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Document Title:	ANNUAL COMPLIANCE REPORT- 2024
Description:	ANNUAL COMPLIANCE REPORT- 2024
Filer:	Anwar Ali
Organization:	California Energy Commission
Submitter Role:	Commission Staff
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Metcalf Energy Center, LLC

1 Blanchard Road
Coyote, CA 95013

August 20, 2025

Mr. Anwar Ali
Compliance Project Manager
Systems Assessment & Facility Sitting Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

Re: Metcalf Energy Center, LLC.
Docket No. 99-AFC-3
Annual Compliance Report for 2024

Dear Mr. Ali:

In accordance with the Conditions of Certification for the Metcalf Energy Center, LLC, this report is intended to fulfill the requirements of the Annual Compliance Report for 2024 in the Conditions of Certification.

Enclosed are the documents required by the Conditions of Certification. The documents are provided as appendices, as noted in the Annual Compliance Summary:

- Annual Compliance Summary
- Conditions of Certification Matrix
- Operating Data Summary
- AQ-13: Gas Turbine and HRSG Firing with Natural Gas
- AQ-14: Heat Input Hourly Limit
- AQ-15: Heat Input daily Limit
- AQ-16: Heat Input Annual Limit
- AQ-17: HRSG Duct Burners Firing
- AQ-18: S-1 and S-2 SCR Operation and Maintenance
- AQ-19: S-3 and S-4 SCR Operation and Maintenance
- AQ-20: Gas Turbine Emissions
- AQ-21: Gas Turbine Mass Emissions
- AQ-22: Gas Turbine Start-up
- AQ-24: Gas Turbine and HRSG Total Combined Daily Emissions
- AQ-25: Gas Turbine and HRSG Total Combined 12-Month Emissions
- AQ-26: Annual Toxic Air Contaminants Emissions
- AQ-27: Operation and Maintenance of Continuous Monitors

- AQ-28: Calculation and Recording of Daily Mass Emissions
- AQ-29: Projected Annual Emissions of Formaldehyde, Benzene, Specific PAHs
- AQ-36: Notification of Violations
- AQ-44: Compliance with 40 CFR Part 75
- AQ-56: Cold Start-up Hours
- BIO-2: Designated Biologist Summaries
- HAZ-1: Hazardous Materials List
- LAND-1: Trail Network Connection
- PUBLIC HEALTH-1: Cooling Tower Inspection
- SOIL & WATER-1: Water Use Summary
- TRANS-3: Permits or Licenses for Hazardous Material Transport
- VIS-1: Treatment of Project Structures
- VIS-10: Visible Plumes
- WASTE-3: Waste Management Comparison

If you have any additional questions, please feel free to contact Rosemary Silva, EHS Project Manager III, at 408-361-4954.

Sincerely,

DS

Signed by:
BFFA23815E88434...

Christopher Schneider
Plant Manager
Metcalf Energy Center, LLC.

Signed by:
81C6B6B202A1191...

Enclosures: Via Email

Appendix 1

California Energy Commission
2024 Annual Compliance Report
Metcalf Energy Center – 99-AFC-3

Table of Contents

Metcalf Energy Center – 99-AFC-3
2024 Annual Compliance Report

Project Status

The Metcalf Energy Center, LLC (MEC) declared commercial operation (COD) on May 29, 2005. MEC is dispatched into the merchant market by Calpine Energy Services (CES) and participates in the Ancillary Services market with the California ISO.

The Annual Compliance Report has been prepared in accordance with the General Conditions of the Compliance Plan.

1. **An updated compliance matrix which shows the status of all conditions of certification (fully satisfied and/or closed conditions do not need to be included in the matrix after they have been reported as closed).**

   The compliance matrix is included as an attachment. See Appendix 2.

2. **A summary of the current project operating status and an explanation of any significant changes to facility operations during the year.**

   The facility is currently operating in a normal status. There have been no significant changes to facility operations during the reporting year. See Appendix 3

3. **Documents required by specific conditions to be submitted along with the Annual Compliance Report. Each of these items must be identified in the transmittal letter and should be submitted as attachments to the Annual Compliance Report.**

   The documents required by specific conditions are included in this report as attachments and are identified in the transmittal letter.

4. **A cumulative listing of all post-certification changes approved by the Energy Commission or cleared by the CPM.**

   - Petition to maintain the facility's post-commissioning daily and annual emission limits amendment. Order number 05-0316—03, approved on March 16, 2005.

   - **PENDING**: Petition for Staff approval of a clarification to the term, "Gas Turbine Cold Start-Up Period", contained in the Air Quality section of the Final Decision for the Metcalf Energy Center. Waiting on issuance of new Title V permit and Permit to Operate from the Bay Area Air District.

5. **An explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided.**

   There are currently no outstanding submittals for the 2024 reporting period.

6. **A listing of filings made to, or permits issued by, other governmental agencies during the year.**
   - Annual compliance report submitted to CEC
     - Monthly Plume Abatement Status Reports
   - Annual Permit to Operate BAAQMD
     - Monthly Air Reports

- Annual Title V Compliance Certification Report submitted to BAAQMD and EPA.
- Annual Hazardous Material Permit City of San Jose
    - Annual Hazardous Materials Business Plan Update and Certification
- Annual Fire Safety Permit City of San Jose
- Annual Business License City of San Jose.
- Annual Storm Water Report to the State Water Resources Control Board
- Annual EIA-923S and EIA-860A to the U.S. Department of Energy
- Quarterly Electronic Data Reporting to the EPA (40 CFR 75)
- Semi-Annual NSPS Report to the EPA
- Semi-Annual Title V Monitoring Reports
- Semi-Annual Wastewater Self-Monitoring Report to the City of San Jose
- Monthly EIA-923M to the U.S. Department of Energy
- All submittals, except as noted above, required under our permits have been made on time to include, for the 2024 reporting year.

7. A projection of project compliance activities scheduled during the next year.

Currently there are no compliance activities scheduled.

8. A listing of the year's additions to the on-site compliance file.

No additions have been made to the on-site compliance files as required by the Decision.

9. An evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to date.

An evaluation of the on-site contingency plan for unexpected facility closure was conducted with no modifications. A copy of the plan is attached in Appendix 4.

In addition, insurance coverage for the site remains current.

10. A listing of complaints, notices of violation, official warnings, and citations received during the year, a description of the resolution of any resolved complaints, and the status of any unresolved complaints.

- **January 17th, 2024 - BAAQMD Complaint (reported to CEC – 01/18/24) –** BAAQMD received a complaint from a member of the public because they saw plumes coming from Metcalf at around 12:00 – 03:00 am on January 17th, 2024. They were concerned about excess emissions. The facility provided the daily compliance reports for the period to our inspector and informed them we were operating at the time and that everything was within normal operating ranges and permit limits. – **NO FURTHER ACTION**
- **February 5th, 2024 - BAAQMD Complaint (reported to CEC – 02/07/24) –** BAAQMD received a complaint from a member of the public because they saw plumes coming from Metcalf at around 23:30 pm on February 5th, 2024. They were concerned about excess emissions. The facility provided the daily compliance reports for the period to our inspector and informed them we were operating at the time and that everything was within normal operating ranges and permit limits. – **NO FURTHER ACTION**

CONDITIONS OF CERTIFICATION SPECIFIC REQUIREMENTS

AQ-13 **The Gas Turbines and the Heat Recovery Steam Generators shall be fired exclusively on natural gas.**

No violation of this condition occurred for the 2024 reporting year

AQ-14 **The combined heat input rate to each power train shall not exceed 2,124 mmBTU per hour, averaged over any rolling 3-hour period.**

No violation of this condition occurred for the 2024 reporting year

AQ-15 **The combined heat input rate to each power train shall not exceed 49,908 mmBTU per calendar day.**

No violation of this condition occurred for the 2024 reporting year.

AQ-16 **The combined cumulative heat input rate for the Gas Turbines and HRSGs shall not exceed 35,274,060 mmBTU per year.**

No violation of this condition occurred for the 2024 reporting year.

AQ-17 **The HRSG duct burners shall not be fired unless its associated gas turbine is in operation.**

No violation of this condition occurred for the 2024 reporting year.

AQ-18 **S-1 Gas Turbine and S-2 HRSG shall be abated by the properly operated and properly maintained A-1 Selective Catalytic Reduction (SCR) system whenever fuel is combusted at those sources and the A-1 catalyst bed has reached minimum operating temperature.**

No violation of this condition occurred for the 2024 reporting year.

AQ-19 **S-3 Gas Turbine and S-4 HRSG shall be abated by the properly operated and properly maintained A-2 Selective Catalytic Reduction (SCR) system whenever fuel is combusted at those sources and the A-2 catalyst bed has reached minimum operating temperature.**

No violation of this condition occurred for the 2024 reporting year.

AQ-20 **The Gas Turbines and HRSGs shall comply with emission requirements (a) through (h) under all operating scenarios, including duct burner firing mode and steam injection power augmentation mode. Requirements (a) through (h) do not apply during a gas turbine start-up or shutdown.**

There were instances of non-compliance with this condition that occurred in the 2024 reporting year. Please refer to Appendix 14 for details.

AQ-21 **The regulated air pollutant mass emission rates from each of the Gas Turbines during a start-up or a shutdown shall not exceed the limits.**

No violation of this condition occurred for the 2024 reporting year.

AQ-22 **The Gas Turbines shall not be in start-up mode simultaneously.**

No violation of this condition occurred for the 2024 reporting year.

AQ-24 **Total combined emissions from the Gas Turbines and HRSGs including emissions generated from the cooling tower and during Gas Turbine start-ups and shutdowns shall not exceed the following limits during any calendar day.**

No violation of this condition occurred for the 2024 reporting year.

AQ-25 **Combined emissions from the gas turbines and HRSGs, including emissions generated from cooling towers and during gas turbine startups, shutdowns and tuning shall not exceed permit limits during any consecutive twelve (12) month period.**

No violation of this condition occurred for the 2024 reporting year.

AQ-26 **Maximum projected annual toxic air contaminants emissions from the gas turbines shall not exceed permit limits.**

No violation of this condition occurred for the 2024 reporting year.

AQ-27 **Properly operated and maintained continuous monitors.**

Continuous monitors are properly operated and maintained.

AQ-28 **To demonstrate compliance with conditions 20(f), 20(g), 20(h), 21, 24(c') through 24(e), and 25('c) through 25(e) the owner/operator shall calculate and record on a daily basis the POC, PM10, and SO2 mass emissions from each power train.**

No violation of this condition occurred for the 2024 reporting year.

AQ-29 **Calculate and record on an annual basis the maximum projected annual emissions of formaldehyde, benzene, and specific PAHs.**

No violation of this condition occurred for the 2024 reporting year.

AQ-36 **Notification to the District and CPM of any violations of permit conditions.**

No violations occurred during the 2024 reporting year.

AQ-44 **Compliance with the continuous emission monitoring requirements of 40 CFR Part 75.**

No violation of this condition occurred for the 2024 reporting year. See Appendix 5

AQ-56 **Cold Start-up hours shall not exceed 30 hours per calendar year for each turbine.**

No violation of this condition occurred for the 2024 reporting year.

BIO-2 **The CPM approved Designated Biologist shall submit record summaries in the Annual Compliance Report:**

Designated Biologist summary for the 2024-2025 reporting year provided in Appendix 6

HAZ-1 **Do not use any hazardous materials in reportable quantities not listed in attachment 1 or in greater quantities or strengths than those identified unless approved in advance by Santa Clara County and the CPM.**

A hazardous material inventory is included as an attachment and is identified in the table of contents. See Appendix 7.

LAND-1 **At such time as a connection to a trail network can be made, install, and maintain the portion of planned trail that would cross the site.**

No trail updates have been made at this time. MEC is awaiting direction from the City of San Jose for trail construction.

PUBLIC HEALTH-1 **Perform a visual inspection of the cooling tower drift eliminators once per calendar year.**

The inspection sheet is included as an attachment and is identified in the table of contents. See Appendix 8.

SOIL & WATER-1 **Potable water may be used for cooling purposes only in the event that SBWR recycled water service is interrupted.**

A record of water consumption has been included and identified in the table of contents. See Appendix 9.

TRANS-3 **Ensure that all federal and state regulations for the transport of hazardous materials are observed during both construction and operation of the facility.**

No permits or licenses have been acquired concerning the transport of hazardous substances. A list of the hazardous materials deliveries received in 2024 is in Appendix 10.

VIS-1 **Treat the project structures, buildings, and tanks visible to the public in a non-reflective color.**

The plant's structures, buildings, and tanks have all been treated in accordance with this condition of certification. No treatment maintenance has been necessary. A copy of the inspection is in Appendix 11.

VIS-10 **The power plant shall be designed and operated to minimize visible plume.**

The total cooling tower plume hours for 2024 were 2 hours and 56 minutes, as noted in the December 2024 Plume Summary Log. A copy of the submitted log is in Appendix 12.

WASTE-3 **Document the actual waste management methods used during the year compared to planned management methods.**

No violation of this condition occurred. A waste management sheet is included as an attachment and is identified in the table of contents. See Appendix 13.

Appendix 2

METCALF ENERGY CENTER - COMPLIANCE MATRIX						
START OF COMERCIAL OPERATION		5/29/2005				
THROUGH YEAR END OF 2024		12/31/2024				
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Status/ Comments**
AQ-13	GTs (S-1, S-3) and HRSG (S-2, S-4) shall be fired exclusively on natural gas. (BACT for SO2 and PM10)	As part of the semiannual Air Quality Reports, indicate the date, time, and duration of any violation of this condition.	Semiannual Air Quality Reports	Ongoing	Monthly and Semi-Annually	Ongoing
AQ-14	Combined heat input rate of each power train (S-1 & S-2, S-3 & S-4) shall not exceed 2,124 MMBtu/hr (3-hour rolling average) (PSD for NOx)	As part of the Air Quality monthly Reports, include information on the date and time when the hourly fuel consumption exceed this hourly limit.	Monthly Air Quality Reports	Ongoing	Monthly	Ongoing
AQ-15	Combined heat input rate of each power train (S-1 & S-2 and S-3 & S-4) shall not exceed 49,908 MMBtu/day (PSD for PM10)	As part of the Air Quality monthly Reports, include information on the date and time when the hourly fuel consumption exceed this daily limit.	Monthly Air Quality Reports	Ongoing	Monthly	Ongoing
AQ-16	Combined cumulative heat input rate of GTs (S-1, S-3) and HRSGs(S-2, S-4) shall not exceed 35,274,060 MMBtu/yr. (Offsets)	As part of the Air Quality annual Reports, include information on the date and time when the annual cumulative fuel consumption exceed this annual limit	Monthly Air Quality Reports	Ongoing	Monthly	Ongoing
AQ-17	HRSGs (S-2, S-4) duct burners shall not be fired unless associated GTs (S-1, S-3) are in operation. (BACT for NOx)	As part of the Air Quality Reports, include information on the date, time, and duration of any violation of this permit condition.	Air Quality Reports	Ongoing	Ongoing	Ongoing
AQ-18	GT/HRSG (S-1/S-2) shall be abated by the A-1 SCR system whenever fuel is combusted in these units and the A-1 catalyst bed has reached min. operating temperature.	As part of the Air Quality Reports, provide information on any major problem in the operation of the Oxidizing Catalyst and Selective Catalytic Reduction Systems for the Gas Turbines and HRSG's.	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-19	GT/HRSG (S-3/S-4) shall be abated by the A-2 SCR system whenever fuel is combusted in these units and the A-2 catalyst bed has reached min. operating temperature.	As part of the Air Quality Reports, provide info. on any major problem in the operation of the Oxidizing Catalyst and Selective Catalytic Reduction Systems for the Gas Turbines and HRSGs.	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(a)	Emission requirements: Emission Point P-1 NOx = 19.2 lbs/hr [0.00904 lbs/MMBtu (HHV) of nat. gas fired] ; Emission Point P-2 NOx = 19.2 lbs/hr [0.00904 lbs/MMBtu (HHV) of nat. gas fired] .	As part of the Semi-Annual Air Quality Reports, indicate the date, time, and duration of any violation. Include quantitative info. on the severity of the violation.	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(b)	NOx Emission concentration = 2.5 ppmvd (corrected to 15% O2), 1-hr average {Emission Point P-1, P-2} (BACT for NOx).	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(c)	CO mass emission = 28.07 lbs/hr (at any 3-hour rolling avg.) (Emission Point P-1, P-2).	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing

METCALF ENERGY CENTER - COMPLIANCE MATRIX						
START OF COMERCIAL OPERATION		5/29/2005				
THROUGH YEAR END OF 2024		12/31/2024				
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Status/ Comments**
AQ-20(d)	When the heat input to a CT exceeds 1700 MMBTU/hr (HHV), the CO emission concentration shall not exceed 6.0 ppmvd on dry basis and the CO mass emission rate shall not exceed 0.0132 lb/MMBTU at any 3-hr rolling average.	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(e)	Ammonia (NH3) emission concentration shall not exceed 5 ppmvd on dry basis, at any 3-hour rolling avg. Ammonia injection rate to A-1, A-2 to be verified through continuous recording of rate.	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(f)	Precursor organic compounds (POC) mass emissions (as CH4) shall not exceed 2.7 lbs/hr or 0.00126 lbs/MMBTU of natural gas fired. (Emission points P-1, P-2).	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(g)	Sulfur dioxide (SO 2) mass emissions at P-1 ,P-2 each shall not exceed 1.28 pounds per hour or 0 .0006 lb /MM BTU of natural gas fired. (BACT)	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(h)	PM10 mass emission s at P-1 ,P-2 each shall not exceed 9 pounds per hour or 0.00452 lb PM10/MM BTU. Particulate matter (PM10) mass emissions at P-1 ,P-2 each shall not exceed 12 pounds per hour or 0.00565 lb PM10/MM BTU, when HRSG duct burners are in operation.	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-20(i)	Testing to confirm the PM10 emissions levels shall occur at least three (3) times per year during each of the first two (2) years of operation. Each year, at least one (1) monitoring test shall occur during winter months.	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-21	GT (S-1, S-3) Start-up and Shutdown emission rates.	Same as above	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-22	Not more than one GT (S-1, S-2) shall be in start-up mode at any one time.	In the monthly compliance report the owner/operator shall indicate any violations of this condition.	Monthly Air Quality Reports	Ongoing	Ongoing	Ongoing
AQ-24	Total combined emissions in lbs/day, from GTs and HRSGs (S-1, S-2, S-3, S-4), including start-up and shutdown.	As part of the Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Semi-Annual Air Quality Reports	Ongoing	Semi-Annual	Ongoing
AQ-25	Cumulative combined emissions in tons/any consecutive 12-month period, from GTs and HRSGs shall not exceed Nox = 123.4 (offsets), CO=588, POC=28 (offsets), PM10=91.3 (offsets), SO2=10.6 (cumulative increase).	As part of the Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Air Quality Reports	Ongoing	Monthly/Annual	Ongoing

