60.7]	None required.	N				Ongoing	
AQ	93		N	This EPA certified engine shall be installed, configured, operated and maintained according to the manufacturer's emission related instructions. The owner or operator may not change any emission related settings unless those changes are permitted by the manufacturer and do not affect the engine's compliance with the emission standards to which it is certified. [40 CFR 60 subpart IIII]	The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	94		N	The engine shall be operated exclusively during emergencies as defined in Rule 69.4.1, 40 CFR Part 60 Subpart IIII or 17 CCR §93115 as applicable, or for maintenance and testing.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	95		Y	Engine operation for maintenance and testing purposes shall not exceed 35 hours per calendar year unless otherwise required by the National Fire Protection Association (NFPA) Section 25. [Rules 69.4.1, 40 CFR Part 60 Subpart IIII, and 17 CCR §93115]	The project owner shall submit to the CPM the fire pump engine operating data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ	96		N	The engine shall only use CARB Diesel Fuel. [Rules 20.3(d)(1), 69.4.1, and 17 CCR §93115]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	97		N	Visible emissions including crankcase smoke shall comply with Air Pollution Control District Rule 50. [Rule 50]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	

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AQ	98		N	The equipment described above shall not cause or contribute to public nuisance. [Rule 51]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	99		N	This engine shall not operate for non-emergency use during the following periods, as applicable: A. Whenever there is any school sponsored activity, if engine is located on school grounds or B. Between 7:30 and 3:30 PM on days when school is in session, if the engine is located within 500 feet of, but not on school grounds. This condition shall not apply to an engine located at or near any school grounds that also serve as the student's place of residence. (ATCM reportable) [17 CCR §93115]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	100	a	Y	A non-resettable engine hour meter shall be installed on this engine, maintained in good working order, and used for recording engine operating hours. If a meter is replaced, the Air Pollution Control District's Compliance Division shall be notified in writing within ten calendar days. The written notification shall include the following information: A. Old meter's hour reading. B. Replacement meter's manufacturer name, model, and serial number if available and current hour reading on replacement meter. C. Copy of receipt of new meter or of installation work order. A copy of the meter replacement notification shall be maintained on site and made available to the Air Pollution Control District upon request. [Rules 69.4.1, 17 CCR §93115, and 40 CFR Part 60 Subpart IIII]	The project owner shall provide notification to the District as required by this condition and	N	10	after	Meter Replacement	Ongoing	
AQ	100	b	N		shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	101		N	The owner or operator shall conduct periodic maintenance of this engine and add-on control equipment, if any, as recommended by the engine and control equipment manufacturers or as specified by the engine servicing company's maintenance procedure. The periodic maintenance shall be conducted at least once each calendar year. [Rule 69.4.1and 40 CFR Part 60 Subpart IIII]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
<u>AQ</u>	102		N	The owner or operator shall keep manuals of recommended maintenance as provided by the engine and control equipment manufacturers for at least the same period of time as the engine to which the records apply is located on site. [Rule 69.4.1 and 40 CFR Part 60 Subpart IIII]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	103		N	The owner or operator of this engine shall maintain records of all maintenance conducted on the engine, including a description of the maintenance and date the maintenance was performed. [Rule 69.4.1 and 40 CFR Part 60 Subpart IIII]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	104		N	The owner or operator shall maintain documentation for all fuel deliveries identifying the fuel as CARB diesel. [Rule 69.4.1, 17 CCR §93115, and 40 CFR Part 60 Subpart IIII]	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	N	as needed	N/A	Inspections	Ongoing	
AQ	105		Y	The owner or operator of this engine equipment shall maintain a monthly operating log containing, at a minimum, the following: A. Dates and times of engine operation, whether the operation was for compliance with the testing requirements of National Fire Protection Association (NFPA) 25 or emergency use, and the nature of the emergency, if known; B. Hours of operation for all uses other than those specified above and identification of the nature of that use. [Rule 69.4.1, 40 CFR subpart IIII and 17 CCR §93115]	The project owner shall submit to the CPM the fire pump engine operating data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).	N	N/A	Quarterly	Quarterly Operation Reports	Ongoing	
AQ-SC	6	a	Y/N	The project owner shall submit to the CPM for review and approval any project air permit modification proposed by the project owner. The project owner shall submit to the CPM any modification to any permit proposed by the District or U.S. EPA, and any revised permit issued by the District or U.S. EPA; for the project.	The project owner shall submit any proposed air permit modification to the CPM within five working days of its submittal either by: 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency.	N	5	prior to	Air Permit Modification	Ongoing	
AQ-SC	6	b	Y		The project owner shall submit all modified air permits to the CPM within 15 days of receipt.	N	15	after	Air Permit Modification	Ongoing	

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AQ-SC	8		Y	The project owner shall submit to the CPM Quarterly Operation Reports, following the end of each calendar quarter that include operational and emissions information as necessary to demonstrate compliance with the conditions of certification herein. The Quarterly Operation Report will specifically state that the facility meets all applicable conditions of certification or note or highlight all incidences of noncompliance.	The project owner shall submit the Quarterly Operation Reports to the CPM and District, if requested by the District, no later than 30 days following the end of each calendar quarter.	N	30	following end of quarter	Quarterly Operation Reports	Ongoing	
<u>AQ-SC</u>	9			The gas turbines shall only be operated between the military time hours of 0600 to 2400, except in the event of a California Independent System Operator declared emergency.	The project owner shall submit the Quarterly Operation Reports to the CPM and District, if requested by the District, no later than 30 days following the end of each calendar quarter that demonstrate the operating hours and provide documentation regarding declared emergency events when the gas turbines are operated between the hours of 2400 and 0600, military time.	N	30	following end of quarter	Quarterly Operation Reports	Ongoing	
BIO	1	b	Y		If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least ten working days prior to the termination or release of the preceding designated biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.	N	10	prior to	Termination of DB, CRS, PRS	Ongoing	
BIO	2	b		5. inspect active construction areas where animals may have become trapped prior to construction commencing each day. At the end of the day, inspect for the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (i.e., parking lots) for animals in harm's way; 6. notify the project owner and the CPM of any non-compliance with any Biological Resources Condition of Certification; 7. respond directly to inquiries of the CPM regarding biological resource issues; 8. maintain written records of the tasks specified above and those included in the BRMIMP. Summaries of these records shall be submitted in the monthly compliance report and the annual report; and 9. train the biological monitors as appropriate, and ensure their familiarity with the BRMIMP, Worker Environmental Awareness Program (WEAP) training, and all permits.	During project operation, the Designated Biologist shall submit record summaries in the annual compliance report unless his/her duties are ceased as approved by the CPM.	N	N/A	Annual	Annual Compliance Report	Ongoing	
BIO	5	d	N		The signed training acknowledgement forms from construction shall be kept on file by the project owner for a period of at least 6 months after the start of commercial operation. During project operation, signed statements for active project operational personnel shall be kept on file for 6 months following the termination of an individual's employment.	N	6 months	after	Commercial Operation	Ongoing	
BIO	5	e	N		During project operation, signed statements for active project operational personnel shall be kept on file for six months following the termination of an individual's employment.	N	>180	N/A	Termination of Individual's Employment	Ongoing	
BIO	6	b	Y		If there are any permits that have not yet been received when the BRMIMP is first submitted, these permits shall be submitted to the CPM, the CDFW, and USFWS within five days of their receipt, and	N	5	after	Receipt of permits for BRMIMP	Ongoing	
BIO	6	c	Y		the BRMIMP shall be revised or supplemented to reflect the permit condition within ten days of their receipt by the project owner.	N	10	after	Receipt of permits for BRMIMP	Ongoing	
BIO	6	e	Y		The project owner shall notify the CPM no less than five working days before implementing any modifications to the approved BRMIMP to obtain CPM approval. Any changes to the approved BRMIMP must also be approved by the CPM in consultation with CDFW, the USFWS, and appropriate agencies to ensure no conflicts exist.	N	5	prior to	Modifications to BRMIMP	Ongoing	

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BIO	6	f	Y	9. all locations on a map, at an approved scale, of sensitive biological resource areas subject to disturbance and areas requiring temporary protection and avoidance during construction; 10. aerial photographs, at an approved scale, of all areas to be disturbed during project construction activities — one set prior to any site (and related facilities) mobilization disturbance and one set subsequent to completion of project construction. Include planned timing of aerial photography and a description of why times were chosen; 11. duration for each type of monitoring and a description of monitoring methodologies and frequency; 12. performance standards to be used to help decide if/when proposed mitigation is or is not successful; 13. all performance standards and remedial measures to be implemented if performance standards are not met; 14. a preliminary discussion of biological resources related facility closure measures; 15. restoration and revegetation plan; and 16. a process for proposing plan modifications to the CPM and appropriate agencies for review and approval.	Implementation of BRMIMP measures will be reported in the monthly compliance reports by the Designated Biologist (i.e., survey results, construction activities that were monitored, species observed).	N	N/A	Annual	Annual Compliance Report	Ongoing	
COMPLIANCE	1		N	Unrestricted Access. The project owner shall take all steps necessary to ensure that the CPM, responsible Energy Commission staff, and delegated agencies or consultants have unrestricted access to the facility site, related facilities, project-related staff, and the records maintained to facilitate audits, surveys, inspections, and general or closure-related site visits. Although the CPM shall normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time, whether such visits are by the CPM in person or through representatives from Energy Commission staff, delegated agencies, or consultants.		N	as needed	N/A	Inspections	Ongoing	
COMPLIANCE	2		N	Compliance Record. The project owner shall maintain electronic copies of all project files and submittals on-site, or at an alternative site approved by the CPM, for the operational life and closure of the project. The files shall also contain at least one hard copy of: 1. the facility's Application(s) for Certification; 2. all amendment petitions and Energy Commission orders; 3. all site-related environmental impact and survey documentation; 4. all appraisals, assessments, and studies for the project; 5. all finalized original and amended structural plans and “as-built” drawings for the entire project; 6. all citations, warnings, violations, or corrective actions applicable to the project; and 7. the most current versions of any plans, manuals and training documentation required by the conditions of certification or applicable LORS. Energy Commission staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files maintained pursuant to this condition.		N	as needed	N/A	Inspections	Ongoing	

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COMPLIANCE	3		Y	<p>Compliance Verification Submittals. Verification lead times associated with the start of construction or closure may require the project owner to file submittals during the AFC process, particularly if construction is planned to commence shortly after certification. The verification procedures, unlike the conditions, may be modified as necessary by the CPM.</p> <p>A cover letter from the project owner or an authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter subject line shall identify the project by AFC number, cite the appropriate condition of certification number(s), and give a brief description of the subject of the submittal. When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal and the condition(s) of certification applicable. All reports and plans required by the project's conditions of certification shall be submitted in a searchable electronic format (.pdf, MS Word, or Excel, etc.) and include standard formatting elements such as a table of contents, identifying by title and page number each section, table, graphic, exhibit, or addendum. All report and/or plan graphics and maps shall be adequately scaled and shall include a key with descriptive labels, directional headings, a bar scale, and the most recent revision date. The project owner is responsible for the content and delivery of all verification submittals to the CPM, whether the actions required by the verification were satisfied by the project owner or an agent of the project owner. All submittals shall be accompanied by an electronic copy on an electronic storage medium, or by e-mail, as agreed upon by the CPM. If hard-copy submittals are required, please address as follows:</p> <p>Compliance Project Manager Carlsbad Energy Center Project (07-AFC-6C) California Energy Commission 1516 Ninth Street (MS-2000) Sacramento, CA 95814</p>		N	N/A	N/A	General compliance	Ongoing	
COMPLIANCE	5		Y	<p>Compliance Matrix. The project owner shall submit a compliance matrix to the CPM with each MCR and ACR. The compliance matrix provides the CPM with the status of all conditions of certification in a spreadsheet format. The compliance matrix shall identify:</p> <ol style="list-style-type: none">1. the technical area (e.g., biological resources, facility design, etc.);2. the condition number;3. a brief description of the verification action or submittal required by the condition;4. the date the submittal is required (e.g., sixty (60) days prior to construction, after final inspection, etc.);5. the expected or actual submittal date;6. the date a submittal or action was approved by the CBO, CPM, or delegate agency, if applicable;7. the compliance status of each condition (e.g., "not started," "in progress," or "completed" (include the date); and8. if the condition was amended, the updated language and the date the amendment was proposed or approved. <p>The CPM can provide a template for the compliance matrix upon request.</p>	A compliance matrix shall be submitted by the project owner to the CPM along with each monthly and annual compliance report.	Y	N/A	Annual	Annual Compliance Report	Ongoing	