METCALF ENERGY CENTER - COMPLIANCE MATRIX						
START OF COMERCIAL OPERATION		5/29/2005				
THROUGH YEAR END OF 2024		12/31/2024				
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Status/ Comments**
AQ-26	Maximum projected combined annual toxic air contaminant emissions from GTs and HRSGs (S-1, S-2, S-3, S-4). (a) formaldehyde = 3,796 lbs/yr (b) Benzene = 480 lbs/yr (c) PAHs=22.8 lbs/yr	As part of the annual Air Quality Reports, indicate the date, duration, and severity of any violation including quantitative information on the severity of the violation.	Annual Air Quality Reports	Ongoing	Monthly/Annual	Ongoing
AQ-26	Perform health risk assessment using emission rates per BAAQMD approved procedures and submit risk analysis to District and CPM.	As part of the annual Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation or submit risk analysis to District and CPM.	Within 60 days of source test date	Ongoing	Monthly/Annual	Ongoing
AQ-27 (a-d)	Demonstrate compliance with conditions 14-17, 20(a-d), 21, 22, 24(a), 24(b), 25(a), 25(b) by using continuous monitors during all operating hours for the following parameters.	As part of the annual Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Annual Air Quality Reports	Ongoing	Monthly/Annual	Ongoing
AQ-27(e-f)	Use parameters in condition 27(a-d) and District approved methods to calculate the following. (e) Heat input rate for S-1 & S-2 combined, and S-3 & S-4 combined (f) Corrected NOx and CO concentrations and mass emissions at each exhaust point (P-1, P-2)	As part of the annual Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Annual Air Quality Reports	Ongoing	Monthly/Annual	Ongoing
AQ-27(g-l)	For each source, source grouping, or exhaust point record parameters at least once every 15 minutes and calculate and record for the following. Refer to AQ-27 for further details.	As part of the annual Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Annual Air Quality Reports	Ongoing	Monthly/Annual	Ongoing
AQ-28(a-b)	Demonstrate compliance with conditions 20, 21, 24, 25 by calculating and recording on a daily basis POC, PM10, and SO2 mass emissions fine PM10 and SO2 from each power train.	As part of the monthly Air Quality Reports, the owner/operator shall indicate the date of any violation including quantitative information on the severity of the violation.	Monthly Air Quality Reports	Ongoing	Monthly/Annual	Ongoing
AQ-29	Calculate and record on annual basis the max. projected annual emissions of formaldehyde, benzene, Specified Poly-Aromatic Hydrocarbons (PAH's).	As part of the annual Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Annual Air Quality Reports	Ongoing	Annual	Ongoing
AQ-35	Maintain records and reports on site for a minimum of 5 years.	During site inspection, make all records and reports available to the District, California Air Resources Board, and CEC staffs.	AQ Inspection per AQ-35	Ongoing	Ongoing	Ongoing
AQ-36	Notify District and CPM of any violations of these permit conditions.	Submittal of these notifications as required by this condition is the verification of these permit conditions.	Violation of Permit Conditions	Ongoing	Ongoing	Ongoing
AQ-44	MEC shall comply with the continuous emission monitoring requirements of 40 CFR Part 75			Ongoing	Ongoing	Ongoing

METCALF ENERGY CENTER - COMPLIANCE MATRIX						
START OF COMERCIAL OPERATION		5/29/2005				
THROUGH YEAR END OF 2024		12/31/2024				
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Status/ Comments**
AQ-45	Take monthly samples of natural gas combusted at MEC and analyze these samples for sulfur content using District-approved lab methods.	Maintain on site the records of all the guarantees received from its natural gas suppliers indicating that the fuel delivered to MEC complies with the 40 CFR Part 60,Subpart GG.	On-site Compliance Inspections	Ongoing	Monthly	Ongoing
AQ-47a	Perform visual inspection of cooling tower drift eliminators once per calendar year and repair or replace any drift eliminators which are broken or missing.	As part of the monthly Air Quality Reports, indicate the date of any violation of this Condition.	Air Quality Reports	Ongoing	Annual	Ongoing
AQ-53	The heat input to the fire pump diesel engine shall not exceed 211 MM BTU totaled over any consecutive twelve month period.	As part of the monthly Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Air Quality Reports	Ongoing	Monthly	Ongoing
AQ-54	The total hours of operation of the emergency generator shall not exceed 200 hours per calendar year, plus an additional 100 hours per calendar year for the purposes of maintenance and testing.	As part of the monthly Air Quality Reports, indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Air Quality Reports	Ongoing	Annual	Ongoing
AQ-56	Cold Start-up hours shall not exceed 30 hours per calendar year for each Gas Turbine.	Provide dates and durations of any violation of this Condition to the CPM.	Air Quality Reports	Ongoing	Annual	Ongoing
AQ-57	Record start time, end time, and duration of Gas Turbine Cold Startup and Combustor Tuning Periods.	Make all records available to Agencies during inspection.	Ongoing	Ongoing	Ongoing	Ongoing
BIO-2	The CPM approved Designated Biologist shall perform the following during project construction and operation: see BIO-2 for detailed tasks.	Submit record summaries in the Annual Compliance Report.	Annual Compliance Report	Annual	Annual	Ongoing
BIO-12	Incorporate into closure plan measures that address the local biological resources and incorporate into the BRMIMP.	Address all biological resource-related issues associated with facility closure.	12 months prior to facility closure	Ongoing	12 months Prior to Closure	Ongoing
HAZ-1	Do not use any hazardous material in reportable quantities, not listed in Attachment 1 or in greater quantities or strengths than those identified unless approved in advance by Santa Clara County and the CPM.	Provide to the CPM and Santa Clara County, in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.	Annual Compliance Report	Ongoing	Annual	Ongoing
LAND-1	At such time as a connection to a trail network can be made, install and maintain the portion of the planned trail that would cross the site.	In the Annual Compliance Reports provide updates on trail developments in the area around the site.	Annual Compliance Report	Ongoing	Annual	Ongoing
NOISE-2	Throughout the construction and operation, document, investigate, evaluate and attempt to resolve all project related noise complaints.	File a copy of the Noise Complaint Resolution Form with City of San Jose and with the CPM documenting the resolution of the complaint.	30 days after receiving a noise complaint	Ongoing	Within 30 Days	Ongoing
PAL-7	Include in the facility closure plan a description regarding facility closure activity's potential to impact paleontological resources.	Include a description of closure activities in the facility closure plan.	12 months prior to facility closure	Ongoing	12 months Prior to Closure	Ongoing

METCALF ENERGY CENTER - COMPLIANCE MATRIX						
START OF COMERCIAL OPERATION		5/29/2005				
THROUGH YEAR END OF 2024		12/31/2024				
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Status/ Comments**
Public Health-1	Perform a visual inspection of the cooling tower drift eliminators once per calendar year. Prior to initial operation of the project, have the cooling tower vendor's field representative inspect the cooling tower drift eliminator and certify that the installation was performed in a satisfactory manner.	The project owner shall include the results of the annual inspection of the cooling tower drift eliminators and a description of any repairs performed in the next required compliance report.	Annual Compliance Report	Ongoing	Annual	Ongoing
SOIL & WATER-1	Potable water may be used for cooling purposes only in the event that SBWR recycled water service is interrupted.	Provide a record of water consumption for the MEC.	Annual Compliance Report	Ongoing	Annual	Ongoing
TRANS-3	Ensure that all federal and state regulations for the transport of hazardous materials are observed.	Copies of all permits and licenses acquired concerning the transport of hazardous substances.	Annual Compliance Report	Ongoing	Annual	Ongoing
VIS-1	Treat the project structures, buildings, and tanks visible to the public in a non-reflective color.	The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.	Annual Compliance Report	Ongoing	Annual	Ongoing
VIS-11	Trail development along the Fisher Creek corridor adjacent to the power plant site.	The project owner shall submit to the City of San Jose and the County of Santa Clara Parks and Recreation Department for review and comment a specific plan.	Start of construction of the trail between Blanchard Road and railroad tracks	Ongoing	Ongoing	Ongoing
VIS-11	Trail development along the Fisher Creek corridor adjacent to the power plant site.	Submit to the CPM for review and approval a specific plan describing its landscape plan.	Start of construction of the trail between Blanchard Road and railroad tracks	Ongoing	Ongoing	Ongoing
VIS-11	Trail development along the Fisher Creek corridor adjacent to the power plant site.	Submit any required revisions.	Within 30 days of notification by the CPM.	Ongoing	Within 30 days	Ongoing
VIS-11	Trail development along the Fisher Creek corridor adjacent to the power plant site.	Notify the CPM, City of San Jose and County of Santa Clara Parks and Recreation Department that the planting installation is ready for inspection.	7 days after completion of planting installation	Ongoing	Within 7 days	Ongoing
WASTE-2	Upon becoming aware of any impending waste management-related enforcement action, notify the CPM of any such enforcement action.	Notify the CPM in writing within 10 days of becoming aware of an impending enforcement action.	Within 10 days of becoming aware of an impending enforcement action	Ongoing	Within 10 Days	Ongoing
WASTE-3	Prepare and submit to the CPM a waste management plan for all wastes generated during construction and operation of the facility.	In the Annual Compliance Reports, document the actual waste management methods used during the year compared to planned management methods.	Annual Compliance Report	8/1/06	Annual	Ongoing
Compliance matrix	A compliance matrix shall be submitted by along with each annual compliance report.	Submit compliance matrix to CPM	Annual Compliance Report	Ongoing	Annual	Ongoing

Appendix 3

Operating Data Summary January 2024 - December 2024

Metcalf CT1			Metcalf CT2			Metcalf ST1		
Date	**Total Net MWh**	**Total Primary Fuel Quantity Burned (MMcf GG)**	**Date**	**Total Net MWh**	**Total Primary Fuel Quantity Burned (MMcf GG)**	**Date**	**Total Net MWh**	**Total Secondary Fuel Quantity Burned (MMcf GG)**
January	120,908	1,356.1	January	122,067	1,393.6	January	150,379	124.74
February	98,166	1,088.0	February	110,822	1,252.1	February	126,087	72.94
March	56,702	636.2	March	110,100	1,289.2	March	102,964	68.81
April	-	-	April	-	-	April	-	-
May	344	9.9	May	-	-	May	-	-
June	58,648	672.1	June	53,488	619.1	June	71,452	59.05
July	88,872	1,003.4	July	109,860	1,264.8	July	131,377	132.64
August	93,631	1,041.6	August	94,336	1,070.7	August	120,755	99.25
September	64,123	727.2	September	52,908	605.6	September	74,745	66.25
October	95,850	1,001.2	October	71,021	738.0	October	103,635	67.40
November	66,841	739.1	November	62,518	707.4	November	72,931	6.72
December	92,517	1,032.3	December	86,747	981.7	December	105,898	51.72

Appendix 4

Date	Description of Revision	Revision No.	Revised By:
6/01/2005	Planned Developed	1	Dana Petrin
8/08/2008	Plan reviewed and contacted information updated.	2	Rosemary Silva
8/24/2009	Annual Review – Updated the notification list, updated the chemical inventory.	3	Rosemary Silva
8/06/2010	Annual Review – Updated the chemical list and CEC contact	4	Rosemary Silva
8/29/2011	Annual Review – Update contact list and chemical list	5	Rosemary Silva
8/24/2012	Annual Review - Updated the contact information for the regulatory agencies. Also updated the chemical list included in the plan. The updated plan was submitted as part of the annual compliance report for reporting year 2011.	6	Rosemary Silva
8/19/2013	Annual Review – Updated contact information and chemical list. The updated plan was submitted as part of the annual compliance report for reporting year 2012.	7	Rosemary Silva
11/07/2014	Annual Review – Updated the Wastewater Inspector information	8	Rosemary Silva
12/30/2015	Annual Review – No Changes	-	Rosemary Silva
8/08/2016	Annual Review – Updated contact information for CEC and HazMat Inspector	9	Rosemary Silva
8/22/2017	Annual Review – Updated contact information for PGE	10	Rosemary Silva
8/10/2018	Annual Review – Updated contact information for City of San Jose Wastewater Inspector	11	Rosemary Silva
8/09/2019	Annual Review – No changes	-	Rosemary Silva
8/06/2020	Annual Review – No changes	-	Rosemary Silva
8/05/2021	Annual Review – Update to the contact information for Santa Clara Environmental Health Department	12	Rosemary Silva
7/27/2022	Annual Review – Updated the San Jose Fire Department Inspector contact information	13	Rosemary Silva
8/10/2023	Annual Review – No changes	-	Rosemary Silva
1/19/2024	Updated the PG&E Customer Rep name and email	14	Rosemary Silva
3/04/2024	Updated the PG&E Customer Rep name and email	15	Rosemary Silva
8/19/2024	Annual Review – updated the plan to include minor additions is to comply with the requirements of CPUC GO-167	16	Rosemary Silva
8/20/2025	Annual Review – No changes	-	Rosemary Silva

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1.0 PURPOSE

This plan was developed to provide an on-site contingency plan to ensure that the unexpected closure occurs in such a way that public health and safety and the environment are protected from adverse impacts. The plan covers written procedures concerning site security, hazardous materials and waste removal, and insurance and warranty coverage.

2.0 SCOPE

The plan was prepared in accordance with the California Energy Commission's (CEC) Decision, Docket Number 99-AFC-03 and covers the following facility:

Metcalf Energy Center, LLC (MEC)
1 Blanchard Road
San Jose, CA 95013

Telephone Number: (408) 361-4900
Type and Nature of Business: SIC 4911 Electric Power Production

3.0 RESPONSIBILITIES

3.1 PLANT MANAGER

The Plant Manager has the overall responsibility for ensuring all provisions of this plan are administered and adhered to.

3.2 OPERATIONS MANAGER AND MAINTENANCE MANAGER

The Operations Manager and Maintenance Manager are responsible for overseeing the program, and notification to the CEC & CPUC.

3.3 EHS SPECIALIST

The EHS Specialist is responsible for assisting with any required agency notifications.

4.0 GENERAL

The unit or facility will remain in a ready for service condition until it has been affirmed that it is unneeded by all regulating bodies.

4.1 NOTIFICATION PROCEDURES

In the event of an unexpected temporary or permanent closure, the Plant Manager or designee shall notify the CEC Compliance Project Manager (CPM) and other responsible agencies within 24 hours and take all necessary steps to implement this Plan. Notification shall be made by either telephone or e-mail (see **Table 1**). The Operations Manager, Maintenance Manager, or EHS Specialist shall keep the CPM informed of the circumstances and expected duration of the closure.

90 days prior to the long-term status change of a unit or the facility the California Public Utilities Commission will be notified in writing with a description of the planned change.

The California Public Utilities Commission will be notified in writing 90 days prior to a change in facility ownership.

If it is determined that a temporary closure is likely to be permanent, or for a duration of more than twelve months, a closure plan consistent with CEC requirements for a planned closure shall be developed and submitted to the CPM within 90 days or the CPM's determination (or another period mutually agreed to by the owner and the CPM).

90 days prior to the long-term status change of a unit or the facility plans and/or procedures for storage and restart of the unit or facility will be provided to the California Public Utilities Commission.

TABLE 1 - AGENCIES TO BE NOTIFIED

California Energy Commission	
Anwar Ali Compliance Project Manager California Energy Commission 1516 9th St. Sacramento, CA 95814-5504	Tel: (916) 654-5020 Fax: (916) 651-8868 Email: anwar.ali@energy.ca.gov
San Jose Fire Department (Hazardous Materials)	
Farheen Sultana San Jose Fire Department 200 E. Santa Clara St., 2nd Fl. Tower San Jose, CA 95113	Email: farheen.sultana@sanjoseca.gov
Santa Clara Environmental Health Department	
Robin Ward Sr. Hazardous Materials Specialist 1555 Berger Dr. San Jose, CA 95112	Tel: (408) 918-1945 Email: robin.ward@cep.sccgov.org
Regional Water Quality Control Board	
San Francisco Bay Regional Water Quality Control Board-Region 2 1515 Clay St. Suite 1400 Oakland, CA 94612	Tel: (510) 622-2300 Fax: (510) 622-2460 Email: info2@waterboards.ca.gov
South Bay Water Recycling	
Pedro Hernandez South Bay Water Recycling Environmental Services Dept. City of San Jose 200 East Santa Clara Street, 4th Floor San Jose, CA 95131	Tel: (408) 794-6804 Email: pedro.hernandez@sanjoseca.gov

San Jose/Santa Clara Water Pollution Control Plant	
Kimberly DeVillier Environmental Inspector City of San Jose 200 E. Santa Clara Street, 7th Floor San Jose, CA 95113	Tel: (408) 793-5359 Fax: (408) 271-1930 Email: kimberly.devillier@sanjoseca.gov
Bay Area Air Quality Management District	
Xuna Cai Senior Air Quality Engineer Engineering Division Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, Ca 94105	Tel: (650) 420-3749 Email: xcai@baaqmd.gov
Pacific Gas and Electric	
Chad Stout Customer Service Representative PG&E 2230 Lake Washington Blvd West Sacramento, CA 95691	Tel: (831) 784-3333 Email: C5SR@pge.com
Cal-ISO	
CAL-ISO Outage Coordination P.O. Box 639014 Folsom, CA 95763-9014	Tel: (916) 351-2241
US Environment Protection Agency – Region IX	
US EPA Region IX 75 Hawthorne Street San Francisco, CA 94105-3901	Tel: (415) 972-3990 Fax: (415) 947-3579 Email: reo9@epa.gov
California Public Utilities Commission	
California Public Utilities Commission 505 Van Ness Avenue San Francisco, California 94102	Email: GO167@cpuc.ca.gov

4.2 PLANT SHUT DOWN PROCEDURE

In the event of a plant closure, MEC, personnel will shut down all operating equipment that is not necessary to respond to an emergency, in accordance with plant operating procedures. In the event of an emergency shutdown (e.g., fire, earthquake, sabotage, etc.), MEC personnel should consult the MEC Emergency Response Plan, ERP. The purpose of the ERP is to provide emergency response guidelines so that the MEC shift, and management personnel can adequately evaluate the situation and respond in the interests of protecting personnel, company resources, and the environment.

The ERP provides guidelines for emergencies, including accidental release of toxic gases, chemical spills, fires, explosions, bomb threats, civil disobedience, and personnel injuries. There are several situations that may require emergency response by site personnel. The response required for each situation may vary, and each requires a separate course of action. Personnel should reference the facility ERP for proper response.

4.3 SITE SECURITY AND EMERGENCY RESPONSE

The plant perimeter is surrounded by a chain link fence. The main gate is located on Blanchard Road. Remote cameras monitor the perimeter entry into the Plant 24 hours per day, 365 days per year by Control Room Personnel. The duties of the Plant Operators include checking plant security measures during the shift.

In the event of an unexpected closure, MEC will ensure that all fencing is intact and a manned guard or private security services it used to maintain site security, if necessary.

In the event of an emergency, the San Jose Fire Department (SJFD) will have access through the main gate via a Knox Box. Additionally, the SJFD has been supplied with a Hazardous Materials Business Plan, Risk Management Plan, and Fire Protection and Prevention Plan. The information contained in these plans will enable SJFD to respond to any emergency if the plant personnel have evacuated the premises.

4.4 HAZARDOUS MATERIAL AND WASTE REMOVAL

Handling and disposal of all hazardous materials and wastes shall be in accordance with all applicable laws, ordinances, regulations, and standards. Figure 1 identifies all hazardous materials that are located at MEC in reportable quantities. In the event of an unexpected temporary closure, not all hazardous materials will require removal. If such an event occurs, MEC will conduct visual inspections of all hazardous material storage vessels daily to assess container condition. This process can be done remotely via site cameras if necessary.

MEC has implemented a Hazardous Materials Business Plan, HMBP, to assist with the identification and handling of all hazardous materials. In addition to HMBP other plans have been developed to assist plant personnel and emergency responders with handling of hazardous materials located at MEC.

Refer to Figure 1 on the following Page.