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COMPLIANCE	7	a	Y	Annual Compliance Reports. After construction is complete, the project owner must submit searchable electronic ACRs instead of MCRs. ACRs are due for each year of commercial operation and may be required for a specified period after decommissioning to monitor closure compliance, as specified by the CPM. The searchable electronic copies may be filed on an electronic storage medium or by e-mail, subject to CPM approval. Each ACR must include the AFC number, identify the reporting period, and contain the following: 1. an updated compliance matrix showing the status of all conditions of certification (fully satisfied conditions do not need to be included in the matrix after they have been reported as completed); 2. a summary of the current project operating status and an explanation of any significant changes to facility operations during the year; 3. documents required by specific conditions to be submitted along with the ACR; each of these items shall be identified in the transmittal letter with the condition it satisfies and submitted as an attachment to the ACR; 4. a cumulative list of all post-certification changes approved by the Energy Commission or the CPM; 5. an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided; 6. a list of filings submitted to, and permits issued by, other governmental agencies during the year; 7. a projection of project compliance activities scheduled during the next year; 8. a list of the year's additions to the on-site compliance file; 9. an evaluation of the Site Contingency Plan, including amendments and plan updates; and 10. a list of complaints, notices of violation, official warnings, and citations received during the year, a description of how the issues were resolved, and the status of any unresolved matters.	ACRs are due for each year of commercial operation and may be required for a specified period after decommissioning to monitor closure compliance, as specified by the CPM.	N	N/A	Annual	Annual Compliance Report	Ongoing	
COMPLIANCE	7	b	Y		Include an updated Provisional Closure Plan and Cost Estimate in every fifth-year ACR for CPM review and approval.	N	N/A	Every 5 Years	Annual Compliance Report		
COMPLIANCE	8		Y	Confidential Information. Any information that the project owner designates as confidential shall be submitted to the Energy Commission's Executive Director with an application for confidentiality, pursuant to Title 20, California Code of Regulations, section 2505 (a). Any information deemed confidential pursuant to the regulations shall remain undisclosed, as provided in Title 20,		N	N/A	N/A	General compliance	Ongoing	
COMPLIANCE	9		Y	Annual Energy Facility Compliance Fee. Pursuant to the provisions of section 25806 (b) of the Public Resources Code, the project owner is required to pay an annually adjusted compliance fee. Current compliance fee information is available on the Energy Commission's website at http://www.energy.ca.gov/siting/filing_fees.html . The project owner may also contact the CPM for the current fee information. The initial payment is due on the date the Energy Commission docket its final Decision. All subsequent payments are due by July 1 of each year in which the facility retains its certification.	The initial payment is due on the date the Energy Commission docket its final Decision. All subsequent payments are due by July 1 of each year in which the facility retains its certification.	N	N/A	N/A	General compliance	Ongoing	
COMPLIANCE	10		Y	Amendments, Staff-Approved Project Modifications, Ownership Changes, and Verification Changes. The project owner shall petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, to modify the design, operation, or performance requirements of the project or linear facilities, or to transfer ownership or operational control of the facility. The CPM will determine whether staff approval will be sufficient, or whether Commission approval will be necessary. It is the project owner's responsibility to contact the CPM to determine if a proposed project change triggers the requirements of section 1769. Section 1769 details the required contents for a Petition to Amend an Energy Commission Decision. The only change that can be requested by means of a letter to the CPM is a request to change the verification method of a condition of certification. Implementation of a project modification without first securing Energy Commission, or Energy Commission staff, approval may result in an enforcement action, including civil penalties, in accordance with section 25534 of the Public Resources Code. If the Energy Commission's rules regarding amendments are revised, the rules in effect at the time the change is requested shall apply.		Y	N/A	Prior to	Project Change on Design	Ongoing	Approved by Start of Tank Demolition Letter from CPM, received on 12-9-14 for tanks 5, 6, and 7 Demolition. Approved by Start of tank demolition 1, 2, and 4, and soil remediation letter 8-31-15.
COMPLIANCE	11	b	Y		The project owner shall respond to all complaints within 24 hours or the next business day.	N	1	after	Complaint	Ongoing	

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COMPLIANCE	11	c	Y		In addition to including all complaints, notices, and citations with the MCRs and ACRs, within ten days of receipt, the project owner shall report, and provide copies to the CPM, of all complaints, including noise and lighting complaints, notices of violation, notices of fines, official warnings, and citations.	N	N/A	Monthly	Monthly Compliance Report	Ongoing	
COMPLIANCE	11	d	Y		In addition to including all complaints, notices, and citations with the MCRs and ACRs, within ten days of receipt, the project owner shall report, and provide copies to the CPM, of all complaints, including noise and lighting complaints, notices of violation, notices of fines, official warnings, and citations.	N	N/A	Annual	Annual Compliance Report	Ongoing	
COMPLIANCE	11	e	Y		In addition to including all complaints, notices, and citations with the MCRs and ACRs, within ten days of receipt, the project owner shall report, and provide copies to the CPM, of all complaints, including noise and lighting complaints, notices of violation, notices of fines, official warnings, and citations.	N	10	after	Complaint	Ongoing	
COMPLIANCE	12		Y	Emergency Response Site Contingency Plan. No less than 60 days prior to the start of commercial operation (or other date agreed to by the CPM), the project owner shall submit for CPM review and approval, an Emergency Response Site Contingency Plan (Contingency Plan). The Contingency Plan shall evidence a facility's coordinated emergency response and recovery preparedness for a series of reasonably foreseeable emergency events. The CPM may require the updating of the Contingency Plan over the life of the facility. Contingency Plan elements include, but are not limited to: 1. a site-specific list and direct contact information for persons, agencies, and responders to be notified for an unanticipated event; 2. a detailed and labeled facility map, including all fences and gates, the windsock location (if applicable), the on- and off-site assembly areas, and the main roads and highways near the site; 3. a detailed and labeled map of population centers, sensitive receptors, and the nearest emergency response facilities; 4. a description of the on-site, first response and backup emergency alert and communication systems, site-specific emergency response protocols, and procedures for maintaining the facility's contingency response capabilities, including a detailed map of interior and exterior evacuation routes, and the planned location(s) of all permanent safety equipment; 5. an organizational chart including the name, contact information, and first aid/emergency response certification(s) and renewal date(s) for all personnel regularly on-site; 6. a brief description of reasonably foreseeable, site-specific incidents and accident sequences (on- and off-site), including response procedures and protocols and site security measures to maintain twenty-four-hour site security; 7. procedures for maintaining contingency response capabilities; and 8. the procedures and implementation sequence for the safe and secure shutdown of all non-critical equipment and removal of hazardous materials and waste (see also specific conditions of certification for the technical areas of Public Health, Waste Management, Hazardous Materials Management, and Worker Safety).	No less than 60 days prior to the start of commercial operation (or other date agreed to by the CPM), the project owner shall submit for CPM review and approval, an Emergency Response Site Contingency Plan (Contingency Plan).	N	60	prior to	Commercial Operation	Ongoing	
COMPLIANCE	13	a		Incident-Reporting Requirements. Within one hour after it is safe and feasible, the project owner shall notify the CPM or compliance office manager, by telephone and e-mail, of any incident at the power plant or appurtenant facilities that results, or could result, in any of the following: 1. health and safety impacts on the surrounding population; 2. property damage off-site; 3. response by off-site emergency response agencies; 4. serious on-site injury; 5. serious environmental damage; or 6. emergency reporting to any federal, state, or local agency. The notice shall describe the circumstances, status, and expected duration of the incident. If warranted, as soon as it is safe and feasible, the project owner shall implement the safe shutdown of any non-critical equipment and removal of any hazardous materials and waste that pose a threat to public health and safety and to environmental quality (also, see specific conditions of certification for the technical areas of HAZARDOUS MATERIALS MANAGEMENT and WASTE MANAGEMENT).	Within one hour after it is safe and feasible, the project owner shall notify the CPM or compliance office manager, by telephone and e-mail, of any incident at the power plant or appurtenant facilities	N	1 hour	after	Incident	Ongoing	