FIGURE 1 - HAZARDOUS MATERIALS IN REPORTABLE QUANTITIESLOCATED AT METCALF

CHEMICAL NAME	CHEMICAL LOCATION
*MISCELLANEOUS FLAMMABLE LIQUID, CLASS IB	MAINTENANCE SHOP
*MISCELLANEOUS FLAMMABLE LIQUID, CLASS IB	Steam Turbine Flammable Locker
*MISCELLANEOUS FLAMMABLE LIQUID, CLASS IB	PROPANE STORAGE
76 Triton 5005 GEO SAE 30	Lube Oil Storage
76 TURBINE OIL 68	Lube Oil Storage
76 TURBINE OIL 68	Combustion Turbine Lube Oil
ACETYLENE	MAINTENANCE SHOP
AMMONIA	Aqueous Ammonia Storage Area
ARGON / CARBON DIOXIDE	MAINTENANCE SHOP
ARGON, COMPRESSED	MAINTENANCE SHOP
ARGON, COMPRESSED	CYLINDER GAS STORAGE
ARGON/CARBON MONOXIDE	CYLINDER GAS STORAGE
CALIBRATION GAS (NITROGEN, CARBON MONOXIDE)	CYLINDER GAS STORAGE
CARBON DIOXIDE	MAINTENANCE SHOP
CARBON DIOXIDE	VARIOUS
CHEMTREAT BL-152	Boiler Water Chemical Treatment Area
CHEMTREAT BL-152	WATER TREATMENT BUILDING
CHEMTREAT BL1794	Boiler Water Chemical Treatment Area
CHEMTREAT BL-8301	WATER TREATMENT BUILDING
CHEMTREAT BL-8401	WATER TREATMENT BUILDING
CHEMTREAT BL-8401	Boiler Water Chemical Treatment Area
CHEMTREAT CL2250	WATER TREATMENT BUILDING
CHEMTREAT CL243	Cooling Tower Chemical Treatment Area
CHEMTREAT CL-2875	WATER TREATMENT BUILDING
CHEMTREAT CL4500	Cooling Tower Chemical Treatment Area
CHEMTREAT P873L	WATER TREATMENT BUILDING
CHEMTREAT RL1245	WATER TREATMENT BUILDING
CHEMTREAT RL9007	WATER TREATMENT BUILDING
CHEMTREAT-BL-1794	WATER TREATMENT BUILDING
CONNTECT 6000	WATER TREATMENT BUILDING
CONOCO PHILLIPS MEGA FLOW 32	BOILER FEED PUMPS
CONOCO PHILLIPS TURBINE OIL 32	STEAM TURBINE PACKAGE
CT WATER WASH	CT WASH WATER SUMP
DEBRIS/RAGS CONTAMINATED WITH PETROLEUM/OIL	Hazardous Material Storage Area
DIESEL	Fire Pump House
DIESEL EXHAUST FLUID	Steam Turbine Under Deck
DIESEL FUEL	Steam Turbine Flammable Locker

CHEMICAL NAME	CHEMICAL LOCATION
DOLOMITIC HYDRATED LIME	Steam Turbine Under Deck
FLOODED LEAD-CALCIUM BATTERY	SWITCH YARD
FYRQUEL EHC PLUS	Lube Oil Storage
FYRQUEL EHC PLUS	Steam Turbine Under Deck
GASOLINE	Steam Turbine Flammable Locker
HELIUM	CYLINDER GAS STORAGE
HYDRO HEAT	MAINTENANCE SHOP
HYTRANS 61	GSU Transformers
HYTRANS 61	AUXILLARY TRANSFORMERS
HYTRANS 61	STATION SERVICE TRANSFORMERS
LEAD-ACID BATTERY	BALANCE OF PLANT
LEAD-ACID BATTERY	COMBUSTION TURBINE #1
LEAD-ACID BATTERY	COMBUSTION TURBINE #2
LEAD-ACID BATTERY	DIESEL FIRE PUMP HOUSE
LUBRICATING OIL	FUEL GAS COMPRESSORS
Megaflow AW HVI Hydraulic Oil	Lube Oil Storage
MISCELLANEOUS LUBE OIL	Lube Oil Storage
MOBIL DTE 26	Lube Oil Storage
MOBIL DTE 26	CT CONTROL OIL TANK
MOBIL DTE 26	Steam Turbine Under Deck
MULTIPURPOSE R+O OIL 220	Lube Oil Storage
NITROGEN	CYLINDER GAS STORAGE
NITROGEN	UNIT 2 NITROGEN STORAGE
NITROGEN	UNIT 1 NITROGEN STORAGE
NITROGEN / NITRIC OXIDE CALIBRATION GAS	CYLINDER GAS STORAGE
NITROGEN / NITRIC OXIDE CALIBRATION GAS	UNIT 1 CEMS GASES
NITROGEN / NITRIC OXIDE CALIBRATION GAS	UNIT 2 CEMS GASES
NITROGEN / OXYGEN CALIBRATION GAS	CYLINDER GAS STORAGE
NITROGEN / OXYGEN CALIBRATION GAS	UNIT 1 CEMS GASES
NITROGEN / OXYGEN CALIBRATION GAS	UNIT 2 CEMS GASES
NITROGEN, COMPRESSED	AUXILLARY TRANSFORMERS
NITROGEN/CARBON MONOXIDE CALIBRATION GAS	UNIT 1 CEMS GASES
NITROGEN/CARBON MONOXIDE CALIBRATION GAS	UNIT 2 CEMS GASES
OXYGEN	MAINTENANCE SHOP
Oxygen	CYLINDER GAS STORAGE
Phillips Turbine Oil 100	Lube Oil Storage
PROPANE	PROPANE STORAGE
Release Number 1 VOC	Lube Oil Storage
Reolube HYD 46	Lube Oil Storage

CHEMICAL NAME	CHEMICAL LOCATION
Shell Morlina S3 BA 220	Steam Turbine Under Deck
Shell Morlina S3 BA 220	Lube Oil Storage
SHELL TELLUS OIL	Lube Oil Storage
Shell Turbo Oil DR 46	Lube Oil Storage
Shell Turbo Oil DR 46	STEAM TURBINE CONTROL OIL TANK
SHELL TURBO OIL T 32	Steam Turbine Under Deck
Sodium Carbonate, Anhydrous	Connex Near Storm Water Pond
SODIUM HYPOCHLORITE 12.5%	Cooling Tower Chemical Treatment Area
SODIUM HYPOCHLORITE 12.5%	WATER TREATMENT BUILDING
SULFUR HEXAFLUORIDE	SWITCH YARD
SULFURIC ACID 93%	Cooling Tower Chemical Treatment Area
TURBO T OIL 32	Lube Oil Storage
USED OIL	Hazardous Material Storage Area
USED OIL	OIL/WATER SEPARATOR
USED OIL	Steam Turbine Under Deck
USED OIL FILTERS	Hazardous Material Storage Area
Vaprotec Light	Lube Oil Storage

4.4 HAZARDOUS MATERIAL AND WASTE REMOVAL, continued

Whenever practical, hazardous materials will be returned to the vendor or transferred to another Calpine site that has the need for the material(s). The following transporters or other qualified transporters will be used if it is deemed necessary to remove any hazardous material(s).

TRANSPORTER	TELEPHONE NUMBER
Bayview Environmental	510-562-6181
Hill Brothers Chemical Company	408-421-0043

If the unexpected temporary closure also results in a release of hazardous materials or waste, plant personnel will consult the Emergency Response Plan, HMBP, and/or Risk Management Plan. These plans address accidental release prevention and emergency policies, a hazardous materials inventory, employee training, and location of safety equipment, main utility shutoffs, notification methods, and accident investigation procedures.

In addition, the Storm Water Pollution Prevention Plan, SWPP, and the Spill Prevention Control and Countermeasure Plan, SPCC, describe the necessary actions in the event of a spill that might threaten off site locations. Both structural and non-structural Best Management Practices (BMPs) are utilized at the site to reduce pollutants in storm water discharge. Structural BMPs include such measures as valves, berms, curbs, and containment structures that are used to hold or divert storm water. Non-structural BMPs include such measures as regular inspections, good housekeeping, employee training, and special procedures for storing/loading hazardous materials and wastes. Plant personnel shall consult all these plans prior to proceeding with any hazardous material or waste removal.

5.0 INSURANCE AND WARRANTY COVERAGE

MEC is insured under an "All-Risk" Builder's Risk policy for property damage and business interruption. The policy is provided by several insurance companies led by Underwriters at Lloyds of London. Liability insurance is provided by Liberty Mutual.

6.0 UNEXPECTED TEMPORARY CLOSURE

If the MEC closed temporarily, there are additional tasks to be performed, including notifications for areas of transmission line engineering and biological resources.

6.1 TRANSMISSION LINE ENGINEERING

MEC signed a third-party Generator Interconnection Agreement (GIA), with PG&E and CAISO. In the event of a planned, unexpected temporary, and unexpected permanent closure contact shall be made with PG&E and Cal ISO to ensure compliance with all applicable laws, ordinances, regulations, and standards (LORS), and that system safety and reliability will not be jeopardized.

6.2 BIOLOGICAL RESOURCES

In the case of temporary closure, measures to protect biological resources would be needed only if there was a potential to surface disturbances or releases of harmful materials. If such an event occurs, MEC will consult with responsible agencies to plan clean up and mitigation of impacts to biological resources.

7.0 PERMANENT CLOSURE

In the event the MEC is closed permanently, there are additional tasks that need to be performed, including preparing a facility closure plan, notifying agencies, ensuring site security, removing hazardous materials and waste.

7.1 FACILITY CLOSURE PLAN

To ensure that the permanent closure does not create adverse impacts, a closure process will be undertaken by MEC that provides for careful consideration of available options, applicable laws, ordinances, regulations, standards, and local plans in existence at the time of closure. MEC will meet with the CEC and other agencies as necessary prior to the development of the closure plan to establish the elements of the plan. In accordance with CEC Conditions of Certification, the plan will include the following:

1) Identify and discuss any impacts and mitigation to address significant adverse impacts associated with proposed closure activities and to address facilities, equipment, or other project related remnants that will remain at the site.
2) Identify a schedule of activities for closure of the power plant site, transmission line corridor, and all other appurtenant facilities constructed as part of the project.
3) Identify any facilities or equipment intended to remain on site after closure, the reason, and any future use.
4) Address conformance of the plan with all applicable laws, ordinances, regulations, standards, local/regional plans in existence at the time of facility closure, and applicable conditions of certification.

5) Removal of transmission conductors when they are no longer used or useful.
6) Removal of all power plant site facilities and related facilities.
7) Measures to restore wildlife habitat to promote the re-establishment of native plant and wildlife species.
8) Revegetation of the plant site and other disturbed areas utilizing appropriate seed mixture.

The plan will be submitted to the CEC CPM, Santa Clara County, and City of San Jose for review and approval at least 12 months (or other mutually agreed to time) prior to commencing the permanent closure activities.

7.2 AGENCY NOTIFICATION

Additional notification may be necessary in the event of a permanent closure, including re-notifying each of the agencies listed in Table 1. The Closure Plan will also be sent to those appropriate agencies with which MEC has a current permit (e.g., Regional Water Quality Control Board, Bay Area Air Quality Management District, USEPA, etc.)

7.3 SITE SECURITY

Prior to permanent closure, the Plant Manager or designee will notify the San Jose Fire Department and City of San Jose Police Department, giving the notice that the existing level of site surveillance will not be in effect. This will enable these agencies to respond appropriately in the event of a disturbance or fire. It may be necessary for MEC to provide site security for a period following permanent closure, the Plant Manager or designee will determine the need for such interim security and will address it in the Closure Plan, if necessary.

7.4 REMOVAL OF HAZARDOUS MATERIALS AND WASTE

As required by the CEC Commission Decision, MEC is responsible for removing all hazardous materials from the site as part of permanent site closure. If MEC intends to redevelop the site, other plans may be made to either remove or store materials in different locations. The details of the removal will be covered in the Closure Plan.

7.5 BIOLOGICAL, CULTURAL, AND PALEONTOLOGICAL RESOURCES

When a permanent Closure Plan is prepared, it will include the take avoidance and mitigation requirements in effect at the time for the species that would be impacted. The plan will also include the removal of the transmission facilities when they are no longer used and useful and reclamation of areas where facilities would be removed. This may include ripping of soil contouring of disturbed areas, implementation of erosion control, revegetation, and other measures deemed appropriate at the time the Closure Plan is developed.

Biological resources compliance reporting for closure activities would likely include pre-activity survey reports, environmental monitoring reports during reclamation, and a final report describing the closure activities and any follow-on reclamation work that would be required.

The permanent Closure Plan will include a description regarding the potential of the closure activities to impact cultural and paleontological resources. The closure requirements are to be based upon the Cultural Resources and Paleontological Resources Final Report. If no activities are proposed that would

potentially impact either of these resources, no mitigation measures will be required. Should a discovery be made, it will be necessary to update the Cultural Resources and Paleontological Resources final report.

The facility will comply with all COC's including contracting with qualified Cultural, Paleontological, Native American and Biological Monitors when condition require. These monitors will be identified in the final Closure Plan if required.

Appendix 5

Re: Metcalf Energy Center (55393) - 1

Dear Certifying Official:

Thank you for submitting your Quarterly Emissions Report using the U. S. EPA`s Emissions Collection and Monitoring Plan System (ECMPS) software. This ECMPS Feedback report provides you with a detailed submission receipt, a summary of the evaluations performed on your submission, and guidance on any follow-up actions needed if any errors were found. EPA has also received a copy of this Feedback Report as part of your submission.

SUBMISSION STATUS

The EPA has received your Quarterly Emissions Report for the Facility and Monitoring Location(s) listed in Table 1 below. The Table also provides confirmation of EPA`s receipt (Date, Time, etc.) of your submission. Prior to submission ECMPS evaluated your emissions report and assigned an overall "Feedback Status Level" to it, based on the results (see Table 1). This Feedback Report also contains Table 2, which displays EPA-Accepted Cumulative Values for emissions and other parameters.

Table 1: Submission Receipt and Feedback Status Level Information

Report Received for Facility ID (ORIS Code):	55393
Facility Name:	Metcalf Energy Center
State:	CA
Monitoring Locations:	1
Submission Type:	EM for 2024 QTR 4
Feedback Status Level:	No Errors
Submission Date/Time:	01/16/2025 9:36:59 AM
Submitter User ID:	rsilva
Submission ID:	1732959
Resubmission Required:	No
EPA Analyst:	Bryan Ramirez; (202) 564-7591; ramirez.bryan@epa.gov

EXPLANATION OF YOUR FEEDBACK STATUS LEVEL LISTED IN TABLE 1

The EPA has accepted your Emissions data submission. ECMPS detected no errors in your data based on the checks performed. NOTE: The ECMPS submission access window for this Emissions report has been closed. If you need to resubmit this data, please see the DATA RESUBMISSION guidance, below.

OTHER INFORMATION AND BULLETINS FROM EPA

QUESTIONS: Please contact your EPA Analyst listed in Table 1 with any questions regarding this submission and the evaluation results. If you need assistance with correcting problems in the Emissions data for this facility, please send an email to ECMPS Technical Support at: ecmps-support@camdsupport.com.

DATA RESUBMISSION: If you need to resubmit emissions data, including for previous calendar quarters, please complete the ECMPS Data Resubmission Request Form located at: https://ecmps.camdsupport.com/help_resubmit_form.shtml. Please provide detailed documentation of the reasons for the resubmission. Support staff will review your request and notify you via e-mail when the necessary database access window has been granted for your resubmission.

ECMPS Data Reporting Instructions: for detailed information about reporting Monitoring Plan, QA/Certification Test, and Emissions data, please see the ECMPS Reporting Instructions on EPA`s website at: https://www.epa.gov/power-sector/ecmps-reporting-instructions.

If you have any questions regarding this correspondence, please feel free to contact your EPA Analyst listed in Table 1 as soon as possible. Thank you for your attention to this matter.

Table 2: Cumulative Data Summary -- EPA-Accepted Values

Unit/Stack/Pipe ID: 1

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Ozone Season	Year-to-Date
Number of Operating Hours	1,712	444	1,654	1,616		5,426
Operating Time (hrs)	1,694.91	424.55	1,629.50	1,598.53		5,347.49
SO2 Mass (tons)	1.0	0.2	0.9	0.9		3.0
CO2 Mass (tons)	192,248.1	42,854.2	175,465.2	174,597.1		585,164.6
Heat Input (mmBtu)	3,234,976	721,114	2,952,551	2,937,942		9,846,583
NOx Emission Rate (lb/mmBtu)	0.008	0.013	0.008	0.008		0.008

Re: Metcalf Energy Center (55393) - 2

Dear Certifying Official:

Thank you for submitting your Quarterly Emissions Report using the U. S. EPA`s Emissions Collection and Monitoring Plan System (ECMPS) software. This ECMPS Feedback report provides you with a detailed submission receipt, a summary of the evaluations performed on your submission, and guidance on any follow-up actions needed if any errors were found. EPA has also received a copy of this Feedback Report as part of your submission.

SUBMISSION STATUS

The EPA has received your Quarterly Emissions Report for the Facility and Monitoring Location(s) listed in Table 1 below. The Table also provides confirmation of EPA`s receipt (Date, Time, etc.) of your submission. Prior to submission ECMPS evaluated your emissions report and assigned an overall "Feedback Status Level" to it, based on the results (see Table 1). This Feedback Report also contains Table 2, which displays EPA-Accepted Cumulative Values for emissions and other parameters.

Table 1: Submission Receipt and Feedback Status Level Information

Report Received for Facility ID (ORIS Code):	55393
Facility Name:	Metcalf Energy Center
State:	CA
Monitoring Locations:	2
Submission Type:	EM for 2024 QTR 4
Feedback Status Level:	No Errors
Submission Date/Time:	01/16/2025 9:38:01 AM
Submitter User ID:	rsilva
Submission ID:	1732966
Resubmission Required:	No
EPA Analyst:	Bryan Ramirez; (202) 564-7591; ramirez.bryan@epa.gov

EXPLANATION OF YOUR FEEDBACK STATUS LEVEL LISTED IN TABLE 1

The EPA has accepted your Emissions data submission. ECMPS detected no errors in your data based on the checks performed. NOTE: The ECMPS submission access window for this Emissions report has been closed. If you need to resubmit this data, please see the DATA RESUBMISSION guidance, below.

OTHER INFORMATION AND BULLETINS FROM EPA

QUESTIONS: Please contact your EPA Analyst listed in Table 1 with any questions regarding this submission and the evaluation results. If you need assistance with correcting problems in the Emissions data for this facility, please send an email to ECMPS Technical Support at: ecmps-support@camdsupport.com.

DATA RESUBMISSION: If you need to resubmit emissions data, including for previous calendar quarters, please complete the ECMPS Data Resubmission Request Form located at: https://ecmps.camdsupport.com/help_resubmit_form.shtml. Please provide detailed documentation of the reasons for the resubmission. Support staff will review your request and notify you via e-mail when the necessary database access window has been granted for your resubmission.

ECMPS Data Reporting Instructions: for detailed information about reporting Monitoring Plan, QA/Certification Test, and Emissions data, please see the ECMPS Reporting Instructions on EPA`s website at: https://www.epa.gov/power-sector/ecmps-reporting-instructions.

If you have any questions regarding this correspondence, please feel free to contact your EPA Analyst listed in Table 1 as soon as possible. Thank you for your attention to this matter.

Table 2: Cumulative Data Summary -- EPA-Accepted Values

Unit/Stack/Pipe ID: 2

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Ozone Season	Year-to-Date
Number of Operating Hours	2,183	376	1,704	1,385		5,648
Operating Time (hrs)	2,182.80	366.50	1,680.86	1,370.54		5,600.70
SO2 Mass (tons)	1.2	0.2	0.9	0.8		3.1
CO2 Mass (tons)	244,399.2	39,202.4	186,823.0	153,241.6		623,666.2
Heat Input (mmBtu)	4,112,465	659,640	3,143,676	2,578,551		10,494,332
NOx Emission Rate (lb/mmBtu)	0.006	0.009	0.007	0.007		0.007

Appendix 6

Jacobs

Memorandum

2101 Webster Street
Suite 1410
155 Grand Avenue
Suite 800
Oakland, CA 94612
United States
T +1.510.251.2426
www.jacobs.com

Subject	**Metcalf Energy Center – Year 2025 Annual Compliance Report for Biological Resources (COC BIO-2)**
Facility Name	Metcalf Energy Center
Attention	Rosemary Silva/Calpine
From	Scott Lindemann/Jacobs
Date	June 26, 2025
Copies to	Joe Aguirre/Jacobs

1. Introduction

This Metcalf Energy Center (MEC) Year 2025 Annual Compliance Report for Biological Resources fulfills the California Energy Commission (CEC) requirement for Condition of Certification (COC) BIO-2, "Designated Biologist Duties." BIO-2 states that the Designated Biologist (DB) will perform the stated duties of BIO-2 relating to "any site (or related facilities) mobilization, ground disturbance, grading, construction, operation, and closure activities." In support of COC BIO-2, the DB is required to maintain written records of the tasks specified previously and those included in the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP). Summaries of these records will be submitted in the annual compliance report.

The BRMIMP for the MEC was prepared in July 2001 as required under the COC BIO-4 set forth by the CEC in their final decision dated October 1, 2001 (99-AFC-3). The purpose of the BRMIMP is to ensure that actions authorized, funded, or carried out by state or federal lead agencies are not likely to jeopardize the continued existence of endangered, threatened, or other special-status species. The BRMIMP describes mitigation measures and guidance to protect biological resources within the project area.

2. Project Location

The MEC is a 600-megawatt natural gas-fired combined cycle power plant operated by Calpine. The MEC is located at the southern edge of the City of San Jose in Santa Clara County. Specifically, the 14.2-acre site is located on the northwestern portion of the Morgan Hill United States Geological Survey quadrangle (Township 8S, Range 2E). The site comprises a 10.9-acre footprint and 3.3-acre riparian corridor. Monterey Road and the Union Pacific Railroad immediately border the MEC site on the east, and farmed agricultural land borders the MEC site to the south. Site access is currently from a railroad overcrossing off Monterey Road, between Metcalf Road to the north and Blanchard Road to the south.

3. Monitored Activities

Since the MEC became operational, Calpine has complied with applicable CEC COCs and periodically consulted with the DB. This 2025 reporting period covers the period between January 2024 and

December 2024. The monitoring and compliance efforts for the subject year are documented further in this section and in Attachment 1 – Site Photographs.

A biological site walkthrough was completed by CEC-approved DB Scott Lindemann (Jacobs), on June 9, 2025. The purpose of the biological site walkthrough was to identify biological concerns and carry out a general monitoring survey.

During the biological site walkthrough, ground squirrel (*Otospermophilus beecheyi*) burrows were recorded within the MEC site on the northern boundary of the detention pond (Attachment 1, Photograph 4). While suitable burrows were observed, evidence of occupancy by burrowing owl (*Athene cunicularia*) such as feathers and white-wash was not detected.

Calpine staff noted that a rock pigeon (*Columba livia*) infestation occurred in approximately 2016, which resulted in excessive fecal waste presenting hazardous conditions to employees. As such, a falconer was employed to control the rock pigeon population on site. The falconer was not active during the 2025 reporting period. No rock pigeon infestation has occurred since these abatement measures were introduced. It is noted that rock pigeon is not afforded protection under the Migratory Bird Treaty Act of 1918 (*United States Code* Title 16, Sections 703–712).

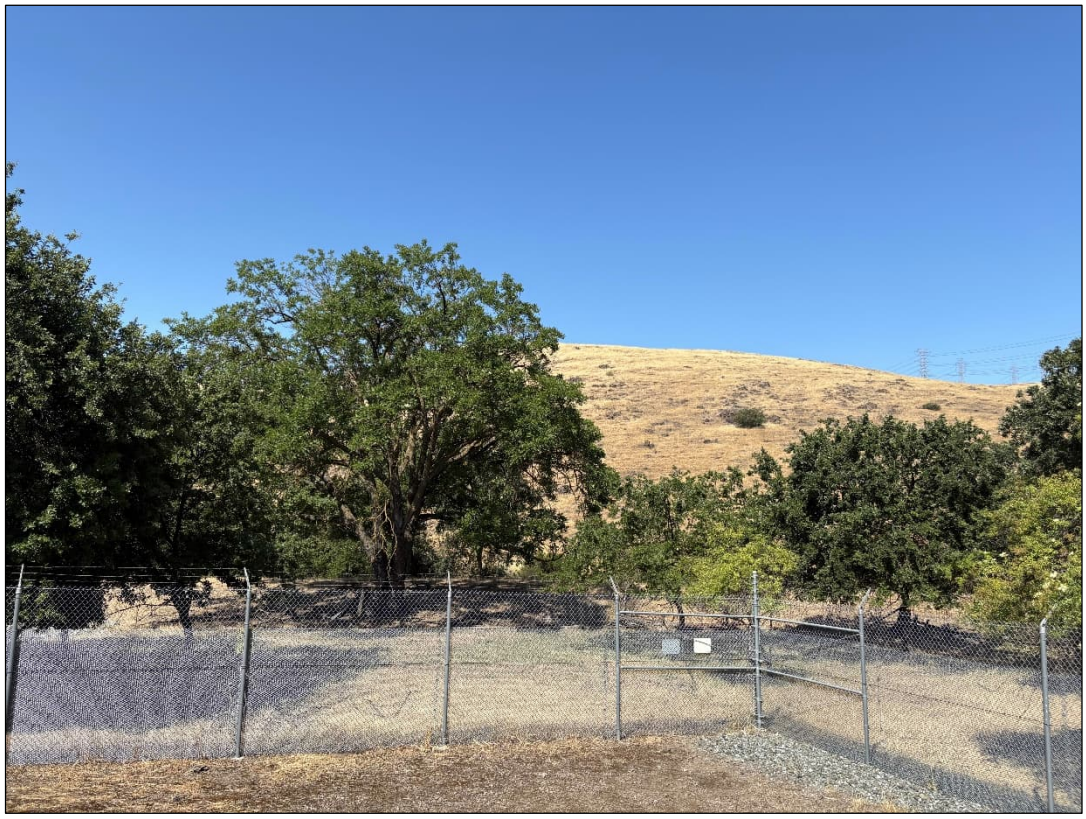
The DB verified that all site personnel are provided training regarding the protected species that may be present in or around the MEC. The training slides are provided in Attachment 2.

4. Conclusion

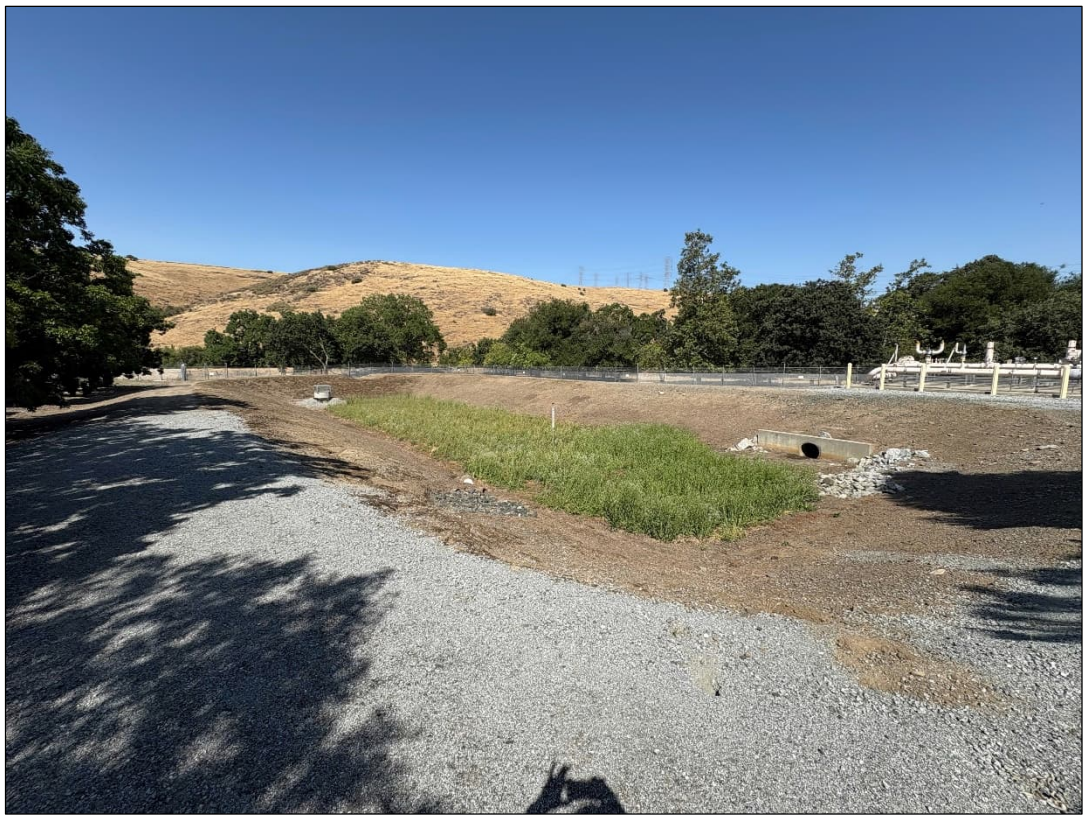
The MEC has demonstrated continued compliance with biological mitigation and protection measures included in the COCs and BRMIMP that are applicable to operation of the facility for the period of January 2024 to December 2024. The DB will remain available to assist with any investigation and biological compliance issues that may arise.

Attachment 1 Site Photographs

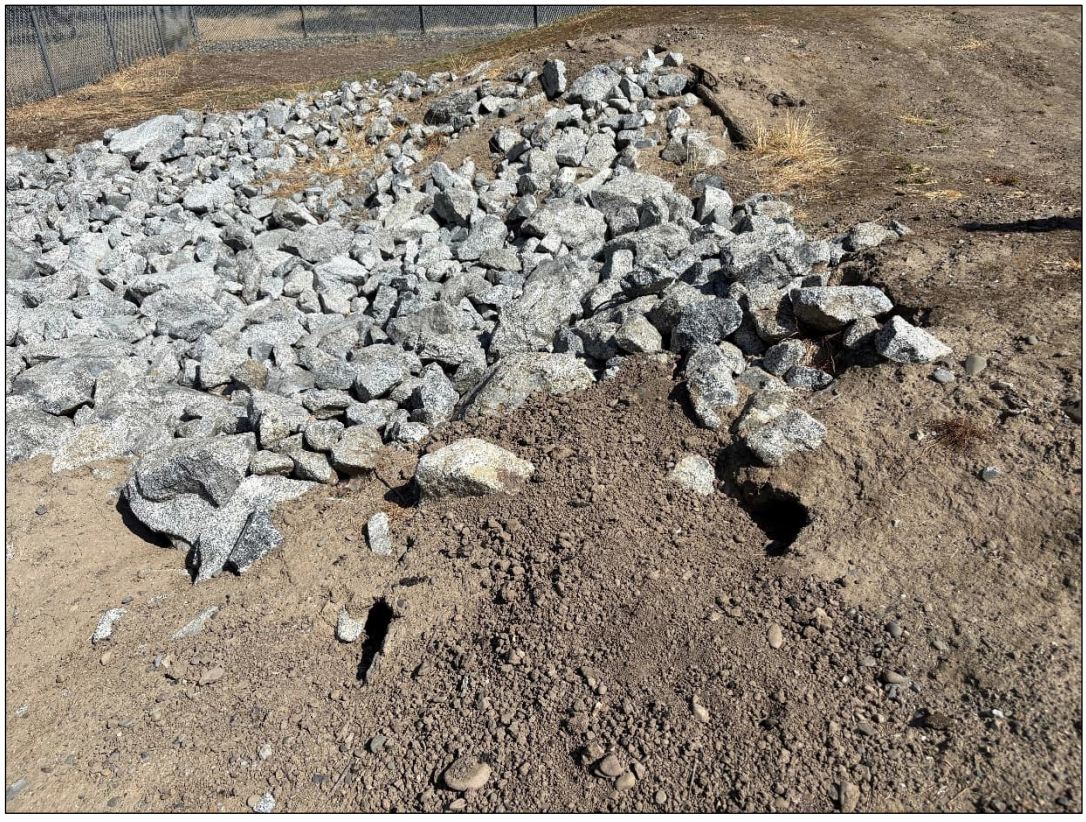
Photograph 1. Trees along southern boundary of MEC site. June 9, 2025.



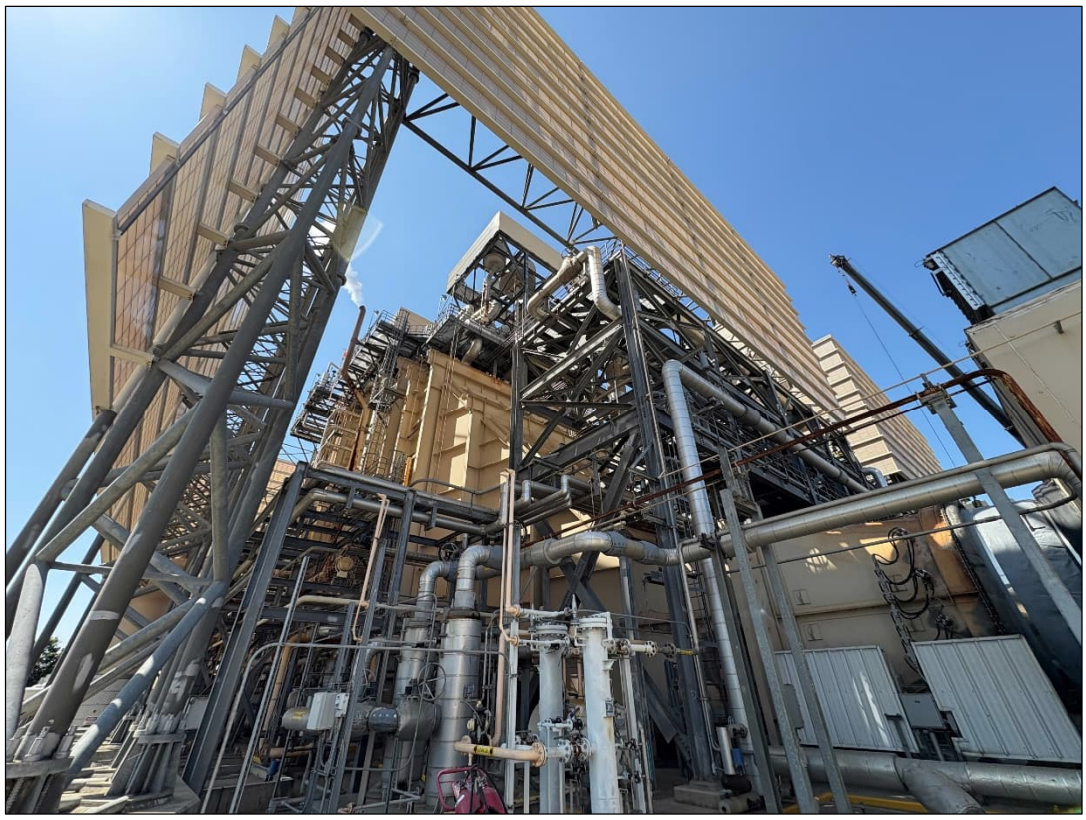
Photograph 2. Southwest site boundary of the MEC site. June 9, 2025.



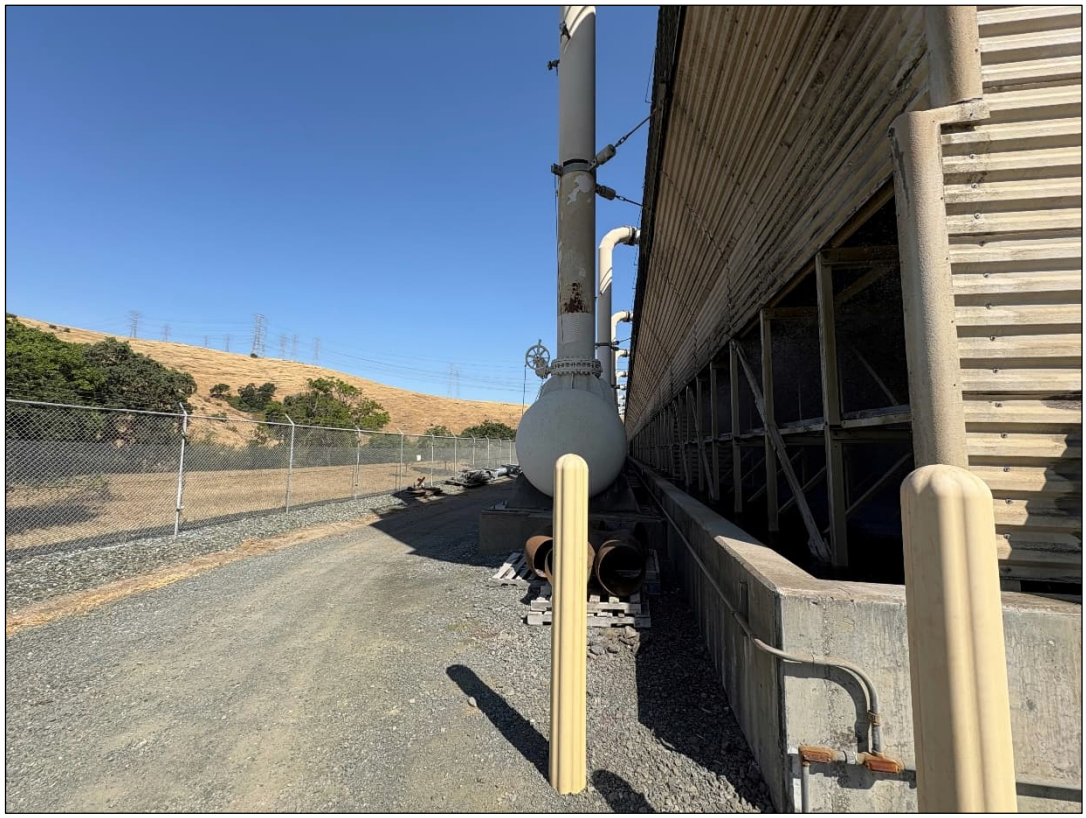
Photograph 3. Detention pond in southwest area of the MEC site. June 9, 2025.



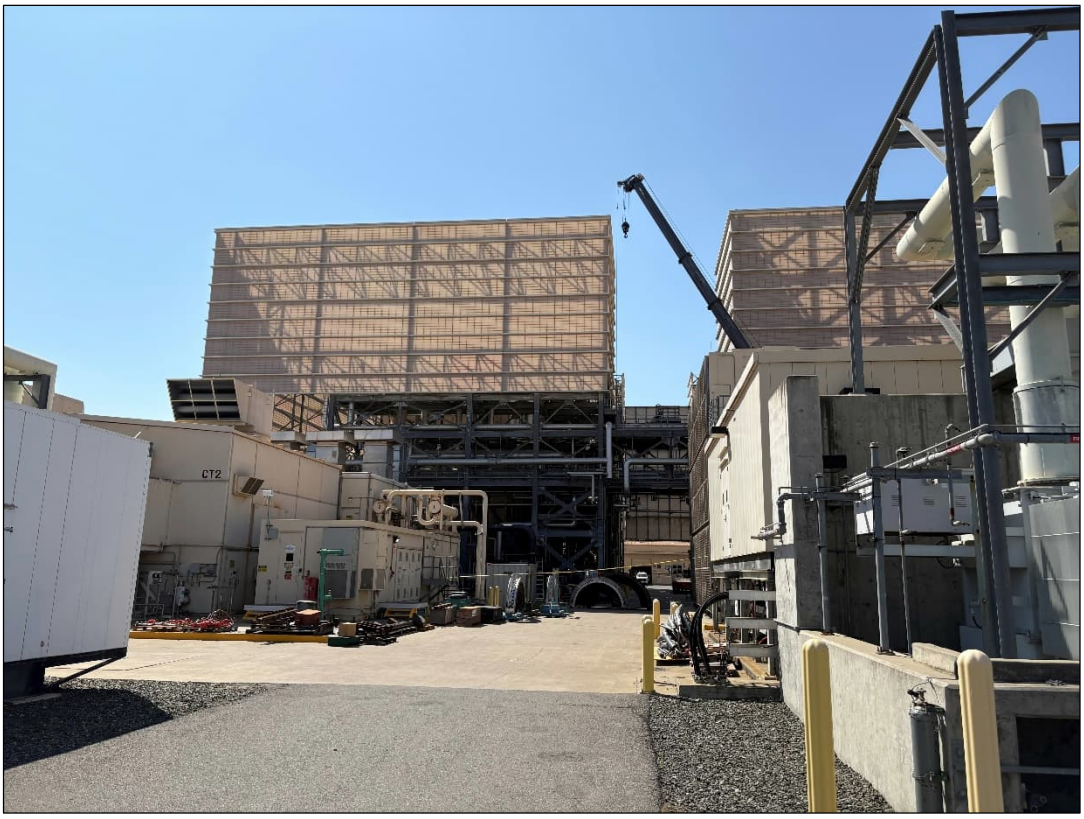
Photograph 4. Ground squirrel burrows bordering the detention ponds; southeast of MEC site. June 9, 2025.



Photograph 5. Built infrastructure within the MEC site. June 9, 2025.



Photograph 6. Boundary treatment along the western site boundary of MEC. June 9, 2025.



Photograph 7. Built infrastructure within the MEC site. June 9, 2025.

Photograph 8. Trees along entrance roadway at front gate to MEC site. June 9, 2025.

Attachment 2 Contractor Orientation

Contractor Orientation
Biological Resources


Western Pond Turtle

Metcalf is situated in an ecologically diverse area.


Bay Checkerspot Butterfly

This area is home to several threatened and endangered plants and animals, including the California Tiger Salamander, Western Pond Turtle, Burrowing Owl, and the Bay Checkerspot Butterfly.

DO NOT disturb or touch any wildlife you encounter onsite.

Report any wildlife encountered to the Control Room immediately.