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COMPLIANCE	13	b		<p>Within one week of the incident, the project owner shall submit to the CPM a detailed incident report, which includes, as appropriate, the following information:</p> <ol style="list-style-type: none"> 1. a brief description of the incident, including its date, time, and location; 2. a description of the cause of the incident, or likely causes if it is still under investigation; 3. the location of any off-site impacts; 4. description of any resultant impacts; 5. a description of emergency response actions associated with the incident; 6. identification of responding agencies; 7. identification of emergency notifications made to federal, state, and/or local agencies; 8. identification of any hazardous materials released and an estimate of the quantity released; 9. a description of any injuries, fatalities, or property damage that occurred as a result of the incident; 10. fines or violations assessed or being processed by other agencies; 11. name, phone number, and e-mail address of the appropriate facility contact person having knowledge of the event; and 12. corrective actions to prevent a recurrence of the incident. <p>The project owner shall maintain all incident report records for the life of the project, including closure. After the submittal of the initial report for any incident, the project owner shall submit to the CPM copies of incident reports within 24 hours of a request.</p>	Within one week of the incident, the project owner shall submit to the CPM a detailed incident report.	N	5	after	Incident	Ongoing	
COMPLIANCE	14	a	Y	<p>Non-operation. If the facility ceases operation temporarily, either planned or unplanned, for longer than one week, but less than three months (or other CPM-approved date), the project owner shall notify the CPM (by telephone and e-mail), interested agencies, and nearby property owners. Notice of planned non-operation shall be given at least two weeks prior to the scheduled date. Notice of unplanned non-operation shall be provided no later than one week after non-operation begins. For any non-operation, a Repair/Restoration Plan for conducting the activities necessary to restore the facility to availability and reliable and/or improved performance shall be submitted to the CPM within one week after notice of non-operation is given. If non-operation is due to an unplanned incident, temporary repairs and/or corrective actions may be undertaken before the Repair/Restoration Plan is submitted. The Repair/Restoration Plan shall include:</p> <ol style="list-style-type: none"> 1. identification of operational and non-operational components of the plant; 2. a detailed description of the repair or restoration activities; 3. a proposed schedule for completing the repair or restoration activities; 4. an assessment of whether or not the proposed activities would require changing, adding, and/or deleting any conditions of certification, and/or would cause noncompliance with any applicable LORS; and 5. planned activities during non-operation, including any measures to ensure continued compliance with all conditions of certification and LORS. 	Notify the CPM (by telephone and e-mail), interested agencies, and nearby property owners of planned non-operation at least two weeks prior to the scheduled date.	N	10	prior to	Planned Non-Operation	Ongoing	
COMPLIANCE	14	b	Y		Notify the CPM (by telephone and e-mail), interested agencies, and nearby property owners of unplanned non-operation shall be provided no later than one week after non-operation begins.	N	5	prior to	Unplanned Non-Operation	Ongoing	
COMPLIANCE	14	c	Y		For any non-operation, a Repair/Restoration Plan for conducting the activities necessary to restore the facility to availability and reliable and/or improved performance shall be submitted to the CPM within one week after notice of non-operation is given.	N	5	after	Notice of Non-Operation	Ongoing	

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COMPLIANCE	14	d	Y	<p>The CPM will determine if CBO oversight or compliance site monitoring is required. Written updates to the CPM for non-operational periods, until operation resumes, shall include:</p> <ol style="list-style-type: none">1. progress relative to the schedule;2. developments that delayed or advanced progress or that may delay or advance future progress;3. any public, agency, or media comments or complaints; and4. projected date for the resumption of operation. <p>During non-operation, all applicable conditions of certification and reporting requirements remain in effect. If, after one year from the date of the project owner's last report of productive Repair/Restoration Plan work, the facility does not resume operation or does not provide a plan to resume operation, the Executive Director may assign suspended status to the facility and recommend commencement of permanent closure activities. Within 90 days of the Executive Director's determination, the project owner shall do one of the following:</p> <ol style="list-style-type: none">1. If the facility has a closure plan, the project owner shall update it and submit it for Energy Commission review and approval.2. If the facility does not have a closure plan, the project owner shall develop one consistent with the requirements in this Compliance Plan and submit it for Energy Commission review and approval.	<p>Within 90 days of the Executive Director's determination, the project owner shall do one of the following:</p> <ol style="list-style-type: none">1. If the facility has a closure plan, the project owner shall update it and submit it for Energy Commission review and approval.2. If the facility does not have a closure plan, the project owner shall develop one consistent with the requirements in this Compliance Plan and submit it for Energy Commission review and approval.	N	90	after	Permanent Closure	Ongoing	
COMPLIANCE	15	a	Y	<p>Facility Closure Planning. To ensure that a facility's eventual permanent closure and long-term maintenance do not pose a threat to public health and safety and/or to environmental quality, the project owner shall coordinate with the Energy Commission to plan and prepare for eventual permanent closure.</p> <p>A. Provisional Closure Plan and Estimate of Permanent Closure Costs To assure satisfactory long-term site maintenance and adequate closure for "the whole of a project," the project owner shall submit a Provisional Closure Plan and Cost Estimate for CPM review and approval within 60 days after the start of commercial operation. The Provisional Closure Plan and Cost Estimate shall consider applicable final closure plan requirements, and reflect the use of an independent third party to carry out the permanent closure.</p> <p>The Provisional Closure Plan and Cost Estimate shall provide for a phased closure process and include but not be limited to:</p> <ol style="list-style-type: none">1. comprehensive scope of work and itemized budget;2. closure plan development costs;3. dismantling and demolition;4. recycling and site clean-up;5. mitigation and monitoring direct, indirect, and cumulative impacts;6. site remediation and/or restoration;7. interim and long term operation monitoring and maintenance, including long-term equipment replacement costs; and8. contingencies. <p>The project owner shall include an updated Provisional Closure Plan and Cost Estimate in every fifth-year ACR for CPM review and approval. Each updated Provisional Closure Plan and Cost Estimate shall reflect the most current regulatory standards, best management practices, and applicable LORS.</p>	<p>Submit a Provisional Closure Plan and Cost Estimate for CPM review and approval within 60 days after the start of commercial operation.</p>	N	60	after	Commercial Operation	Ongoing	