Burrowing Owl


California Tiger Salamander

Appendix 7

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
4160 kV STATION SERVICE TRANSFORMERS

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**DIALA OIL AX** CAS No NA Map: 1 Grid: F8, E8	**Gallons** State Liquid Type Mixture	**9210** Storage Container Other Days on Site: 365	**4605**	9210 Pressue Ambient Temperature Ambient	Waste Code	- Health Respiratory Skin Sensitization	HIGHLY REFINED PETROLEUM OILS	100%		128-37-0

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **480 V TRANSFORMERS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**DEILETRIC OIL** CAS No Map: 1 Grid: C2, F7, C8, E7	**Gallons** State: Liquid Type: Mixture	**2248** Storage Container: Other Days on Site: 365	**489**	2248 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **ADMIN BLDG OPEN AREA (1 BREAKER)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**SULFUR HEXAFLUORIDE (SF6)** CAS No 2551-62-4 Map: 1 Grid: A10	**Cu. Feet** State Gas Type Pure	**128** Storage Container Other Days on Site: 365	**24**	24 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **AIR COMPRESSORS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**LUBRICATING OIL** CAS No Map: 1 Grid: C4	**Gallons** State: Liquid Type: Mixture	**98** Storage Container: Other Days on Site: 365	**49**	98 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **AMMONIA STORAGE AREA**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**AMMONIUM HYDROXIDE 19%** CAS No 1336-21-6 ✔EHS Map: 1 Grid: H6	**Pounds** State Liquid Type Mixture	**24741.81** Storage Container Aboveground Tank Days on Site: 365	**14554**	24741.81 Pressue Ambient Temperature Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **BOILER CHEMICAL SKID**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT BL-152** CAS No Map: 1 Grid: E5	**Gallons** State: Liquid Type: Mixture	**400** Storage Container: Aboveground Tank Days on Site: 365	**400**	400 Pressue: Ambient Temperature: Ambient	0 Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	AMMONIUM HYDROXIDE ETHANOLAMINE	30% 10%	✓	1336-21-6 141-43-5
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT BL-17945** CAS No Map: 1 Grid: E5	**Gallons** State: Liquid Type: Mixture	**400** Storage Container: Aboveground Tank Days on Site: 365	**400**	400 Pressue: Ambient Temperature: Ambient	0 Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation	Sodium hydroxide SODIUM PHOSPHATE	2% 5%		1310-73-2 7601-54-9
DOT: 9 - Misc. Hazardous Materials	**CHEMTREAT BL8401** CAS No Map: 1 Grid: E5	**Gallons** State: Liquid Type: Mixture	**55** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Health Acute 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. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **BOILER FEED PUMPS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	SHELL TELLAS S2 MX 32	**Gallons**	**280**	**70**	280		- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
	CAS No	State: Liquid Storage Container: Other			Pressue: Ambient	Waste Code					
	Map: 1 Grid: E4, E7, D4, D7	Type: Mixture Days on Site: 365			Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **CEMS STORAGE - UNIT 1**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**NITROGEN / NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E5	**Cu. Feet** State: Gas Type: Mixture	**1587.3** Storage Container: Cylinder Days on Site: 365	**144.3**	1587.3 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity				
DOT: 2.2 - Nonflammable Gases	**NITROGEN / OXYGEN CALIBRATION GAS** CAS No Map: 1 Grid: E5	**Cu. Feet** State: Gas Type:	**865.8** Storage Container: Cylinder Days on Site: 365	**144.3**	865.8 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Physical Oxidizer - Health Acute Toxicity - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E5	**Cu. Feet** State: Gas Type: Mixture	**1298.7** Storage Container: Cylinder Days on Site: 365	**144.3**	1298.7 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE/NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E5	**Cu. Feet** State: Gas Type: Mixture	**576** Storage Container: Cylinder Days on Site: 365	**144.3**	432 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **CEMS STORAGE - UNIT 2**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**NITROGEN / NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E6	**Cu. Feet** State: Gas Type: Mixture	**1587.3** Storage Container: Cylinder Days on Site: 365	**144.3**	1587.3 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity				
DOT: 2.2 - Nonflammable Gases	**NITROGEN / OXYGEN CALIBRATION GAS** CAS No Map: 1 Grid: E6	**Cu. Feet** State: Gas Type:	**865.8** Storage Container: Cylinder Days on Site: 365	**144.3**	865.8 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Physical Oxidizer - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E6	**Cu. Feet** State: Gas Type: Mixture	**1298.7** Storage Container: Cylinder Days on Site: 365	**144.3**	1298.7 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE/NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E5	**Cu. Feet** State: Gas Type: Mixture	**576** Storage Container: Cylinder Days on Site: 365	**144.3**	432 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **CEMS STORAGE - UNIT 3**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**NITROGEN / NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: D6	**Cu. Feet** State: Gas Type: Mixture	**1587.3** Storage Container: Cylinder Days on Site: 365	**144.3**	1587.3 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity				
DOT: 2.2 - Nonflammable Gases	**NITROGEN / OXYGEN CALIBRATION GAS** CAS No Map: 1 Grid: D6	**Cu. Feet** State: Gas Type:	**865.8** Storage Container: Cylinder Days on Site: 365	**144.3**	865.8 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Physical Oxidizer - Health Acute Toxicity - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE CALIBRATION GAS** CAS No Map: 1 Grid: D6	**Cu. Feet** State: Gas Type: Mixture	**1298.7** Storage Container: Cylinder Days on Site: 365	**144.3**	1298.7 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE/NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E5	**Cu. Feet** State: Gas Type: Mixture	**576** Storage Container: Cylinder Days on Site: 365	**144.3**	432 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **CEMS STORAGE - UNIT 4**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**NITROGEN / NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E6	**Cu. Feet** State: Gas Type: Mixture	**1587.3** Storage Container: Cylinder Days on Site: 365	**144.3**	1587.3 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity				
DOT: 2.2 - Nonflammable Gases	**NITROGEN / OXYGEN CALIBRATION GAS** CAS No Map: 1 Grid: D5	**Cu. Feet** State: Gas Type:	**865.8** Storage Container: Cylinder Days on Site: 365	**144.3**	865.8 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Acute Toxicity - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE CALIBRATION GAS** CAS No Map: 1 Grid: D5	**Cu. Feet** State: Gas Type: Mixture	**1298.7** Storage Container: Cylinder Days on Site: 365	**144.3**	1298.7 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**NITROGEN/CARBON MONOXIDE/NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: E5	**Cu. Feet** State: Gas Type: Mixture	**576** Storage Container: Cylinder Days on Site: 365	**144.3**	432 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **CHILLER SKIDS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**DUPONT HCFC-123** CAS No 306-83-2 Map: 1 Grid: F7	**Pounds** State Liquid Type Pure	**7600** Storage Container Other Days on Site: 365	**1900**	7600 Pressue Ambient Temperature Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization - Health Specific Target Organ Toxicity	2,2-DICHLORO-1,1,1-TRIFLUOROETHANE	100%		306-83-2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **CIRC WATER PUMPS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**SHELL MORLINA S3BA 150** CAS No Map: 1 Grid: F2	**Gallons** State: Liquid Type: Mixture	**75** Storage Container: Other Days on Site: 365	**34**	75 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity - Health Respiratory Skin Sensitization				
	SHELL TURBO T68 CAS No Map: 1 Grid: F2	**Gallons** State: Liquid Type: Mixture	**165** Storage Container: Other Days on Site: 365	**34**	165 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
CONTROL ROOM (ENERSYS 4DX-11 60 UNITS)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: C5	**Gallons** State: Liquid Type: Mixture	**840** Storage Container: Other Days on Site: 365	**14**	840 Pressue: < Ambient Temperature: < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **COOLING TOWER GEAR BOXES**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**SHELL MORLINA S3 BA 220** CAS No Map: 1 Grid: H1 F1, E1	**Gallons** State: Liquid Type: Mixture	**126** Storage Container: Other Days on Site: 365	**21**	126 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **COOLING WATER CHEMICALS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	CHEMTREAT CL-5428 CAS No Map: 1 Grid: E1	**Gallons** State: Liquid Type: Mixture	**400** Storage Container: Aboveground Tank Days on Site: 365	**400**	400 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
DOT: 9 - Misc. Hazardous Materials	**CHEMTREAT CT-709** CAS No Map: 1 Grid: E1	**Gallons** State: Liquid Type: Mixture	**400** Storage Container: Aboveground Tank Days on Site: 365	**400**	400 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Acute Toxicity	SODIUM HEXAMETAPHOSPHATE	40%		10124-56-8
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**SODIUM HYPOCHLORITE 12.5%** CAS No Map: 1 Grid: E1	**Gallons** State: Liquid Type: Mixture	**6000** Storage Container: Aboveground Tank Days on Site: 365	**6000**	6000 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**SULFURIC ACID 93%** CAS No ✓EHS 7664-93-9 Map: 1 Grid: E1	**Pounds** State: Liquid Type: Mixture	**87234** Storage Container: Aboveground Tank Days on Site: 365	**87234**	87234 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
CTG #1 & #4 OILY WATER SEPARATOR #1

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
	USED OIL CAS No 70514-12-4	**Gallons** State Liquid Type Mixture	**773** Storage Container Other Days on Site: 365	**773**	600 Pressue < Ambient Temperature < Ambient	773 Waste Code	- Health Carcinogenicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard - Health Germ Cell Mutagenicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
CTG #2 & #3 OILY WATER SEPARATOR #2

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	USED OIL CAS No 70514-12-4	**Gallons** State Liquid Type Mixture	**773** Storage Container Other Days on Site: 365	**773**	600 Pressue < Ambient Temperature < Ambient	773 Waste Code	- Health Carcinogenicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **CTG GENERATOR RESERVOIRS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**GST 32 GENERATOR LUBRICATING OIL** CAS No Map: 1 Grid: D7, D4, E4, E7	Gallons State: Liquid Type: Mixture	**2000** Storage Container: Other Days on Site: 365	**500**	2000 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Hazard Not Otherwise Classified	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC	98%		64742-54-7

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
CTG HYDRAULIC STARTER RESERVOIRS

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**SHELL TELLUS S2 MX 46** CAS No Map: 1 Grid: D4, E4, D7, E7	**Gallons** State: Liquid Type: Mixture	**160** Storage Container: Other Days on Site: 365	**40**	160 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **FIRE PUMP HOUSE**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class III-B	**NO. 2 DIESEL FUEL** CAS No NA Map: 1 Grid: B9	**Gallons** State Liquid Type Mixture	**320** Storage Container Aboveground Tank Days on Site: 365	**320**	320 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable - Physical Contact Water Emits Flammable Gas - Health Acute Toxicity - Health Respiratory Skin Sensitization - Health Aspiration Hazard	NAPHTHALENE #2 DIESEL FUEL			91-20-3 68476-34-6

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **FIRE PUMP HOUSE (INTERSTATE 8D-MHD 2 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**LEAD-ACID BATTERY** CAS No Map: 1 Grid: B9	**Gallons** State Liquid Type Mixture	**9** Storage Container Other Days on Site: 365	**4.5**	9 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable - Physical Explosive - Physical Corrosive To Metal - Health Carcinogenicity - Health Acute Toxicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	Lead/Lead Oxide (Litharge)/Lead Sulfate Sulfuric Acid (Battery Electrolyte)	70% 15%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **FUEL GAS COMPRESSOR SKID**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**SHELL MORLINA S3 BA 100** CAS No Map: 1 Grid: H4	**Gallons** State: Liquid Type: Mixture	**180** Storage Container: Other Days on Site: 365	**50**	180 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **FUEL GAS CONDENSATE DRAIN TANK**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	NATURAL GAS CONDENSATES	**Gallons**	**500**	**500**	50	50					
	CAS No: 68919-39-1	State: Liquid	Storage Container: Other		Pressue: < Ambient	Waste Code: 221					
		Type: Mixture	Days on Site: 365		Temperature: < Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **GAS TURBINE RESERVOIR**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**AEROSHELL 500** CAS No Map: 1 Grid: D8, E8, D4, E4	**Gallons** State: Liquid Type: Mixture	**600** Storage Container: Other Days on Site: 365	**150**	600 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Acute Toxicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Specific Target Organ Toxicity	1-NAPHTHYLAMINE, N-PHENYL TRICRESYL PHOSPHATE .04%	2% 2%		90-30-2 1330-78-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
GENERATOR STEP UP TRANSFORMERS

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	HYVOLT II TRANSFORMER INSULATING OIL CAS No Map: 1 Grid: D8, D3, E3, E8	**Gallons** State: Liquid Type: Mixture	**25036** Storage Container: Other Days on Site: 365	**6259**	25036 Pressue: Ambient Temperature: < Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Skin Corrosion Irritation - Health Aspiration Hazard	SEVERLY HYDROTREATED LIGHT NAPHTHENIC DISTILLATES	100%		64742-53-6
DOT: 2.2 - Nonflammable Gases	**NITROGEN** CAS No 7727-37-9 Map: 1 Grid: D8, D3, E3, E8	**Cu. Feet** State: Gas Type: Pure	**1200** Storage Container: Cylinder Days on Site: 365	**300**	1200 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **HAZARDOUS WASTE STORAGE**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 4.1 - Flammable Solids Flammable Solid	**DEBRIS/RAGS CONTAMINATED WITH PETROLEUM/OIL** CAS No Map: 1 Grid: C8	**Pounds** State: Solid Type: Waste	**840** Storage Container: Steel Drum Days on Site: 180	**230**	600 Pressue: Ambient Temperature: Ambient	2500 Waste Code: 352	- Physical Flammable - Health Hazard Not Otherwise Classified				
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**USED OIL** CAS No NA Map: 1 Grid: C8	**Gallons** State: Liquid Type: Waste	**330** Storage Container: Steel Drum Days on Site: 180	**55**	285 Pressue: Ambient Temperature: Ambient	2500 Waste Code: 221	- Physical Flammable - Health Acute Toxicity				
DOT: 4.1 - Flammable Solids Flammable Solid	**USED OIL FILTERS** CAS No NA Map: 1 Grid: C8	**Pounds** State: Solid Type: Waste	**400** Storage Container: Steel Drum Days on Site: 180	**200**	200 Pressue: Ambient Temperature: Ambient	400 Waste Code: 352	- Physical Flammable - Health Hazard Not Otherwise Classified				
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**USED OIL/OILY WATER** CAS No NA Map: 1 Grid: C8	**Gallons** State: Liquid Type: Waste	**330** Storage Container: Steel Drum Days on Site: 180	**55**	285 Pressue: Ambient Temperature: Ambient	3500 Waste Code: 221	- Physical Flammable - Health Acute Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **ICE SHOP AREA**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**MISCELLANEOUS FLAMMABLES** CAS No Map: 1 Grid: C8	**Gallons** State Liquid Type Mixture	**95** Storage Container Other Days on Site: 365	**1**	75 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Acute Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **OIL STORAGE SKID**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	**CHEMTREAT BL-1304** CAS No Map: C Grid: 8	**Gallons** State: Liquid Type: Mixture	**220** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	220 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation	POTASSIUM HYDROXIDE SODIUM HYDROXIDE`	30% 40%		1310-58-3 1310-73-2
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT BL-152** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**275** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	165 Pressue: Ambient Temperature: Ambient	0 Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	AMMONIUM HYDROXIDE ETHANOLAMINE	30% 10%	✓	1336-21-6 141-43-5
DOT: 9 - Misc. Hazardous Materials	**CHEMTREAT BL8401** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity				
DOT: 8 - Corrosives (Liquids and Solids)	**CHEMTREAT CL-2230** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**30** Storage Container: Carboy Days on Site: 365	**5**	30 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	5-CHLORO-2METHYL-4-ISOTHIAZOLIN-3-ONE 2-METHYL-4-ISOTHIAZDIN-3-ONE	1% 0%		26172-55-4 2682-20-4
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT CL-2875** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**550** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	275 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility** | Chemical Location | CERS ID **10096750**

Facility Name **Los Esteros Critical Energy Facility** | **OIL STORAGE SKID** | Facility ID **FA0256442**

800 THOMAS FOON CHEW WY, San Jose 95134 | Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**CHEMTREAT CL-5428** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**220** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
DOT: 9 - Misc. Hazardous Materials	**CHEMTREAT CT-709** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**550** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	550 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Acute Toxicity - Health Serious Eye Damage Eye Irritation	SODIUM HEXAMETAPHOSPHATE	40%		10124-56-8
	CHEMTREAT FO223 CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**275** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	220 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Skin Corrosion Irritation				
DOT: 9 - Misc. Hazardous Materials	**CONNECT 6000** CAS No NA Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	ETHOXYLATED ALCOHOLS (C9-C11) 2-BUTOXY ETHANOL WATER			68439-46-3 111-76-2 7732-18-5
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class II	**DIESEL FUEL NO. 2** CAS No 68334-30-5	**Gallons** State: Liquid Type: Pure	**100** Storage Container: Can	**10**	60 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Carcinogenicity - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard				
	HYTRANS 61 TRANSFORMER OIL CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**165** Storage Container: Steel Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **OIL STORAGE SKID**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-A	**MISCELLANEOUS FLAMMABLES** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**175** Storage Container: Other Days on Site: 365	**5**	125 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Acute Toxicity				
	MISCELLANEOUS LUBE OILS CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**200** Storage Container: Other Days on Site: 365	**5**	150 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**ND-165** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity				
DOT: 2.1 - Flammable Gases Flammable Gas	**PROPANE** CAS No 74-98-6 Map: 1 Grid: C8	**Cu. Feet** State: Gas Type: Pure	**100** Storage Container: Cylinder Days on Site: 365	**15**	75 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Simple Asphyxiant				
	ROTO Z FLUID MINERAL LUBRICANT CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**50** Storage Container: Carboy Days on Site: 365	**5**	45 Pressue: Temperature:	Waste Code	- Physical Flammable - Health Skin Corrosion Irritation				
	SHELL MORLINA S3 BA 100 CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**330** Storage Container: Steel Drum Days on Site: 365	**55**	220 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
	SHELL TELLUS S2 MX32 CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**165** Storage Container: Steel Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **OIL STORAGE SKID**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	SHELL TELLUS S2 MX46 CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Steel Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Serious Eye Damage Eye Irritation				
	SHELL TURBO J 32 CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**330** Storage Container: Steel Drum Days on Site: 365	**55**	220 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
DOT: 9 - Misc. Hazardous Materials	**SHELL TURBO T 32** CAS No Map: 1 Grid: H3	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Steel Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Skin Corrosion Irritation				
DOT: 3 - Flammable and Combustible Liquids	**TURBINE OIL 500** CAS No Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**330** Storage Container: Steel Drum Days on Site: 365	**55**	220 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Hazard Not Otherwise Classified - Health Reproductive Toxicity - Health Respiratory Skin Sensitization - Health Specific Target Organ Toxicity				
DOT: 3 - Flammable and Combustible Liquids	**TURBINE OIL TURBO 68** CAS No NA Map: 1 Grid: C8	**Gallons** State: Liquid Type: Mixture	**330** Storage Container: Steel Drum Days on Site: 365	**55**	220 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Hazard Not Otherwise Classified	PETROLEUM HYDROTREATED PARAFINIC	98%		64742-54-7

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
OILY WATER SEPARATOR #4 (AMMONIA SOTRAGE)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	USED OIL CAS No 70514-12-4	**Gallons** State Liquid Type Mixture	**773** Storage Container Other Days on Site: 365	**773**	600 Pressue Temperature	773 Waste Code	- Health Carcinogenicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard - Health Germ Cell Mutagenicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
PDC #1 (ENERSYS 4DX-11 60 UNITS)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: E3	**Gallons** State Liquid Type Mixture	**840** Storage Container Other Days on Site: 365	**14**	840 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #1 (HOPPECKE FNC 333L 19 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NI-CAD BATTERY** CAS No Map: 1 Grid: E3	**Gallons** State Liquid Type Mixture	**41.8** Storage Container Other Days on Site: 365	**2.52**	41.8 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Flammable - Physical Explosive - Physical Corrosive To Metal - 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. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #1 (HOPPECKE FNC 66 L 19 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NI-CAD BATTERY** CAS No Map: 1 Grid: E3	**Gallons** State Liquid Type Mixture	**11.97** Storage Container Other Days on Site: 365	**0.63**	11.97 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
PDC #10 (ENERSYS 4DX-11 60 UNITS)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: F8	**Gallons** State Liquid Type Mixture	**840** Storage Container Other Days on Site: 365	**14**	840 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #12 (ENERSYS 4DX-11 60 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: C3	**Gallons** State: Liquid Type: Mixture	**840** Storage Container: Other Days on Site: 365	**14**	840 Pressue: < Ambient Temperature: < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
PDC #2 (ENERSYS 4DX-11 60 UNITS)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: E8	**Gallons** State: Liquid Type: Mixture	**840** Storage Container: Other Days on Site: 365	**14**	840 Pressue: < Ambient Temperature: < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
PDC #3 (ENERSYS 4DX-11 60 UNITS)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: D8	**Gallons** State Liquid Type Mixture	**840** Storage Container Other Days on Site: 365	**14**	840 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #3 (HOPPECKE FNC 333L 19 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NI-CAD BATTERY** CAS No Map: 1 Grid: D8	**Gallons** State Liquid Type Mixture	**41.8** Storage Container Other Days on Site: 365	**2.52**	41.8 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Flammable - Physical Explosive - Physical Corrosive To Metal - 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. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #3 (HOPPECKE FNC 66 L 19 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NI-CAD BATTERY** CAS No Map: 1 Grid: D8	**Gallons** State Liquid Type Mixture	**11.97** Storage Container Other Days on Site: 365	**0.63**	11.97 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
PDC #4 (ENERSYS 4DX-11 60 UNITS)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: D3	**Gallons** State: Liquid Type: Mixture	**840** Storage Container: Other Days on Site: 365	**14**	840 Pressue: < Ambient Temperature: < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #4 (HOPPECKE FNC 333L 19 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NI-CAD BATTERY** CAS No Map: 1 Grid: D3	**Gallons** State Liquid Type Mixture	**41.8** Storage Container Other Days on Site: 365	**2.52**	41.8 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Flammable - Physical Explosive - Physical Corrosive To Metal - 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. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #4 (HOPPECKE FNC 66 L 19 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NI-CAD BATTERY** CAS No Map: 1 Grid: D3	**Gallons** State Liquid Type Mixture	**11.97** Storage Container Other Days on Site: 365	**0.63**	11.97 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **PDC #5 (ENERSYS 4DX-11 60 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: F2	**Gallons** State Liquid Type Mixture	**840** Storage Container Other Days on Site: 365	**14**	840 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
PDC #7 (ENERSYS 4DX-11 60 UNITS)

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: E7	**Gallons** State Liquid Type Mixture	**840** Storage Container Other Days on Site: 365	**14**	840 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **RO SKIDS**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT RL124B** CAS No	**Gallons** State: Liquid Type: Mixture	**165** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation				
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT RL9007** CAS No	**Gallons** State: Liquid Type: Mixture	**165** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Diethylenetriamine penta methylene phosphonic acid	20%		22042-96-2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
SECONDARY UNIT SUBSTATION

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	**LUBRICATING OIL** CAS No Map: 1 Grid: F4	**Gallons** State: Liquid Type: Mixture	**636** Storage Container: Other Days on Site: 365	**636**	636 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility** | Chemical Location | CERS ID **10096750**

Facility Name **Los Esteros Critical Energy Facility** | **SHOP AREA** | Facility ID **FA0256442**

800 THOMAS FOON CHEW WY, San Jose 95134 | Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.1 - Flammable Gases Unstable (Reactive), Class 2, Flammable Gas	**ACETYLENE** CAS No 74-86-2 Map: 1 Grid: C7	**Cu. Feet** State Gas Type Pure	**575** Storage Container Cylinder Days on Site: 365	**139**	437 Pressue Ambient Temperature Ambient	0 Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Aspiration Hazard				
	AQUATENE 330GM CAS No Map: 1 Grid: C7	**Gallons** State Liquid Type Mixture	**75** Storage Container Carboy	**5**	55 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Dipropylene Glycol Methyl Ether Triphosphoric Acid, Pentasodium Salt Silicic Acid (h2sio3), Disodium Salt	5% 5% 10%		34590-94-8 7758-29-4 6834-92-0
DOT: 2.2 - Nonflammable Gases	**ARGON, COMPRESSED** CAS No 7440-37-1 Map: 1 Grid: C7	**Cu. Feet** State Gas Type Pure	**875** Storage Container Cylinder Days on Site: 365	**250**	776 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Aspiration Hazard				
	BAILEIGH COOLANT CAS No Map: 1 Grid: C7	**Gallons** State Liquid Type Mixture	**25** Storage Container Other Days on Site: 365	**5**	25 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation				
	BLAST-O-LITE INDUSTRIAL BEADS CAS No Map: 1 Grid: C7	**Gallons** State Solid Type Mixture	**35** Storage Container Other Days on Site: 365	**5**	35 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation				
DOT: 3 - Flammable and Combustible Liquids	**MISCELLANEOUS FLAMMABLES** CAS No Map: 1 Grid: C7	**Gallons** State Liquid Type Mixture	**95** Storage Container Can Days on Site: 365	**1**	75 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity - Health Serious Eye Damage Eye Irritation				
DOT: 2.2 - Nonflammable Gases	**NITROGEN** CAS No 7727-37-9 Map: 1 Grid: C7	**Cu. Feet** State Gas Type Pure	**330** Storage Container Cylinder Days on Site: 365	**116**	272 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **SHOP AREA**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases Oxidizing, Class 2	**OXYGEN** CAS No 7782-44-7 Map: 1 Grid: C7	**Cu. Feet** State Gas Type Pure	**785** Storage Container Cylinder	**337**	712 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Physical Oxidizer - Health Hazard Not Otherwise Classified				
DOT: 2.2 - Nonflammable Gases	**SULFUR HEXAFLUORIDE (SF6)** CAS No 2551-62-4	**Cu. Feet** State Gas Type Pure	**172** Storage Container Cylinder Days on Site: 365	**115**	172 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
SITE PDC / MCC ROOMS

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**DUPONT HCFC-227** CAS No 431-89-0 Map: E8,D3,F8 Grid: E3,E7,C3,C5	**Pounds** State Gas Type Pure	**2910** Storage Container Other Days on Site: 365	**468**	2910 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization	HEPTAFLUOROPROPANE	100%		431-89-0

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location
STEAM TURBINE LUBE OIL RESERVOIR

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	**SHELL TURBO J 32** CAS No Map: 1 Grid: H3	**Gallons** State: Liquid Type: Mixture	**10058** Storage Container: Other Days on Site: 365	**10058**	10058 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **STEAM TURBINE UNDERDECK**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CARBON DIOXIDE (Fire Extinguishing Agent and Expellant)** CAS No 124-38-9 Map: D4 Grid: D7	**Pounds** State Gas Type Pure	**1200** Storage Container Cylinder Days on Site: 365	**100**	1200 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **STG GSU TRANSFORMER**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	DIELECTRIC OIL	**Gallons**	**9010**	**9010**	9010		- Physical Hazard Not Otherwise Classified - Health Aspiration Hazard				
	CAS No	State: Liquid Storage Container: Other			Pressue: Ambient	Waste Code					
	Map: 1 Grid: F2	Type: Mixture Days on Site: 365			Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **STG OILY WATER SEPARATOR #3**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
	USED OIL CAS No 70514-12-4	**Gallons** State Liquid Type Mixture	**384** Storage Container Other Days on Site: 365	**384**	250 Pressue < Ambient Temperature < Ambient	384 Waste Code	- Health Carcinogenicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard - Health Germ Cell Mutagenicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **SWITCH YARD (ENERSYS 4DX-11 60 UNITS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**NON-SPILLABLE LEAD-ACID BATTERY** CAS No Map: 1 Grid: B1	**Gallons** State Liquid Type Mixture	**840** Storage Container Other Days on Site: 365	**14**	840 Pressue < Ambient Temperature < Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	LEAD, LEAD COMPONENTS SULFURIC ACID	60% 30%	 ✓	7439-92-1 7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **SWITCHYARD (14 BREAKERS)**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**SULFUR HEXAFLUORIDE (SF6)** CAS No 2551-62-4 Map: 1 Grid: B1	**Cu. Feet** State Gas Type Pure	**1280** Storage Container Other Days on Site: 365	**128**	1280 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **Los Esteros Critical Energy Facility**
Facility Name **Los Esteros Critical Energy Facility**
800 THOMAS FOON CHEW WY, San Jose 95134

Chemical Location **TURBINE PACKAGES**

CERS ID **10096750**
Facility ID **FA0256442**
Status **Submitted** on 7/8/2025 12:14 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CARBON DIOXIDE** CAS No 124-38-9 Map: 1 Grid: D7, D4, E4, E7	**Pounds** State Gas Type Pure	**4800** Storage Container Cylinder Days on Site: 365	**100**	4800 Pressue < Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Simple Asphyxiant				

Appendix 8

Cell 10 p1

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation
Tower Manufacturer
Process Served by Tower
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. 10 Number of Fan Cells 10 Tower Type: Crossflow ❑ Counterflow ❑
Date Tower was installed

Date Inspected May 13th through 25th
Inspected by Pat Mannion
Inspector
Signature Pat Mannion
Model No. Serial No.
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material		X		
Branch Pipe Material		X		
Nozzles–Orifice Diameter Size		X		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material		X		fiberglass
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention Cell 10 P2

Mechanical Equipment	1	2	3	Comments
Speed Reducer Type: Belt ☐ Gear ☒ Direct Drive ☐				
Belt Drive Unit				
Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				
Gear Drive Unit				
Manufacturer MARLEY Model R4000 566 Ratio				
Oil Level: Full ☒ Add Immediately ☐ Low, check again soon ☐				serial # 2563301
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used Oil is sent out for scheduled oil testing				
Seals pinion seal leak		X		after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass
Unusual Noises? No ☐ Yes ☐ Action Required				
Drive Shaft				
Manufacturer Material	X			carbon fiber shaft with flex plate couplings
Fan				noise heard when rotating shaft
Fan Type: Propeller ☒ Blower ☐				
Manufacturer Fixed Pitch ☐ Adjustable Pitch ☐				
Diameter Number of Blades 10				see recorded measurements
Blade Material fiberglass		X		heavy chemical build up (see pictures)
Hub Material aluminum		X		
Hub Cover Material fiberglass		X		
Blade Assembly Hardware stainless		X		
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support		X		g/box support foundation beam OK -
Oil Fill and Drain Line		X		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass		X		them vibrating
Vibration Limit Switch		X		did not test switch for trip
Motor				
Manufacturer				
Name Plate Data: HP RPM Phase Hz Volts				
F L Amps Frame S F Special Info.				
Last Lubrication—Date				
Grease Used—Type				
Unusual Noises? No ☐ Yes ☐ Action Required				
Unusual Vibration? No ☐ Yes ☐ Action Required				
Unusual Heat Build-up? No ☐ Yes ☐ Action Required				
Make-up Valve				
Other Component				
Other Component				

Cell 9 p1

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location: Metcalf
Owner/Company: Calpine
Company Contact:
Signature:
Owner's Tower Designation:
Tower Manufacturer:
Process Served by Tower:
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. 9 Number of Fan Cells 10
Date Tower was installed:

Date Inspected: May 13th through 25th
Inspected by: Pat Mannion
Inspector:
Signature: Pat Mannion
Model No. Serial No.
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑
Tower Type: Crossflow ❑ Counterflow ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material				
Branch Pipe Material				
Nozzles–Orifice Diameter Size				
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material				
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention Cell 9 p 2

Mechanical Equipment	1	2	3	Comments
Speed Reducer Type: Belt ☐ Gear ☒ Direct Drive ☐				
Belt Drive Unit				
Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				
Gear Drive Unit				
Manufacturer Amarillo rebuild Model Marley M4000 Ratio 15.84:1				
Oil Level: Full ☒ Add Immediately ☐ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used Oil is sent out for scheduled oil testing				
Seals		X		after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass
Unusual Noises? No ☐ Yes ☐ Action Required				
Drive Shaft				
Manufacturer Material	X			carbon fiber shaft with flex plate couplings
Fan				
Fan Type: Propeller ☒ Blower ☐				
Manufacturer Fixed Pitch ☐ Adjustable Pitch ☒				
Diameter Number of Blades 10				
Blade Material fiberglass				
Hub Material aluminum		x		
Hub Cover Material fiberglass		x		
Blade Assembly Hardware stainless		x		
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support		✓		g/box support foundation beam OK
Oil Fill and Drain Line		x		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass		x		them vibrating
Vibration Limit Switch		x		did not test switch for trip
Motor				
Manufacturer				
Name Plate Data: HP RPM Phase Hz Volts				
F L Amps Frame S F Special Info.				
Last Lubrication—Date				
Grease Used—Type				
Unusual Noises? No ☐ Yes ☐ Action Required				
Unusual Vibration? No ☐ Yes ☐ Action Required				
Unusual Heat Build-up? No ☐ Yes ☐ Action Required				
Make-up Valve				
Other Component				
Other Component				

Cell 8 p1

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location: Metcalf
Owner/Company: Calpine
Company Contact:
Signature:
Owner's Tower Designation:
Tower Manufacturer:
Process Served by Tower:
Design Conditions: GPM ____ HW ____ ° F CW ____ ° F WB ____ ° F
Cell No. 8 Number of Fan Cells 10 Tower Type: Crossflow ❑ Counterflow ❑
Date Tower was installed:

Date Inspected: May 13th through 25th
Inspected by: Pat Mannion
Inspector:
Signature: Pat Mannion
Model No. ____ Serial No. ____
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material		X		
Branch Pipe Material		X		
Nozzles–Orifice Diameter Size		X		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material		X		fiberglass
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

CELL 8 p2

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention

Mechanical Equipment	1	2	3	Comments
Speed Reducer Type: Belt ❑ Gear ☒ Direct Drive ❑				
Belt Drive Unit				
Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				
Gear Drive Unit				
Manufacturer ____ Model ____ Ratio ____				
Oil Level: Full ☒ Add Immediately ❑ Low, check again soon ❑				
Oil Condition: Good ❑ Contains Water ❑ Contains Metal ❑ Contains Sludge ❑				
Oil Type Used Oil is sent out for scheduled oil testing				
Seals		X		after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass
Unusual Noises? No ☒ Yes ❑ Action Required ____				
Drive Shaft				
Manufacturer ____ Material ____	X			carbon fiber shaft with flex plate couplings
Fan				
Fan Type: Propeller ☒ Blower ❑				
Manufacturer ____ Fixed Pitch ❑ Adjustable Pitch ☒				
Diameter ____ Number of Blades 10				
Blade Material fiberglass		X		starting to deteriorate see picture
Hub Material aluminum		x		
Hub Cover Material fiberglass		x		
Blade Assembly Hardware stainless		x		
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support				g/box support foundation beam OK
Oil Fill and Drain Line		x		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass		x		them vibrating
Vibration Limit Switch		x		did not test switch for trip
Motor				
Manufacturer ____				
Name Plate Data: HP ____ RPM ____ Phase ____ Hz ____ Volts ____				
F L Amps ____ Frame ____ S F ____ Special Info. ____				
Last Lubrication—Date ____				
Grease Used—Type ____				
Unusual Noises? No ❑ Yes ❑ Action Required ____				
Unusual Vibration? No ❑ Yes ❑ Action Required ____				
Unusual Heat Build-up? No ❑ Yes ❑ Action Required ____				
Make-up Valve ____				
Other Component ____				
Other Component ____				

Cell 7 p 1

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation
Tower Manufacturer
Process Served by Tower
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. 7 Number of Fan Cells 10 Tower Type: Crossflow ❑ Counterflow ❑
Date Tower was installed

Date Inspected May 13th through 25th
Inspected by Pat Mannion
Inspector
Signature Pat Mannion
Model No. Serial No.
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material ABS plastic		x		
Branch Pipe Material		x		
Nozzles–Orifice Diameter Size		x		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material		x		fiberglass
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Cell 7 p2

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention

Mechanical Equipment	1	2	3	Comments

Speed Reducer Type: Belt ☐ Gear ☒ Direct Drive ☐

Belt Drive Unit

Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				

Gear Drive Unit

Manufacturer Marley Model _____ Ratio label unreadable.

Oil Level: Full ☒ Add Immediately ☐ Low, check again soon ☐

Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐

Oil Type Used Oil is sent out for scheduled oil testing

Seals		X		after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass

Unusual Noises? No ☐ Yes ☐ Action Required _____

Drive Shaft

Manufacturer _____ Material _____

	X			carbon fiber shaft with flex plate couplings

Fan

Fan Type: Propeller ☐ Blower ☐

Manufacturer _____ Fixed Pitch ☐ Adjustable Pitch ☐

Diameter _____ Number of Blades _____

Blade Material fiberglass		X		starting to deteriorate
Hub Material aluminum		x		
Hub Cover Material fiberglass		x		
Blade Assembly Hardware stainless		x		
Tip Clearance _____" min _____" max				
Vibration Level _____				
Fan Cylinder Height _____				
Mechanical Equipment Support _____				g/box support foundation beam OK
Oil Fill and Drain Line _____		x		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass _____		x		them vibrating
Vibration Limit Switch _____		x		did not test switch for trip

Motor

Manufacturer _____

Name Plate Data: HP _____ RPM _____ Phase _____ Hz _____ Volts _____

F L Amps _____ Frame _____ S F _____ Special Info. _____

Last Lubrication—Date _____

Grease Used—Type _____

Unusual Noises? No ☐ Yes ☐ Action Required _____

Unusual Vibration? No ☐ Yes ☐ Action Required _____

Unusual Heat Build-up? No ☐ Yes ☐ Action Required _____

Make-up Valve _____				
Other Component _____				
Other Component _____				

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Cell 6 p1

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation
Tower Manufacturer
Process Served by Tower
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. 6 Number of Fan Cells 10 Tower Type: Crossflow ❑ Counterflow ❑
Date Tower was installed

Date Inspected May 13th through 25th
Inspected by Pat Mannion
Inspector
Signature
Model No. Serial No.
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material		X		
Branch Pipe Material		X		
Nozzles–Orifice Diameter Size		X		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material		X		fiberglass
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Cell 6 p 2

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention

Mechanical Equipment	1	2	3	Comments
Speed Reducer Type: Belt ❑ Gear ☒ Direct Drive ❑				
Belt Drive Unit				
Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				
Gear Drive Unit				
Manufacturer ____ Model ____ Ratio ____				
Oil Level: Full ☒ Add Immediately ❑ Low, check again soon ❑				
Oil Condition: Good ❑ Contains Water ❑ Contains Metal ❑ Contains Sludge ❑				
Oil Type Used Oil is sent out for scheduled oil testing				
Seals				after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass
Unusual Noises? No ❑ Yes ❑ Action Required ____				
Drive Shaft				
Manufacturer ____ Material ____	X			carbon fiber shaft with flex plate couplings
Fan				
Fan Type: Propeller ❑ Blower ❑				
Manufacturer ____ Fixed Pitch ❑ Adjustable Pitch ❑				
Diameter ____ Number of Blades ____				
Blade Material fiberglass		X		
Hub Material aluminum		x		
Hub Cover Material fiberglass		x		
Blade Assembly Hardware stainless		x		
Tip Clearance ____" min ____" max				OK
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support		✓		g/box support foundation beam OK bolts were loose
Oil Fill and Drain Line		x		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass		x		them vibrating
Vibration Limit Switch		x		did not test switch for trip
Motor				
Manufacturer ____				
Name Plate Data: HP ____ RPM ____ Phase ____ Hz ____ Volts ____				
F L Amps ____ Frame ____ S F ____ Special Info. ____				
Last Lubrication—Date ____				
Grease Used—Type ____				
Unusual Noises? No ❑ Yes ❑ Action Required ____				
Unusual Vibration? No ❑ Yes ❑ Action Required ____				
Unusual Heat Build-up? No ❑ Yes ❑ Action Required ____				
Make-up Valve ____				
Other Component ____				
Other Component ____				

Cooling Tower Inspection Checklist

SM-CKLIST

Cells p 1

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation
Tower Manufacturer
Process Served by Tower
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. Number of Fan Cells 10 Tower Type: Crossflow ❑ Counterflow ❑
Date Tower was installed

Date Inspected May 13th through 25th
Inspected by Pat Mannion
Inspector
Signature
Model No. Serial No.
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage. H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material		✓		
Branch Pipe Material		✓		
Nozzles–Orifice Diameter Size		X		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material		X		fiberglass
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention

Cell 5 P2

Mechanical Equipment	1	2	3	Comments

Speed Reducer Type: Belt ☐ Gear ☒ Direct Drive ☐

Belt Drive Unit

Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				

Gear Drive Unit

Manufacturer Marley Model 0567C68358 Ratio ~~[illegible]~~

Oil Level: Full ☒ Add Immediately ☐ Low, check again soon ☐

Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐

Oil Type Used Oil is sent out for scheduled oil testing

Seals				after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass

Unusual Noises? No ☐ Yes ☐ Action Required

Drive Shaft

Manufacturer Material

X			carbon fiber shaft with flex plate couplings

Fan

Fan Type: Propeller ☒ Blower ☐

Manufacturer Fixed Pitch ☐ Adjustable Pitch ☐

Diameter Number of Blades

Blade Material fiberglass	X		
Hub Material aluminum	x		
Hub Cover Material fiberglass	x		
Blade Assembly Hardware stainless	x		
Tip Clearance ____" min ____" max			
Vibration Level			
Fan Cylinder Height			
Mechanical Equipment Support	X		g/box support foundation beam OK
Oil Fill and Drain Line	x		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass	x		them vibrating
Vibration Limit Switch	x		did not test switch for trip

Motor

Manufacturer

Name Plate Data: HP RPM Phase Hz Volts

F L Amps Frame S F Special Info.