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COMPLIANCE	15	b		<p>B. Final Closure Plan and Cost Estimate</p> <p>At least three years prior to initiating a permanent facility closure, the project owner shall submit for Energy Commission review and approval, a Final Closure Plan and Cost Estimate, which includes any long-term, post-closure site maintenance and monitoring. Final Closure Plan and Cost Estimate contents include, but are not limited to:</p> <p>1. a statement of specific Final Closure Plan objectives;</p> <p>2. a statement of qualifications and resumes of the technical experts proposed to conduct the closure activities, with detailed descriptions of previous power plant closure experience;</p> <p>3. identification of any facility-related installations not part of the Energy Commission certification, designation of who is responsible for these, and an explanation of what will be done with them after closure;</p> <p>4. a comprehensive scope of work and itemized budget for permanent plant closure and site maintenance activities, with a description and explanation of methods to be used, broken down by phases, including, but not limited to:</p> <p>a) dismantling and demolition;</p> <p>b) recycling and site clean-up;</p> <p>c) impact mitigation and monitoring;</p> <p>d) site remediation and/or restoration and;</p> <p>e) any contingencies.</p> <p>5. a revised/updated Final Cost Estimate for all closure activities, by phases, including site monitoring and maintenance costs, and long-term equipment replacement;</p>	At least three years prior to initiating a permanent facility closure, the project owner shall submit for Energy Commission review and approval, a Final Closure Plan and Cost Estimate, which includes any long-term, post-closure site maintenance and monitoring.	N	3 Years	prior to	Permanent Closure	Ongoing	
COMPLIANCE	15	c		<p>6. a schedule projecting all phases of closure activities for the power plant site and all appurtenances constructed as part of the Energy Commissioncertified project;</p> <p>7. an electronic submittal package of all relevant plans, drawings, risk assessments, and maintenance schedules and/or reports, including an above- and below-ground infrastructure inventory map and registered engineer's or delegate CBO's assessment of demolishing the facility; additionally, for any facility that permanently ceased operation prior to submitting a Final Closure Plan and Cost Estimate and for which only minimal or no maintenance has been done since, a comprehensive condition report focused on identifying potential hazards;</p> <p>8. all information additionally required by the facility's conditions of certification applicable to plant closure;</p> <p>9. an equipment disposition plan, including:</p> <p>a) recycling and disposal methods for equipment and materials; and</p> <p>b) identification and justification for any equipment and materials that will remain on-site after closure;</p> <p>10. a site disposition plan, including but not limited to:</p> <p>a) proposed rehabilitation, restoration, and/or remediation procedures, as required by the conditions of certification and applicable LORS; and</p> <p>b) site maintenance activities.</p> <p>11. identification and assessment of all potential direct, indirect, and cumulative impacts and proposal of mitigation measures to reduce significant adverse impacts to a less-than-significant level; potential impacts to be considered shall include, but not be limited to:</p> <p>a) traffic</p> <p>b) noise and vibration</p> <p>c) soil erosion</p> <p>d) air quality degradation</p> <p>e) solid waste</p> <p>f) hazardous materials</p> <p>g) waste water discharges</p> <p>h) contaminated soil</p>		N				Ongoing	

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COMPLIANCE	15	d		12. identification of all current conditions of certification, LORS, federal, state, regional, and local planning efforts applicable to the facility, and proposed strategies for achieving and maintaining compliance during closure; 13. updated mailing list or listserv of all responsible agencies, potentially interested parties, and property owners within one mile of the facility; 14. identification of alternatives to plant closure and assessment of the feasibility and environmental impacts of these; and 15. description of and schedule for security measures and safe shutdown of all non-critical equipment and removal of hazardous materials and waste (see conditions of certification for Public Health, Waste Management, Hazardous Materials Management, and Worker Safety). If implementation of an Energy Commission-approved Final Closure Plan and Cost Estimate is not initiated within one year of its approval date, it shall be updated and re-submitted to the Commission for supplementary review and approval. If a project owner initiates but then suspends closure activities, and the suspension continues for longer than one year, or subsequently abandons the facility, the Final Closure Plan and Cost Estimate shall be resubmitted to the Commission for supplementary review and approval. The project owner remains liable for all costs of contingency planning and closure.						Ongoing	
GEN	1	c	N		At least 30 days prior to the demolition of the EPS, the project owner shall contact the CBO to obtain the CBO's approval of the work.	N	30	prior to	Demolition of the EPS	Demolition Started	
HAZ	1	b	Y		and in the Annual Compliance Report.	N	N/A	Annual	Annual Compliance Report	Ongoing	
HAZ	8	c	Y		In the annual compliance report, the project owner shall include a statement that all current project employee and appropriate contractor background investigations have been performed, and that updated certification statements have been appended to the operations security plan. In the annual compliance report, the project owner shall include a statement that the operations security plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.	N	N/A	Annual	Annual Compliance Report	Ongoing	
SOIL&WATER	4	b	Y		The project owner shall submit to the CPM the annual water quality monitoring report required by the SDRWQCB in the annual compliance report. The project owner shall notify the CPM of all WDR Order violations, the actions taken or planned to bring the project back into compliance with the WDR Order, and the date compliance was reestablished.	N	N/A	Annual	Annual Compliance Report	Ongoing	
SOIL&WATER	5	b	Y		The project owner shall submit to the CPM any water quality monitoring reports required by the City in the annual compliance report. The project owner shall notify the CPM of any violations of the permit(s) and conditions, the actions taken or planned to bring the project back into compliance with the permit(s), and the date compliance was reestablished.	N	N/A	Annual	Annual Compliance Report	Ongoing	
SOIL&WATER	6	b	Y		The project owner shall provide a report on the servicing, testing, and calibration of the metering devices in the annual compliance report. The project owner shall submit a water use summary report to the CPM in the annual compliance report for the life of the project. The annual summary report shall be based on and distinguish recorded daily use and emergency uses of potable and recycled water. The report shall include calculated monthly range, monthly average, and annual use by the project in both gallons per minute and acre-feet. After the first year and for subsequent years, this information shall also include the yearly range and yearly average potable and recycled water used by the project.	N	N/A	Annual	Annual Compliance Report	Ongoing	
SOIL&WATER	6	c			The project owner shall submit a petition to amend within 3 months of exceeding the maximum allowable 300 acre-feet of potable water for operational uses.	N	90	after	Exceeding Maximum Allowable 300 acre-Feet of Potable Water for Operational Uses	Ongoing	