Last Lubrication—Date

Grease Used—Type

Unusual Noises? No ☐ Yes ☐ Action Required

Unusual Vibration? No ☐ Yes ☐ Action Required

Unusual Heat Build-up? No ☐ Yes ☐ Action Required

Make-up Valve				
Other Component				
Other Component				

Cell 4 p1

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location: Metcalf
Owner/Company: Calpine
Company Contact:
Signature:
Owner's Tower Designation:
Tower Manufacturer:
Process Served by Tower:
Design Conditions: GPM ____ HW ____ ° F CW ____ ° F WB ____ ° F
Cell No. ____ Number of Fan Cells: 10
Date Tower was installed:

Date Inspected: May 13th through 25th
Inspected by: Pat Mannion
Inspector:
Signature:
Model No. ____ Serial No. ____
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑
Tower Type: Crossflow ❑ Counterflow ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material		x		
Branch Pipe Material		x		
Nozzles–Orifice Diameter Size		x		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material				
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention Cell 4

Mechanical Equipment

1	2	3	Comments
			p2

Speed Reducer Type: Belt ☐ Gear ☒ Direct Drive ☐

Belt Drive Unit

Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				

Gear Drive Unit

Manufacturer Marley Model 4000 rnnnn 68358 Ratio label unreadable can only read first and last numbers

Oil Level: Full ☒ Add Immediately ☐ Low, check again soon ☐

Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐

Oil Type Used Oil is sent out for scheduled oil testing

Seals		✓	after inspection was complete, verified correct oil level
Backlash		X	in gear box to correct level on site glass and topped
Fan Shaft Endplay		X	up all gearboxes to FULL mark on site glass

Unusual Noises? No ☐ Yes ☐ Action Required

Drive Shaft

Manufacturer Material

X			carbon fiber shaft with flex plate couplings

Fan

Fan Type: Propeller ☒ Blower ☐

Manufacturer Fixed Pitch ☐ Adjustable Pitch ☐

Diameter Number of Blades

Blade Material fiberglass			
Hub Material aluminum		x	
Hub Cover Material fiberglass		x	
Blade Assembly Hardware stainless		x	tap hardware to hub some were loose
Tip Clearance ____" min ____" max			
Vibration Level			
Fan Cylinder Height			
Mechanical Equipment Support			g/box support foundation beam OK
Oil Fill and Drain Line		x	Secured all drain and breather lines in cell tower to stop them vibrating
Oil Level Sight Glass		x	
Vibration Limit Switch		x	did not test switch for trip

Motor

Manufacturer

Name Plate Data: HP RPM Phase Hz Volts

F L Amps Frame S F Special Info.

Last Lubrication—Date

Grease Used—Type

Unusual Noises? No ☐ Yes ☐ Action Required

Unusual Vibration? No ☐ Yes ☐ Action Required

Unusual Heat Build-up? No ☐ Yes ☐ Action Required

Make-up Valve				
Other Component				
Other Component				

Cell 3 p1

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation
Tower Manufacturer
Process Served by Tower
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. Number of Fan Cells 10
Date Tower was installed

Date Inspected May 13th through 25th
Inspected by Pat Mannion
Inspector
Signature
Model No. Serial No.
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑
Tower Type: Crossflow ❑ Counterflow ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material		x		fiberglass
Branch Pipe Material		x		
Nozzles–Orifice Diameter Size		x		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material fiberglass		x		
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention

Cell 3 P2

Mechanical Equipment	1	2	3	Comments

Speed Reducer Type: Belt ❑ Gear ☒ Direct Drive ❑

Belt Drive Unit

Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				

Gear Drive Unit

Manufacturer SPX Model 2738428 Ratio 15.84:1 serial # R4000 S74

Oil Level: Full ☒ Add Immediately ❑ Low, check again soon ❑

Oil Condition: Good ❑ Contains Water ❑ Contains Metal ❑ Contains Sludge ❑

No Leaks!

Oil Type Used Oil is sent out for scheduled oil testing				
Seals		X		after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass

Unusual Noises? No ❑ Yes ❑ Action Required

Drive Shaft

Manufacturer Material	X			carbon fiber shaft with flex plate couplings

Fan

Fan Type: Propeller ❑ Blower ❑

Manufacturer Fixed Pitch ❑ Adjustable Pitch ❑

Diameter Number of Blades

Blade Material fiberglass				
Hub Material aluminum		X		
Hub Cover Material fiberglass		X		
Blade Assembly Hardware stainless		X		
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support				g/box support foundation beam OK
Oil Fill and Drain Line		X		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass		X		them vibrating
Vibration Limit Switch		X		did not test switch for trip

Motor

Manufacturer

Name Plate Data: HP RPM Phase Hz Volts

F L Amps Frame S F Special Info.

Last Lubrication—Date

Grease Used—Type

Unusual Noises? No ❑ Yes ❑ Action Required

Unusual Vibration? No ❑ Yes ❑ Action Required

Unusual Heat Build-up? No ❑ Yes ❑ Action Required

Make-up Valve				
Other Component				
Other Component				

Cell2 p1

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation
Tower Manufacturer
Process Served by Tower
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. Number of Fan Cells 10
Date Tower was installed

Date Inspected May 13th through 25th
Inspected by Pat Mannion
Inspector
Signature
Model No. Serial No.
Operation: Continuous ❑ Intermittent ❑ Seasonal ❑
Tower Type: Crossflow ❑ Counterflow ❑

Condition: 1–Good 2–Keep an eye on it 3–Needs immediate attention

	1	2	3	Comments
Structure				
Casing Material	x			Concrete basin fiberglass siding and stairs
Structural Material	x			Fiberglass
Fan Deck Material	x			Fiberglass
Stairway ❑ Material	x			Fiberglass
Ladder ❑ Material	x			Fiberglass
Handrail ❑ Material	x			Fiberglass
Interior Walkway ❑ Material				no interior walkway
Cold Water Basin Material	x			Concrete
Silt, Debris Buildup	x			No excess silt or debris
Water Distribution System				
Open Basin System				
Distribution Basin Material		x		PVC
Inlet Pipe Material		x		PVC
Inlet Manifold Material		x		PVC
Flow Control Valves Size		x		PVC
Nozzles–Orifice Diameter Size		x		Replaced and or repaired many nozzles in all cells
Silt, Algae, Debris		x		Plant was down for prolonged Outage, H20 to be chemically treated when back in service
Spray Type System				
Header Pipe Material fiberglass		✓		
Branch Pipe Material		✓		
Nozzles–Orifice Diameter Size		✓		
Up spray ❑ Down spray ❑				
Heat Transfer System				
Fill–Type & Material		X		Fill is getting brittle, see attached pics of damage
Eliminators–Type & Material		✓		
Louvers–Type & Material			x	Air operated plumb abatement louvers do not work
Biological Fouling		x		somewhat normal build up on heat transfer coils

Use this space to list specific items needing attention:

Cell 2
p2

Condition: 1—Good 2—Keep an eye on it 3—Needs immediate attention

Mechanical Equipment	1	2	3	Comments
Speed Reducer Type: Belt ❑ Gear ☒ Direct Drive ❑				
Belt Drive Unit				
Belt Designation N/A				
Fan Sheave Designation N/A				
Motor Sheave Designation N/A				
Gear Drive Unit				
Manufacturer Marley overhauled by Amarillo Model M36 Ratio 15.84:1 Serial # M543				
Oil Level: Full ☒ Add Immediately ❑ Low, check again soon ❑				
Oil Condition: Good ❑ Contains Water ❑ Contains Metal ❑ Contains Sludge ❑				
Oil Type Used Oil is sent out for scheduled oil testing				
Seals minor leak				after inspection was complete, verified correct oil level
Backlash		X		in gear box to correct level on site glass and topped
Fan Shaft Endplay		X		up all gearboxes to FULL mark on site glass
Unusual Noises? No ❑ Yes ❑ Action Required				
Drive Shaft				
Manufacturer Material	X			carbon fiber shaft with flex plate couplings
Fan				
Fan Type: Propeller ❑ Blower ❑				
Manufacturer Fixed Pitch ❑ Adjustable Pitch ❑				
Diameter Number of Blades				
Blade Material fiberglass				
Hub Material aluminum		x		
Hub Cover Material fiberglass		x		
Blade Assembly Hardware stainless		x		
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support				g/box support foundation beam OK
Oil Fill and Drain Line		x		Secured all drain and breather lines in cell tower to stop
Oil Level Sight Glass		x		them vibrating
Vibration Limit Switch		x		did not test switch for trip
Motor				
Manufacturer				
Name Plate Data: HP RPM Phase Hz Volts				
F L Amps Frame S F Special Info.				
Last Lubrication—Date				
Grease Used—Type				
Unusual Noises? No ❑ Yes ❑ Action Required				
Unusual Vibration? No ❑ Yes ❑ Action Required				
Unusual Heat Build-up? No ❑ Yes ❑ Action Required				
Make-up Valve				
Other Component				
Other Component				

Appendix 9

Metcalf Energy Center

Annual Compliance Report 2024

Water Usage Summary

Recycled Water	
month	consumption (gal)
January	70,177,360
February	61,704,016
March	42,917,248
April	37,400
May	506,396
June	38,367,912
July	79,867,700
August	70,572,304
September	42,647,220
October	58,968,580
November	37,534,640
December	51,769,828
Total	**555,070,604**

Potable Water	
month	consumption (gal)
January	9,765,477
February	9,277,332
March	15,715,480
April	583,537
May	967,388
June	11,048,805
July	9,030,507
August	8,881,909
September	8,520,393
October	9,916,872
November	6,353,699
December	7,468,234
Total	**97,529,633**

Metcalf Energy Center

Annual Compliance Report 2024

Water Usage Summary

Condition of Certification S&W-1

Recycled Water	
Cooling Tower for Steam Cycle Cooling	555,070,604
Total Gallons 2024	**555,070,604**

Potable Water	
Condenser Make-Up	35,356,511
Steam Attemperation	33,440,064
Inlet Air Cooling	9,070,408
Domestic	752,118
RO Reject	14,969,798
Filter Backwash	2,993,960
CT Wash Water	482,475
Plant Wash Down	689,249
Total Gallons 2024	**97,529,633**

Appendix 10

METCALF ENERGY CENTER, LLC

TRANS-3 HAZARDOUS MATERIAL DELIVERIES

JANUARY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	RL9007	1/25/2024	539	LBS
CHEMTREAT	BL1794	1/25/2024	497	LBS
CHEMTREAT	BL8401	1/25/2024	957	LBS
CHEMTREAT	CL4500	1/19/2024	2,228	LBS
CHEMTREAT	BL8401	1/29/2024	916	LBS
CHEMTREAT	BL1794	1/29/2024	477	LBS
CHEMTREAT	RL9007	1/29/2024	519	LBS
CHEMTREAT	BL8401	1/29/2024	458	LBS
CHEMTREAT	CL243	1/29/2024	4,400	LBS
HILL BROTHERS	AQUEOUS AMMONIA	1/24/2024	6,701	LBS
HILL BROTHERS	AQUEOUS AMMONIA	1/22/2024	5,901	GAL
HILL BROTHERS	AQUEOUS AMMONIA	1/17/2024	6,704	GAL
HILL BROTHERS	AQUEOUS AMMONIA	1/30/2024	6,000	GAL
HILL BROTHERS	AQUEOUS AMMONIA	1/12/2024	6,009	GAL
HILL BROTHERS	AQUEOUS AMMONIA	1/9/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	1/4/2024	6,700	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	1/17/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	1/21/2024	45,025	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	1/4/2024	44,991	LBS

FEBRUARY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	RL1245	2/19/2024	511	LBS
CHEMTREAT	BL152	2/13/2024	1,990	LBS
CHEMTREAT	CL4500	2/8/2024	10,130	LBS
CHEMTREAT	RL1245	2/8/2024	531	LBS
CHEMTREAT	BL152	2/13/2024	1,592	LBS
CHEMTREAT	BL1794	2/13/2024	477	LBS
CHEMTREAT	BL8401	2/13/2024	458	LBS
HILL BROTHERS	AQUEOUS AMMONIA	2/7/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	2/9/2024	3,902	GAL
HILL BROTHERS	AQUEOUS AMMONIA	2/23/2024	6,703	GAL
HILL BROTHERS	AQUEOUS AMMONIA	2/16/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	2/14/2024	6,702	GAL
HILL BROTHERS	AQUEOUS AMMONIA	2/28/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	2/2/2024	6,001	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	2/2/2024	3,268	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	2/13/2024	3,268	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	2/23/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	2/17/2024	45,003	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	2/6/2024	45,042	LBS

MARCH				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	BL8401	3/7/2024	478	LBS
CHEMTREAT	RL9007	3/21/2024	539	LBS
CHEMTREAT	RL1245	3/21/2024	531	LBS
CHEMTREAT	BL152	3/21/2024	418	LBS
CHEMTREAT	BL1794	3/21/2024	497	LBS
HILL BROTHERS	AQUEOUS AMMONIA	3/5/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	3/28/2024	2,302	GAL
HILL BROTHERS	AQUEOUS AMMONIA	3/25/2024	3,502	GAL
HILL BROTHERS	AQUEOUS AMMONIA	3/18/2024	6,704	GAL
HILL BROTHERS	AQUEOUS AMMONIA	3/8/2024	5,905	GAL
HILL BROTHERS	AQUEOUS AMMONIA	3/18/2024	3,705	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	3/13/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	3/8/2024	45,057	LBS

APRIL				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM

NO DELIVERIES

MAY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	RL1245	5/16/2024	1,063	LBS
CHEMTREAT	BL152	5/16/2024	1,672	LBS
CHEMTREAT	BL8401	5/30/2024	957	LBS
CHEMTREAT	CL243	5/30/2024	2,326	LBS
HILL BROTHERS	AQUEOUS AMMONIA	5/25/2024	3,705	GAL

JUNE				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
HILL BROTHERS	AQUEOUS AMMONIA	6/27/2024	6,702	GAL
HILL BROTHERS	AQUEOUS AMMONIA	6/21/2024	6,703	GAL
HILL BROTHERS	AQUEOUS AMMONIA	6/13/2024	5,201	GAL
HILL BROTHERS	AQUEOUS AMMONIA	6/4/2024	5,802	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	6/6/2024	3,137	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	6/5/2024	45,095	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	6/28/2024	45,035	LBS

JULY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	CL4500	7/5/2024	12,663	LBS
CHEMTREAT	BL152	7/10/2025	1,672	LBS
HILL BROTHERS	AQUEOUS AMMONIA	7/24/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	7/30/2024	6,001	GAL
HILL BROTHERS	AQUEOUS AMMONIA	7/12/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	7/19/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	7/2/2024	4,001	GAL
HILL BROTHERS	AQUEOUS AMMONIA	7/5/2024	6,704	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	7/31/2024	3,194	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	7/1/2024	3,268	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	7/15/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	7/10/2024	44,566	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	7/22/2024	44,376	LBS

AUGUST				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	BL1794	8/22/2024	995	LBS
HILL BROTHERS	AQUEOUS AMMONIA	8/2/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	8/30/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	8/16/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	8/22/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	8/9/2024	6,701	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	8/14/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	8/2/2024	44,526	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	8/12/2024	44,802	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	8/26/2024	44,984	LBS

SEPTEMBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	CL243	9/19/2024	6,977	LBS
CHEMTREAT	BL152	9/5/2024	1,592	LBS
HILL BROTHERS	AQUEOUS AMMONIA	9/27/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	9/10/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	9/5/2024	6,500	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	9/4/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	9/10/2024	47,859	LBS

OCTOBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	RL9007	10/3/2024	1,618	LBS
CHEMTREAT	RL9007	10/3/2024	1,618	LBS
HILL BROTHERS	AQUEOUS AMMONIA	10/31/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	10/11/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	10/8/2024	6,702	GAL
HILL BROTHERS	AQUEOUS AMMONIA	10/2/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	10/24/2024	6,702	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	10/3/2024	3,268	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	10/22/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	10/14/2024	45,021	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	10/3/2024	45,012	LBS

NOVEMBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	BL1794	11/7/2024	1,908	LBS
CHEMTREAT	BL152	11/4/2024	1,672	LBS
HILL BROTHERS	AQUEOUS AMMONIA	11/6/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	11/11/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	11/15/2024	6,705	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	11/14/2024	3,268	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	11/1/2024	45,083	LBS

DECEMBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
CHEMTREAT	BL1794	12/6/2024	1,908	LBS
CHEMTREAT	BL152	12/6/2024	1,674	LBS
HILL BROTHERS	AQUEOUS AMMONIA	12/6/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	12/18/2024	6,700	GAL
HILL BROTHERS	AQUEOUS AMMONIA	12/3/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	12/13/2024	6,701	GAL
HILL BROTHERS	AQUEOUS AMMONIA	12/23/2024	5,001	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	12/12/2024	3,268	GAL
NORTHSTAR CHEMICAL	SULFURIC ACID	12/30/2024	3,500	GAL
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	12/18/2024	44,951	LBS
UNIVAR SOLUTIONS	SODIUM HYPOCHLORITE	12/4/2024	46,173	LBS

Appendix 11

CALPINE

Work Order Details

32852802: MF-1Y ARCHITECTURAL TREATMENT INSPECTION FOR THE CEC

Asset: 10348123 METCALF ENERGY CENTER SYSTEMS POWER BLOCK 1
Location: MF-01 MF POWER BLOCK 1
Job Plan: 27731 MF-1Y ARCHITECTURAL TREATMENT INSPECTION FOR THE CEC

Sched Start:	Aug 5, 2024 10:02 AM
Sched Finish:	
Target Start:	Aug 10, 2024 12:00 AM
Target Finish:	Aug 10, 2024 2:00 AM
Actual Start:	Aug 7, 2024 4:33 PM
Actual Finish:	Aug 7, 2024 4:34 PM
Report Date:	Jul 15, 2024 5:30 AM
Reported By:	MAXADMIN
On Behalf Of:	

Site:	MF
Priority:	3
Work Type:	PM
Status:	COMP
Parent:	
Failure Class:	BG
Problem Code:	
Vendor:	
GL Account:	50300~623000~2070100~2901~S10030~OM00000

Supervisor:	OPS MGR
Lead:	MF-OPS
Work Group:	
Owner:	
Owner Group:	
Service:	
Service Group:	
Classification:	
PM:	107859

Task IDs

Task ID	Description	Status	Measurement Point	Value	Date	Observations
10	PRINT OUT INSPECTION CHECKLIST AND DEFINITIONS	COMP		0		
20	PERFORM INSPECTION OF SITE AREAS LISTED IN THE CHECKLIST	COMP		0		
30	THE CEC IS ONLY CONCERNED WITH PORTIONS OF THE PLANT VISIBLE TO THE PUBLIC.	COMP		0		
40		COMP		0		
50	GIVE COMPLETED CHECKLIST TO THE OPERATIONS MANAGER	COMP		0		
60	OPS MANAGER TO INFORM EHS SPECIALIST THAT ANNUAL INSPECTION IS DONE AND CAN BE INCLUDED WITH THE ANNUAL CEC REPORT.	COMP		0		
70	IF NECESSARY CREATE ANY CORRECTIVE WORK ORDERS.	COMP		0		
80	UPDATE MAXIMO AND FILE THE INSPECTION CHECKLIST.	COMP		0		

Log

Date	Class	Created By	Subject	Description	Long Description
8/7/24	WORKORDER	SH13667		Performed architectural inspection	Architectural condition consistent with age of plant.<!-- RICH TEXT -->

California Energy Commission's Condition of Certification

VISUAL RESOURCES-1

METCALF ENERGY CENTER, LLC
STATUS REPORT REGARDING THE ARCHITECTURAL DESIGN TREATMENT MAINTENANCE

California Energy Commission Condition of Certification Visual Resources – 1 requires the Metcalf Energy Center to submit in its Annual Compliance Report a status report regarding the treatment maintenance of the project structures. The project structures, which are visible to the public, have been painted with CPM-approved and City of San Jose-approved non-reflective colors with a low-gloss finish.

The Metcalf Energy Center Maintenance Department has procedures to address all aspects for maintaining the power plant efficiently. Issues such as coating or painting are captured by staff's surveillance and utilization of checklists. Once an item is deemed in need of maintenance, Plant Management schedule and prioritizes the maintenance through a work order process. Outside contractors are also utilized at Metcalf Energy Center. Plant Management inspects and signs off on the work once it is fully complete.

A copy of the checklists used to survey the architectural screen as well as the other painted surfaces visible from offsite is attached to this summary.

ARCHITECTURAL DESIGN TREATMENT INSPECTION METCALF ENERGY CENTER

UNIT: Steam Turbine

	TURBINE / GENERATOR ENCLOSURE	GENERATOR / CONDENSER SOUND WALL
Chalking	2	2
Erosion	1	1
Discoloration	3	~~3~~ 2
Fading	3	3
Loss of Gloss	3	3
Mildew Defacement	1	1
Moisture Blushing	1	1
Orange Peel	1	1
Wrinkling	1	1
Chemical Attack	1	1
High Temperature Attack	~~3~~ 2	1
Mottling	1	1
Crackling	1	1
Saponification	1	1
Disbanding (peel/blister)	1	1
Crawling (fish eye)	1	1

Comments:

Rating System: Mark a number from 1 through 5 in the appropriate box to indicate the condition of the coating:
1 = No Problems; 2 = Minor Problems; 3 =Average Problems; 4 = Increased Problems; 5 = Major Problems.

ARCHITECTURAL DESIGN TREATMENT INSPECTION METCALF ENERGY CENTER

UNIT: Cooling Tower

	SUPERSTRUCTURE
Chalking	3
Erosion/Corrosion	2
Discoloration	3
Fading	3
Loss of Gloss	3
Mildew Defacement	1
Moisture Blushing	3
Orange Peel	1
Wrinkling	1
Chemical Attack	1
High Temperature Attack	1
Mottling	1
Crackling	1
Saponification	1
Disbanding {peel/blister)	1
Crawling (fish eye)	1

Comments:

Rating System: Mark a number from 1 through 5 in the appropriate box to indicate the condition of the coating:
1 = No Problems; 2 = Minor Problems; 3 =Average Problems; 4 = Increased Problems; 5 = Major Problems.

ARCHITECTURAL DESIGN TREATMENT INSPECTION METCALF ENERGY CENTER

UNIT: HRSG & Gas Turbine 1

	INLET AIR FILTER HOUSE	TURBINE/ GENERATOR	STACK	SCREENING
Chalking	3	2	3	3
Erosion/Corrosion	1	2	1	1
Discoloration	2	2	2	2
FadinQ	3	3	3	3
Loss of Gloss	3	3	3	3
Mildew Defacement	1	1	1	1
Moisture Blushing	1	1	1	1
Orange Peel	1	1	1	1
Wrinkling	1	1	1	1
Chemical Attack	1	1	1	1
High Temperature Attack	1	2	1	1
Mottling	1	1	1	1
Crackling	1	1	1	1
Saponification	1	1	1	1
Disbanding (peel/blister)	1	1	1	1
Crawling (fish eye)	1	1	1	1

Comments:

Rating System: Mark a number from 1 through 5 in the appropriate box to indicate the condition of the coating:
1 = No Problems; 2 = Minor Problems; 3 =Average Problems; 4 = Increased Problems; 5 = Major Problems.

ARCHITECTURAL DESIGN TREATMENT INSPECTION METCALF ENERGY CENTER

UNIT: HRSG & Gas Turbine 2

	INLET AIR FILTER HOUSE	TURBINE/ GENERATOR	STACK	SCREENING
Chalking	2	2	3	3
Erosion/Corrosion	1	2	1	1
Discoloration	2	2	2	2
Fading	3	3	3	3
Loss of Gloss	3	3	3	3
Mildew Defacement	1	1	1	1
Moisture Blushing	1	1	1	1
Orange Peel	1	1	1	1
Wrinkling	1	1	1	1
Chemical Attack	1	1	1	1
High Temperature Attack	1	3	1	1
Mottling	1	1	1	1
Crackling	1	1	1	1
Saponification	1	1	1	1
Disbanding (peel/blister)	1	1	1	1
Crawling (fish eye)	1	1	1	1

Comments:

Rating System: Mark a number from 1 through 5 in the appropriate box to indicate the condition of the coating:
1 = No Problems; 2 = Minor Problems; 3 =Average Problems; 4 = Increased Problems; 5 = Major Problems.

ARCHITECTURAL DESIGN TREATMENT INSPECTION METCALF ENERGY CENTER

UNIT: Water Tanks

	SERVICE/FIRE WATER	DEMINERALIZED WATER
Chalking	3	3
Erosion/Corrosion	1	1
Discoloration	2	2
Fading	3	3
Loss of Gloss	3	3
Mildew Defacement	1	1
Moisture Blushing	1	1
Orange Peel	1	1
Wrinkling	1	1
Chemical Attack	1	1
High Temperature Attack	1	1
Mottling	1	1
Crackling	2	2
Saponification	1	1
Disbanding (peel/blister)	1	1
Crawling (fish eye)	1	1

Comments:

Rating System: Mark a number from 1 through 5 in the appropriate box to indicate the condition of the coating:
1 = No Problems; 2 = Minor Problems; 3 =Average Problems; 4 = Increased Problems; 5 = Major Problems.

ARCHITECTURAL DESIGN TREATMENT INSPECTION METCALF ENERGY CENTER

UNIT: Buildings

	ADMINISTRATION	WAREHOUSE
Chalking	3	3
Erosion/Corrosion	2	2
Discoloration	3	3
Fading	3	3
Loss of Gloss	3	3
Mildew Defacement	1	1
Moisture Blushing	1	1
Orange Peel	1	1
Wrinkling	1	1
Chemical Attack	1	1
High Temperature Attack	1	1
Mottling	1	1
Crackling	1	1
Saponification	1	1
Disbanding (peel/blister)	1	1
Crawling (fish eye)	1	1

Comments:

Rating System: Mark a number from 1 through 5 in the appropriate box to indicate the condition of the coating:
1 = No Problems; 2 = Minor Problems; 3 =Average Problems; 4 = Increased Problems; 5 = Major Problems.

Appendix 12

Metcalf Energy Center Plume Log - Year to Date

Cooling Tower Plumes

Date	Start Time	End time	Total Time	Event	Relative Humidity	Temperature	Supplemental Firing (On/Off)	Plume Abatement In Service (Louvers Open)
No Plume Events in January 2024								
No Plume Events in February 2024								
No Plume Events in March 2024								
No Plume Events in April 2024								
No Plume Events in May 2024								
No Plume Events in June 2024								
No Plume Events in July 2024								
No Plume Events in August 2024								
No Plume Events in September 2024								
No Plume Events in October 2024								
November 15, 2024	**7:55**	**8:55**	**1 hr.**	**Plume**	**86%**	**45**	**Off**	**Yes**
December 3, 2024	**7:05**	**7:35**	**30 mins**	**Plume**	**85%**	**41**	**On**	**Yes**
December 4, 2024	**8:03**	**8:28**	**25 mins**	**Plume**	**89%**	**45**	**Off**	**Yes**
December 5, 2024	**7:07**	**7:37**	**30 mins**	**Plume**	**85%**	**45**	**On**	**Yes**
December 6, 2024	**7:07**	**7:38**	**31 mins**	**Plume**	**89%**	**42**	**On**	**Yes**
Total Cooling Tower Plume Hours:			**2:56**					

Remedial Actions To Be Taken

1. The Operator will verify that the plume abatement was in service.
2. The Operator will verify that the louvers were completely opened.
3. Curtail supplementary firing in the HRSG.

Stack Plumes

Date	Start Time	End time	Total Time	Event	Relative Humidity	Temperature	Supplemental Firing (On/Off)	Steam Injection (On/Off)	Economizer By-Pass Valve Position
No Plume Events in January 2024									
No Plume Events in February 2024									
No Plume Events in March 2024									
No Plume Events in April 2024									
No Plume Events in May 2024									
No Plume Events in June 2024									
No Plume Events in July 2024									
No Plume Events in August 2024									
No Plume Events in September 2024									
No Plume Events in October 2024									
No Plume Events in November 2024									
No Plume Events in December 2024									
Total Stack Plume Hours:			**0:00**						

Remedial Actions Taken

1. The Operator will operate the economizer bypass valve.
2. Curtail steam injection to the combustion turbine (called PAG steam).
3. Curtail supplementary firing in the HRSG.

Total Combined Plume Hours: **2:56**

Appendix 13

METCALF ENERGY CENTER

2024 ANNUAL COMPLIANCE REPORT

WASTE-3

In accordance with **Waste-3**, the Metcalf Energy Facility is required to document actual waste management methods used during the year compared to planned management methods. The facility is currently using the planned waste management methods for all the waste streams generated within the facility, as listed in the table below.

Waste Stream	Type	Planned	Actual
Non-hazardous Solid Waste	Recyclables	Recycle (Off-site)	Recycle (Off-site)
	Non-Recyclables	Landfill	Landfill
Non-hazardous Liquid Waste	Sanitary Waste	Sewage Treatment Plant	Sewage Treatment Plant
	Process Wastewater	Sewage Treatment Plant	Sewage Treatment Plant
Hazardous Liquid Waste	Used Oil	Recycle (Off-site)	Recycle (Off-site)
	Oily Water	Off-site disposal company	Off-site disposal company
	Aqueous Parts Washer	Off-site disposal company	Off-site disposal company
	Flammable Liquid	Off-site disposal company	Off-site disposal company
Hazardous Solid Waste	Used Oil Filters	Recycle (Off-site)	Recycle (Off-site)
	Oily Rags	Off-site disposal company	Off-site disposal company
	Debris from HRSG Cleaning	Off-site disposal company	Off-site disposal company
	Universal Waste	Recycle (Off-site)	Recycle (Off-site)

Appendix 14

Metcalf Energy Center, LLC

1 Blanchard Road
Coyote, CA 95013

April 9, 2024

Director, Enforcement and Compliance Division
Bay Area Air Quality Management District, Suite 600
375 Beale Street
San Francisco, CA 94105-2066
Attn: Jeffrey Gove
compliance@baaqmd.gov

RE: Metcalf Energy Center, LLC., Permit No. B2183
Major Facility Review Permit (Title V Permit)
30-Day Title V Non-Compliance Report
RCA ID: 200236

Dear Mr. Gove,

In accordance with the Major Facility Review Permit ("Title V Permit") for Metcalf Energy Center, LLC (the "Facility"), this letter is intended to satisfy the 30-day follow-up reporting requirement as required by Section I.F. of the Title V Permit, which requires the reporting of all non-compliance instances of the Title V Permit in writing within 30 days of discovery of such non-compliance.

The RCA was submitted on March 13, 2024, and the Title V 10-day initial notification was submitted to the District on March 14, 2024.

On March 11, 2024, the facility experienced an indicated excess of the following NO_X emission limits of the Title V permit: 19.2 pounds per hour (Condition 20.a), 0.00904 lbs./MMBtu (Condition 20.a), and 2.5 ppm 1-hour average, corrected to 15% O_2 (Condition 20.b). All evidence indicates that this event was caused by a loose sample tube connected to the O_2 analyzer. The details of the troubleshooting and event are described in the event description section below. The Facility believes that these values do not accurately represent actual stack emissions and that no excess emissions occurred during this event.

Event Description

On March 11, 2024, the Facility experienced issues with the Combustion Turbine 1 (CT-1) O_2 analyzer after it failed a calibration check out of control (OOC). Subsequent to successfully passing a 2nd calibration check, the analyzer recorded 11 minutes of O_2 concentration data that were not representative of combustion gas as shown in Attachment 1. The high O_2 data resulted in high NO_X corrected values that led to the indicated excess emissions.

After recording the high O_2 data the analyzer was put into maintenance for troubleshooting. During troubleshooting, after the analyzer was challenged with calibration gas, it began reporting data typical of combustion gas. The system was returned to service and NOx data were within normal range.

On March 12, 2024, while the unit was down, Facility staff continued to troubleshoot the O_2 analyzer since the cause of the failed calibration had not been determined. During this process, the analyzer OEM (Thermo) was contacted for guidance, and they advised checking the analyzer for loose connections. Upon inspection, staff found a loose connection on the O_2 sensor. After the loose sample tube was tightened, the O_2 values became stable, and a calibration check was successfully completed. No further issues have been noted.

The following is a chronology of the event:

March 11, 2024

- 13:17-13:41: O_2 analyzer fails calibration check OOC.
- 13:44-13:55: O_2 analyzer passes calibration check.
- 13:56-14:06: O_2 analyzer records data (> 24%) that is non-representative of combustion gas
- 14:07: O_2 analyzer placed into "Maintenance Mode" to troubleshoot cause of the elevated O_2 readings. During troubleshooting, the analyzer began reading O_2 data within normal range after analyzer was challenged with calibration gas.
- 15:12: O_2 analyzer returned to service.

March 12, 2024

- 06:30-14:10: staff continued troubleshooting O_2 analyzer. Contacted Thermo. Tightened sample tube on the O_2 sensor.
- 14:11: CEMS was placed back into "Service"
- 14:12-14:27: Initiated calibration check on the analyzer.

Corrective Actions

The Facility determined that a loose sample tube connected to the O_2 analyzer was the cause of the calibration failure and non-representative O_2 readings. The connection was tightened.

Compliance Status

The Facility was in full compliance with its air permit throughout the duration of this event. The 11 minutes of non-representative data will be invalidated and the database rebuilt upon District approval.

Investigation and Cause Determination

The O_2 concentration in combustion exhaust must be below the ambient O_2 concentration of 21% since oxygen is consumed to support combustion. The standard default O_2 concentration for combustion turbine exhaust is 15%, and the typical Facility exhaust gas O_2 concentration during normal operations is 14%. The O_2 data recorded during the event that led to the indicated NO_X excess emissions was greater than 24%. The Facility has determined that the loose sample tube connected to the analyzer affected the ability of the O_2 analyzer to accurately measure the O_2 concentration data.

Based on the investigation, it has been determined that the analyzer recorded O_2 data that was not representative of actual oxygen concentrations and the Facility did not emit excess emissions.

Preventative Actions

The onsite technicians perform quarterly CEMS analyzer preventive maintenance. The maintenance procedures have been updated to include a step to check all analyzer sample connections for loose fittings and make necessary adjustments. Furthermore, the Facility will utilize high O_2 alarms to alert operations when the analyzers are recording high indicated O_2 concentrations in the future.

Certification

As the Responsible Official, I certify that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

If you have any questions or require additional information, please contact Rosemary Silva, EHS Specialist, at 408-361-4954.

Sincerely,

DocuSigned by:
kevin karwick
C4DF598531F14B6...

Kevin Karwick
General Manager
Metcalf Energy Center, LLC

Cc:	Erin Phillips	BAAQMD	via email attachment
	Anwar Ali	CEC AQ-34	via email attachment
	EHSWalnutCreek@calpine.com		via email attachment
	CICS Records INC103103		

Attachments

Attachment 1: Hourly Emissions Report_031124

Attachment 1

Metcalf

San Jose, CA

Turbine-1 Hourly Emissions Report

March 11, 2024 - Hour 14

1-Hr Emission Limits		3-Hr Rolling Emission Limits		4-Hr Rolling (Subpart GG) Emission Limit
NOx ppm @15% O2 - 2.5 *	NOx lb/hr - 19.2 *	CO ppm @15% O2 - 4 *	CO lb/hr - 18.7 *	NOx ppm @15% O2 - 100
NOx lb/mmBtu - 0.00904 *		CO lb/mmBtu - 0.0088 *	NH3 Slip ppm @15% O2 - 5 *	

Minute	O2%	NOx ppm	NOx ppm @15% O2	NOx lb/mmBtu	NOx lb/hr	CO ppm	CO ppm @15% O2	CO lb/mmBtu	CO lb/hr	NH3 ppm Slip @15% O2	SCR NOx ppm	Process Status
14:00	24.67	2.38	7.39	0.02717	55.48	0.08	0.25	0.0006	1.23	0.00	21.4	Normal
14:01	24.66	2.50	7.76	0.02854	58.08	0.23	0.71	0.0016	3.26	0.00	21.2	Normal
14:02	24.64	2.51	7.79	0.02865	57.91	0.17	0.53	0.0012	2.43	0.00	20.2	Normal
14:03	24.64	2.60	8.07	0.02968	60.28	0.23	0.71	0.0016	3.25	0.00	20.1	Normal
14:04	24.65	2.92	9.07	0.03333	68.14	0.17	0.53	0.0012	2.46	0.00	20.5	Normal
14:05	24.67	3.36	10.43	0.03835	78.86	0.10	0.31	0.0007	1.44	0.00	21.2	Normal
14:06	24.70	3.86	11.99	0.04406	90.60	0.10	0.31	0.0007	1.44	0.00	21.8	Normal
14:07	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:08	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:09	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:10	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:11	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:12	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:13	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:14	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:15	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:16	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:17	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:18	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:19	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:20	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:21	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:22	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:23	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:24	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:25	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:26	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:27	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:28	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:29	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:30	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal

Minute	O2%	NOx ppm	NOx ppm @15% O2	NOx lb/mmBtu	NOx lb/hr	CO ppm	CO ppm @15% O2	CO lb/mmBtu	CO lb/hr	NH3 ppm Slip @15% O2	SCR NOx ppm	Process Status
14:31	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:32	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:33	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:34	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:35	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:36	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:37	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:38	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:39	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:40	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:41	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:42	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:43	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:44	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:45	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:46	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:47	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:48	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:49	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:50	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:51	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:52	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:53	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:54	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:55	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:56	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:57	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:58	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
14:59	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	**Maint**	Normal
Average	24.7	2.9	**8.9 ***	**0.03310 ***		0.2	0.6	0.0014		0.0	20.9	Normal
Total					**66.06 ***				2.79			
4-Hr Rlng			7.2									
3-Hr Rlng							0.3 *	0.0006 *	1.14 *	1.17 *		

** - Excluding Startup and Shutdown*

Metcalf Energy Center, LLC.

1 Blanchard Road
Coyote, CA 95013

May 9, 2024

Director, Enforcement and Compliance Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
compliance@baaqmd.gov

RE: **Metcalf Energy Center, Permit No. B2183**
Major Facility Review Permit (Title V Permit)
10-Day Title V Non-Compliance Report
30-Day Title V Follow-Up Report

To Whom It May Concern:

In accordance with the Major Facility Review Permit (Title V Permit) for the Metcalf Energy Center (the "Facility"), this letter is to advise you of an instance of potential non-compliance as required by Section I. F. of the Title V Permit, which requires the reporting of all non-compliance instances of the Title V Permit in writing within 10 days. It is also intended to satisfy the 30-day follow-up reporting requirement as required by Section I.F. of the Title V Permit.

On May 1, 2024, during a routine review of the cooling tower TDS data, it was discovered that the samples collected during April 25th to April 30th, 2024, showed negative values, due to a lack of water in the sampling system. During that period, the facility, including the cooling tower, did not operate and remains in a maintenance outage.

We are providing this notification as courtesy to explain readings during this period.

If you have any questions or require additional information, please contact Rosemary Silva, EHS Project Manager III, at 408-361-4954 or silvaro@calpine.com.

Sincerely,

DocuSigned by:
Kevin Karwick
C4DF598531F14B6...

Kevin Karwick
Designated Representative and General Manager
Metcalf Energy Center, LLC

CC:	Region IX, EPA	via email attachment
	Anwar Ali, CEC AQ-34	via email attachment
	EHSWalnutCreek@calpine.com	via email attachment
	CICS INC103164	