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SOIL&WATER	7	b	Y		During operations, the project owner shall submit to the CPM any wastewater quality monitoring reports required by the City in the annual compliance report.	N	N/A	Annual	Annual Compliance Report	Ongoing	
SOIL&WATER	7	c	Y		The project owner shall submit any notices of violation from the City to the CPM within ten days of receipt and fully explain the corrective actions taken in the annual compliance report.	N	10	after	NOV	Ongoing	
SOIL&WATER	9	a	Y	<p>Prior to transport and disposal of any facility construction or demolition-related wastewaters offsite, the project owner shall test and classify the stored wastewater to determine proper management and disposal requirements. The project owner shall provide evidence that wastewater is disposed of at an appropriately licensed facility. The project owner shall ensure that the wastewater is transported and disposed of in accordance with the wastewater's characteristics and classification and all applicable LORS (including any CCR Title 22 Hazardous Waste and Title 23 Waste Discharges to Land requirements).</p> <p>Where discharge of wastewater must comply with the San Diego Regional Water Quality Control Board (SDRWQCB) and State Water Resources Control Board regulatory requirements, the project owner shall submit a Report of Waste Discharge (ROWD) to the compliance project manager (CPM) and SDRWQCB for determination of which regulatory waiver or permit applies to the proposed discharges. The project owner shall pay all necessary fees for filing and review of the ROWD and all other related fees. Checks for such fees shall be submitted to the SDRWQCB and shall be payable to the State Water Resources Control Board. The project owner shall ensure compliance with the provisions of the waiver or permit applicable to the discharge. Where the regulatory requirements are not applied pursuant to a National Pollutant Discharge Elimination System permit, it is the Commission's intent that the requirements of the applicable waiver or permit be enforceable by both the Commission and the SDRWQCB. In furtherance of that objective, the Commission hereby delegates the enforcement of the waiver or permit requirements, and associated monitoring, inspection, and annual fee collection authority, to the SDRWQCB. The CPM and SDRWQCB shall confer with each other and coordinate, as needed, in the enforcement of the requirements.</p>	The project owner shall submit to the CPM copies of all relevant correspondence between the project owner and the SWRCB or SDRWQCB about the EPS demolition wastewater discharge requirements within ten days of its receipt or submittal. This information shall include copies of the Notice of Intent and Notice of Termination for the project. A letter from the SWRCB or SDRWQCB indicating that there is no requirement for the discharge of EPS demolition wastewater would satisfy this condition.	N	10	after	receipt or submittal of correspondence between project owner and SWRCB or SDRWQCB about the EPS demolition wastewater discharge requirements	Ongoing	
TLSN	3			The project owner shall ensure that the rights-of-way of the proposed transmission lines are kept free of combustible material, as required under the provisions of section 4292 of the Public Resources Code and section 1250 of Title 14 of the California Code of Regulations.	During the first five years of plant operation, the project owner shall provide a summary of inspection results and any fire prevention activities carried out along the right-of-way of each line and provide such summaries in the Annual Compliance Report.	N	N/A	Annual	During the first five years of plant operation	Ongoing	
VIS	1	c	Y		The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify: a) the condition of the surfaces of all structures and buildings at the end of the reporting year; b) maintenance activities that occurred during the reporting year; and c) the schedule of maintenance activities for the next year.	N	N/A	Annual	Annual Compliance Report	Ongoing	
VIS	2	b	N		3. The planting must occur during the first optimal planting season following site mobilization. The project owner shall simultaneously notify the CPM and the City of Carlsbad within seven days after completing installation of the landscaping, that the landscaping is ready for inspection.	N	7	after	Landscaping	Ongoing	
VIS	2	c	Y		4. The project owner shall report landscape maintenance activities, including replacement of dead or dying vegetation, for the previous year of operation in each Annual Compliance Report. The City of Carlsbad, with the concurrence of the CPM, shall have authority to require replacement planting of dead or dying vegetation through the life of the project	N	N/A	Annual	Annual Compliance Report	Ongoing	

Carlsbad Energy Center Project
Compliance Matrix: 2020

Technical Area	COC Number	Subtask	Deliverable Req.	Description	Verification/Action/Submittal Required	Required Prior to Start of Construction?	Action Days	Submittal Timing	Submittal Trigger Event	Compliance Status	Comments
VIS	3	B		<p>If necessary to provide visual screening of staging activities, equipment and materials in the short term, the project owner shall provide temporary dark-colored, opaque fencing to provide visual screening until landscape screening described above has achieved sufficient maturity to provide visual screening. Existing opaque fencing shall be maintained along the Carlsbad Boulevard frontage of the EPS for the duration of construction and demolition.</p> <p>The project owner shall submit to the CPM for review and approval, and simultaneously to the city of Carlsbad for review and comment, a landscaping plan whose proper implementation will satisfy these requirements. The plan shall include:</p> <p>a) A detailed landscape, grading, and irrigation plan, at a reasonable scale. The plan shall demonstrate how the requirements stated above shall be met. The plan shall provide a detailed installation schedule demonstrating installation of as much of the landscaping as early in the construction process as is feasible in coordination with project construction. The intent of the plan shall be to minimize loss of existing perimeter tree and shrub screening, particularly at the northeast laydown site; and to provide supplemental and replacement plantings as needed to screen staging sites.</p>		N			As Needed	Ongoing	
VIS	3	b	N	<p>b) A list (prepared by a qualified professional arborist familiar with local growing conditions) of proposed species, specifying installation sizes, growth rates, expected time to maturity, expected size at five years and at maturity, spacing, number, availability, and a discussion of the suitability of the plants for the site conditions and mitigation objectives, with the objective of providing the widest possible range of species from which to choose;</p> <p>c) Maintenance procedures, including any needed irrigation and a plan for routine annual or semi-annual debris removal for the life of the project;</p> <p>d) A procedure for monitoring for and replacement of unsuccessful plantings for the life of the project; and</p> <p>e) One set of 11"x17" color photo-simulations of the proposed landscaping landscape condition at start of construction and at five years and twenty years after planting, as viewed from Key Observation Point 1 6 (location shown on Visual Resources Figure 3 of the Staff Assessment).</p> <p>The plan shall not be implemented until the project owner receives final approval from the CPM.</p>	3. The planting must occur during the first optimal planting season following site mobilization. The project owner shall simultaneously notify the CPM and the City of Carlsbad within seven days after completing installation of the landscaping, that the landscaping is ready for inspection.	N	7	after	Landscaping	Ongoing	
VIS	3	c	Y		4. The project owner shall report landscape maintenance activities, including replacement of dead or dying vegetation, for the previous year of operation in each Annual Compliance Report.	N	N/A	Annual	Annual Compliance Report	Ongoing	
VIS	4	e	Y		Within 48 hours of receiving a lighting complaint, the project owner shall provide the CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the complaint, and a schedule for implementation.	N	48 hrs	within receipt	Lighting Complaint	Ongoing	
VIS	4	f	N		The project owner shall notify the CPM within 48 hours after completing implementation of the proposal.	N	48 hrs	within receipt	Lighting Complaint	Ongoing	
VIS	4	g	Y		A copy of the complaint resolution form report shall be submitted to the CPM within 30 days	N	30	after	Lighting Complaint	Ongoing	
VIS	5	a	Y	<p>In order to address potential cumulative visual impacts resulting from I-5 widening, the project owner shall maintain a permanent buffer zone, including the existing vegetative visual screening, on the eastern portion of the CECF site, between the existing NRG fence line and storage tank perimeter road. This measure shall be coordinated with Conditions of Certification LAND-1 and HAZ-8, requiring construction of a tall wall/safety barrier at the future right-of-way. The existing landscape screening within the buffer zone shall be maintained and enhanced per Condition of Certification VIS-2 after start of project construction. The buffer zone shall be kept available to maintain existing visual screening, accommodate future possible I-5 widening to the extent necessary, and to accommodate both future hazard protection features and visual screening.</p> <p>In addition, the project owner shall work with Caltrans to develop a Cumulative Impact Mitigation Plan for accommodating the widening project while maintaining visual screening of the CECF to acceptable levels over the long term following I-5 widening. This plan could include complete or partial avoidance of the CECF site, complete or partial berm retention or replacement, complete or partial retention of existing landscape screening, and replacement screening as needed. The objective of the plan shall be to accommodate the I-5 widening within the designated buffer zone to the extent that encroachment is unavoidable, while providing needed hazard protection and acceptable levels of visual screening of the power plant.</p>	At the earliest feasible time, the project owner shall coordinate with Caltrans to discuss specific hazard and visual mitigation strategies. The project owner shall work with Caltrans to devise a specific Cumulative Impact Mitigation Plan for accommodating hazard protection and visual screening, to be implemented at the time of I-5 widening.	N	N/A	earliest feasible time	I-5 Widening DEIS	Ongoing	

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VIS	5	b	Y	<p>The Cumulative Impact Mitigation Plan shall include a landscape planting buffer zone along the entire CECF/I-5 boundary, to accommodate replacement tree canopy of sufficient height and density as to provide substantial visual screening of the tall amended CECF features, including exhaust stacks and transmission poles; and to substantially replace any existing tree canopy on the eastern CECF boundary lost to highway expansion. The landscape buffer may occupy portions of the CECF site, the Caltrans right-of-way, or both. Wherever feasible, the landscape buffer shall maintain a minimum 20 foot width. Where infeasible, exceptions shall be approved by the CPM. The solution developed under Condition of Certification VIS-5 shall not preclude relocation or undergrounding of transmission poles or other features, if necessary to provide the stipulated visual buffer or achieve adequate long-term project screening.</p> <p>Landscaping of the buffer zone shall include installation of large-container (24-inch box or larger, as needed), fast-growing evergreen trees in sufficient density to provide comparable or better visual screening of the CECF site than currently exists, within the shortest feasible period. Trees shall be selected and located so as to achieve substantial screening within a period of five years from the time of planting.</p> <p>The plan shall, at a minimum, include the following components:</p> <p>a. a record of discussions, meetings and planning activities conducted with Caltrans;</p> <p>b. the conclusions of these coordination activities;</p> <p>c. detailed plans, elevations, cross-sections or other details, including a detailed list of plants and container size, sufficient to fully convey how the objectives of effective visual screening of the CECF are to be achieved. To the extent possible, the plans shall comply with the city of Carlsbad Landscape Manual as applicable. The plan shall specifically address visual design of security barriers required under Condition of Certification HAZ-8 to ensure their aesthetic quality and compatibility. To the extent feasible, the plans shall conform with the intent of the Caltrans Design Guidelines for the I-5 NCC Project, Coastal Mesa Theme Unit (Caltrans 2013). ; and</p> <p>d. a proposed construction schedule</p>	<p>At the earliest feasible time, the project owner shall coordinate with Caltrans to discuss specific hazard and visual mitigation strategies. The project owner shall work with Caltrans to devise a specific Cumulative Impact Mitigation Plan for accommodating hazard protection and visual screening, to be implemented at the time of I-5 widening.</p> <p>Following coordination and plan development with Caltrans, the project owner shall submit a draft of the Cumulative Impact Mitigation Plan to the city of Carlsbad for review and comment, and to the CPM for review and approval, at least 180 days prior to completion by Caltrans of I-5 widening in the area of the CECF boundary.</p>	N	180	prior to	I-5 Widening DEIS	Ongoing	
VIS	5	c		<p>To the extent that it is necessary to plant or maintain vegetative screening on project lands transferred to Caltrans in furtherance of the widening project, the project owner shall be responsible for the costs of doing so, whether by reimbursement to Caltrans, performing the work itself under agreement with Caltrans or a third party (such as the City of Carlsbad) contracting with Caltrans, or some other means.</p>	<p>The project owner shall submit any required revisions within 30 days of notification by the CPM. The project owner shall not implement the plan until receiving approval from the CPM.</p>	N	30	after	Revisions to Cumulative Impact Mitigation Plan	Ongoing	
VIS	5	d	N		<p>After receiving approval, the project owner shall complete implementation of the mitigation plan at the earliest feasible opportunity, but not later than 180 days after plan approval.</p>	N	180	after	I-5 Widening DEIS	Ongoing	
VIS	5	e	N		<p>The project owner shall notify the CPM within seven days after implementing the approved plan that the plan is ready for inspection.</p>	N	7	after	Implementation of plan	Ongoing	
WASTE	9	b	Y		<p>The project owner shall submit any required revisions to the CPM within 20 days of notification from the CPM that revisions are necessary.</p>	N	20	after	Commercial Operation	Ongoing	
WASTE	9	c	Y		<p>The project owner shall also document in each Annual Compliance Report the actual volume of wastes generated and the waste management methods used during the year; provide a comparison of the actual waste generation and management methods used to those proposed in the original Operation Waste Management Plan; and update the Operation Waste Management Plan as necessary to address current waste generation and management practices.</p>	N	N/A	Annual	Annual Compliance Report	Ongoing	

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WASTE	11		Y	The project owner shall ensure that all spills or releases of hazardous substances, materials, or waste are reported, cleaned up, and remediated as necessary, in accordance with all applicable federal, state, and local requirements.	The project owner shall document all unauthorized releases and spills of hazardous substances, materials, or wastes that occur on the project property or related pipeline and transmission corridors. The documentation shall include, at a minimum, the following information: location of release; date and time of release; reason for release; volume released; amount of contaminated soil/material generated; how release was managed and material cleaned up; if the release was reported; to whom the release was reported; release corrective action and cleanup requirements placed by regulating agencies; level of cleanup achieved and actions taken to prevent a similar release or spill; and disposition of any hazardous wastes and/or contaminated soils and materials that may have been generated by the release. Copies of the unauthorized spill documentation shall be provided to the CPM within 30 days of the date the release was discovered.	N	30	after	Release/Spill of Haz Mat	Ongoing	
WORKER SAFETY	7		Y	The project owner shall place a barrier of sufficient strength and height at the eastern fence line of the project at the widened I-5 Right-of-Way so as to prevent a runaway car or semi-trailer truck from piercing the barrier and going over the edge and down into the power plant site. This barrier shall also serve to prevent line-of-sight viewing of the power plant site from the shoulder of I-5. In designing this barrier, the project owner shall consult with Caltrans and then submit a final plan to the CPM for review and approval. The project owner may also negotiate cost-sharing of this barrier with Caltrans and if the project owner chooses to do so, the cost-sharing contract with Caltrans shall be submitted to the CPM for review and approval.	At least 60 days prior to the start of I-5 widening activities that encroach onto the project site, the project owner shall submit a copy of the final plans for the barrier and any cost-sharing contract to the CPM for review and approval.	N	60	prior to	I-5 Widening	Ongoing	Dependent on CalTrans Progress

Attachment K WASTE-9: Waste Generation Report

Hazardous Waste 2020

NON-RCRA	codes	lbs	comments
Oily debris	352	1920	from regular operations
Used Oil	223	840	from regular operations
Oily water 25%oil	223	6911	from regular operations
Oily water 90%oil	223	1487	from regular operations
Empty Drum w lead acid residual	352	20	from regular operations
Used oil filters	352	1400	from regular operations
Expired HACH Chemical Lab Packs	141	2	from regular operations, expired chemical
Used Air Filters	352	800	from regular operations
	TOTAL	13380	

RCRA	codes	lbs	comments
oil w/benzene	D018, 331, 221	4319	from regular operations
oily debris w/benzene	D018, 181	1000	from regular operations
filters w/benzene	D018, 352	500	from regular operations
Used Aerosols	D001, 223-352	20	from regular operations
Expired HACH Chemical Lab Packs	D002, 141	2	from regular operations, expired chemical
Expired HACH Chemical Lab Packs	D002, 331	2	from regular operations, expired chemical
Sulfuric Acid, Spent	D002, 135	26	from regular operations
	TOTAL	5869	

Waste Description:	CA Codes	EPA Codes
Oil w/ Benzene	331,221	D018
Quantity Shipped in 2020 (lbs)		
4319		
Means of Generation		
Fuel Gas system knockout tanks. Gas compressor maintenance.		
Minimization Efforts Already in Place		
N/A		
New/Updated Minimization Efforts for 2021		
N/A – Generation of waste is a byproduct of operations and the gas quality.		
2021 Minimization Goal (lbs)		
4000		

Waste Description:	CA Codes	EPA Codes
Oily Debris w/ Benzene	181	D018
Quantity Shipped in 2020 (lbs)		
1000		
Means of Generation		
Rags and other debris associated with the generation of the Oil w/ Benzene waste.		
Minimization Efforts Already in Place		
N/A		
New/Updated Minimization Efforts for 2021		
N/A – Generation of waste is a byproduct of operations and the gas quality. Quantities could come down with less maintenance on FGC A.		
2021 Minimization Goal (lbs)		
700		

Waste Description:	CA Codes	EPA Codes
Filters w/ Benzene	352	D018
Quantity Shipped in 2020 (lbs)		
500		
Means of Generation		
Regular maintenance filter changes in the fuel gas system.		
Minimization Efforts Already in Place		
N/A		
New/Updated Minimization Efforts for 2021		
N/A – Filters are required to be changed annually.		
2021 Minimization Goal (lbs)		
500		

Waste Description:	CA Codes	EPA Codes
Used Aerosols	223, 352	D001
Quantity Shipped in 2020 (lbs)		
20		
Means of Generation		
Cans from painting		
Minimization Efforts Already in Place		
Less painting is being planned.		
New/Updated Minimization Efforts for 2021		
Cans can be categorized as Universal Waste, this will be explored.		
2021 Minimization Goal (lbs)		
0		

Waste Description:	CA Codes	EPA Codes
Expired Hach Lab Pack	141, 331	D002
Quantity Shipped in 2019 (lbs)		
6		
Means of Generation		
Product left over from water sampling		
Minimization Efforts Already in Place		
N/A		
New/Updated Minimization Efforts for 2020		
Ensure that chemical is used or returned before expiration.		
2021 Minimization Goal (lbs)		
0		

Waste Description:	CA Codes	EPA Codes
Sulfuric Acid	135	D002
Quantity Shipped in 2019 (lbs)		
26		
Means of Generation		
Product was used during construction, leftover product		
Minimization Efforts Already in Place		
N/A – First year of operation		
New/Updated Minimization Efforts for 2021		
Product is not planned to be used unless required by General Electric		
2021 Minimization Goal (lbs)		
0		

Waste Description:	CA Codes	EPA Codes
Oily Water (includes both profiles)	223	-
Quantity Shipped in 2020 (lbs)		
8398		
Means of Generation		
Largely from operations and oily water separator cleaning		
Minimization Efforts Already in Place		
Better management of oily water separators to ensure that cleaning is not as frequent.		
New/Updated Minimization Efforts for 2020		
N/A – Mostly a product of cleaning OWS.		
2021 Minimization Goal (lbs)		
7000		

Waste Description:	CA Codes	EPA Codes
Oily Debris	352	-
Quantity Shipped in 2020 (lbs)		
1920		
Means of Generation		
Rags and other debris from normal maintenance and operations.		
Minimization Efforts Already in Place		
N/A – Byproduct of routine maintenance		
New/Updated Minimization Efforts for 2021		
N/A – Byproduct of routine maintenance		
2021 Minimization Goal (lbs)		
1800		

Waste Description:	CA Codes	EPA Codes
Used Oil	223	-
Quantity Shipped in 2020 (lbs)		
840		
Means of Generation		
From normal operations and regular maintenance		
Minimization Efforts Already in Place		
Changed out U8 aging supercore.		
New/Updated Minimization Efforts for 2021		
N/A – Oil must be changed out during outages. All waste resulted from routine, required maintenance.		
2021 Minimization Goal (lbs)		
840		

Waste Description:	CA Codes	EPA Codes
Used Filters	352	-
Quantity Shipped in 2020 (lbs)		
1400		
Means of Generation		
Regular required maintenance.		
Minimization Efforts Already in Place		
N/A – Part of regular required Maintenance		
New/Updated Minimization Efforts for 2021		
N/A – Part of regular required Maintenance		
2021 Minimization Goal (lbs)		
N/A - 1400		

Attachment M Additions to Compliance File

2020 Additions to Compliance File
1Q2020 Air Pollution Control District Rule 19.2 Report
1Q2020 California Energy Commission Quarterly Report
1Q2020 Cylinder Gas Audit
1Q2020 Encina Waste Water Authority Sampling Event
1Q2020 EPA Electronic Data Report Feedback Report
1SA2020 Encina Wastewater Authority Semiannual
1SA2020 EPA Part 60.7 Reports
2019 Annual CEC Report submitted in 2020
2020 Annual Greenhouse Gas Submittal - CARB
2020 Annual Greenhouse Gas Submittal - EPA
2020 Annual SMARTS Report
2020 Hazardous Materials Business Plan
2Q2020 Air Pollution Control District Rule 19.2 Report
2Q2020 California Energy Commission Quarterly Report
2Q2020 Encina Waste Water Authority Sampling Event
2Q2020 EPA Electronic Data Report Feedback Report
2SA2020 Encina Wastewater Authority Semiannual
2SA2020 EPA Part 60.7 Reports
3Q2020 Air Pollution Control District Rule 19.2 Report
3Q2020 California Energy Commission Quarterly Report
3Q2020 Cylinder Gas Audit
3Q2020 Encina Waste Water Authority Sampling Event
3Q2020 EPA Electronic Data Report Feedback Report
4Q2020 Air Pollution Control District Rule 19.2 Report
4Q2020 California Energy Commission Quarterly Report
4Q2020 Cylinder Gas Audit
4Q2020 Encina Waste Water Authority Sampling Event
4Q2020 EPA Electronic Data Report Feedback Report
Department of Environmental Health Permit DEH2018-HUPFP-004698
Diesel Firepump Annual Maintenance Records
EWA flowmeter calibration records
SMARTS Ad Hoc Report - 2 Storm Events
Unit 10 Fuel Flow Meter Calibration
Unit 10 Source Test and RATA Report
Unit 6 Fuel Flow Meter Calibration
Unit 6 Source Test and RATA Report
Unit 7 Fuel Flow Meter Calibration
Unit 7 Source Test and RATA Report
Unit 8 Fuel Flow Meter Calibration
Unit 8 Source Test and RATA Report
Unit 9 Fuel Flow Meter Calibration
Unit 9 Source Test and RATA Report