DOCKETED	
Docket Number:	99-AFC-03C
Project Title:	METCALF Energy Center Compliance
TN #:	242973
Document Title:	ANNUAL COMPLIANCE REPORT- 2020
Description:	N/A
Filer:	Anwar Ali
Organization:	CalPine PowerAmerica-CA, LLC
Submitter Role:	Commission Staff
Submission Date:	5/9/2022 10:31:43 AM
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1 Blanchard Road
Coyote, CA 95013

August 5, 2021

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
COM-7 - Annual Compliance Report for 2020

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 2020 in Condition of Certification COM-7.

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

Appendix 4

Appendix 5

Appendix 6

Appendix 7

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Appendix 10

Appendix 11

Appendix 12

METCALF ENERGY CENTER
REVISION LOG
On-Site Contingency Plan for Unplanned Temporary & Permanent Facility Closure

Date	Description of Revision	Revision No.	Revised By:
6/01/2005	Planned Developed	1	Dana Petrin
8/08/2008	Plan reviewed and contact 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 Waste Water 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 Waste Water 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

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1.0 PURPOSE

This plan was developed in order to provide an on-site contingency plan in order 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

The Operations Manger is responsible for overseeing the program, and notification to the CEC.

4.0 GENERAL

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, fax, or e-mail (see table 1). The Operations Manager shall keep the CPM informed of the circumstances and expected duration of the closure.

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 other period of time mutually agreed to by the owner and the CPM).

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 e-mail: anwar.ali@energy.ca.gov
San Jose Fire Department	
Bryan Barrows Hazmat Inspector San Jose Fire Department 200 E. Santa Clara St., 2nd Fl. Tower San Jose, CA 95113	Tel: (408) 535-7644 e-mail: bryan.barows@sanjoseca.gov
Ed Tolentino Fire Protection Engineer 4 North Second Street, Suite 1000 San Jose, CA 95113-1305	Tel: (408) 277-8755 Fax: (408) 277-2745 e-mail: edward.tolentino@ci.sj.ca.us
Santa Clara Environmental Health Department	
Robin Ward Sr. Hazardous Materials Specialist 1555 Berger Dr. San Jose, CA 95112	Tel: (408) 918-1945 e-mail: 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
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 e-mail: 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 e-mail: kimberly.devillier@sanjoseca.gov
Bay Area Air Quality Management District	
Jack Broadbent Air Pollution Control Officer BAAQMD 939 Ellis Street San Francisco, Ca 94109	Tel: (415) 749-5052 e-mail: jbroadbent@baaqmd.gov
Pacific Gas and Electric	
Kris Matulich Customer Service Representative PG&E 2230 Lake Washington Blvd West Sacramento, CA 95691	Tel: (916) 386-5159 Fax: (916) 687-1094 e-mail: KEMh@pge.com
Cal-ISO	
Felix Gonzalez CAL-ISO Outage Coordination P.O. Box 639014 Folsom, CA 95763-9014	Tel: (916) 351-2241 e-mail:
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 e-mail: reo9@epa.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 Action Plan, EAP. The purpose of the EAP 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 EAP 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 EAP for proper response.

4.3 SITE SECURITY AND EMERGENCY RESPONSE

The plant perimeter is surrounded by 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. 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. 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 in the event that 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 on a daily basis to assess container condition. This process can be done remotely via site cameras if necessary.

FIGURE 1
HAZARDOUS MATERIALS IN REPORTABLE QUANTITIES LOCATED AT METCALF

MATERIAL NAME	MAX DAILY	UNIT OF MEASURE
*MISCELLANEOUS FLAMMABLE LIQUID, CLASS IB	110	GAL
TURBINE OIL 68	7995	GAL
ACETYLENE	1000	CUFT
AQUEOUS AMMONIA	27527	LBS
CALIBRATION GAS (5% CARBON DIOXIDE, 12% OXYGEN, 83% NITROGEN)	435	CUFT
CALIBRATION GAS (NITRIC OXIDE/NITROGEN)	3335	CUFT
CHEMTREAT BL-124	300	GAL
CHEMTREAT BL-153	455	GAL
CHEMTREAT BL-1795	510	GAL
CHEMTREAT CL240	1500	GAL
CHEMTREAT CL4500	1500	GAL
CHEMTREAT P873L	220	GAL
CHEMTREAT RL9007	400	GAL
CONNTECT 6000	55	GAL
COSMOLUBRIC B-230	220	GAL
DEBRIS/RAGS CONTAMINATED WITH PETROLEUM/OIL	100	LBS
DIESEL	572	GAL
ELECTROLYTE	1522	GAL
GASOLINE	55	GAL
HYTRANS 61	56877	GAL
LIQUID PROPANE GAS	50	GAL
MISC LUBE OIL (LUBE OIL STORAGE)	980	GAL
CHEMTREAT BL124	300	GAL
CHEMTREAT RL9007	400	GAL
CHEMTREAT BL1795	400	GAL
NITROGEN	2650	LBS
REOLUBE TURBOFLUID 46B	6650	GAL
SILICONE OIL SH200-50 CS EG	300	GAL
SODIUM CARBNATE	300	LBS
SODIUM HYDROXIDE	55	GAL
SODIUM HYPOCHLORITE 12.5%	8300	GAL
SULFUR HEXAFLUORIDE SF6	448	LBS
SULFURIC ACID 93%	42763	LBS
USED OIL	400	GAL

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

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 Action 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 of 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 a number of insurance companies led by Underwriters at Lloyds of London. Liability insurance is provided by Liberty Mutual.

The warranties on the major equipment at MEC have expired.

6.0 UNEXPECTED TEMPORARY CLOSURE

In the event that 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 Generator Facility Interconnection Agreement (GFIA), with PG&E. 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 were 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

In order 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 General Manager or designee will notify the San Jose Fire Department and 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 of time following permanent closure, the General Manger 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 location. 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.

Metcalf Energy Center Plume Log

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 December 2020.

Total Cooling Tower Plume Hours: 0:00

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 December 2020.

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: 0:00

Metcalf Energy Center Plume Log

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 2020.								
No Plume Events in February 2020.								
No Plume Events in March 2020.								
No Plume Events in April 2020.								
No Plume Events in May 2020.								
No Plume Events in June 2020.								
No Plume Events in July 2020.								
No Plume Events in August 2020.								
No Plume Events in September 2020.								
No Plume Events in October 2020.								
No Plume Events in November 2020.								
No Plume Events in December 2020.								
Total Cooling Tower Plume Hours YTD:			**0:00**					

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)
No Plume Events in January 2020.								
No Plume Events in February 2020.								
No Plume Events in March 2020.								
No Plume Events in April 2020.								
No Plume Events in May 2020.								
No Plume Events in June 2020.								
No Plume Events in July 2020.								
No Plume Events in August 2020.								
No Plume Events in September 2020.								
No Plume Events in October 2020.								
No Plume Events in November 2020.								
No Plume Events in December 2020.								
Total Stack Plume Hours YTD:			**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 Year-to-Date **0:00**

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	2	2
Discoloration	4	4
Fading	3	3
Loss of Gloss	3	3
Mildew Defacement	1	1
Moisture Blushing	1	1
Orange Peel	3	3
Wrinkling	1	1
Chemical Attack	1	1
High Temperature Attack	2	2
Mottling	1	1
Crackling	1	1
Saponification	1	1
Disbanding (peel/blister)	1	1
Crawling (fish eye)	2	2

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	3	1	NA
Erosion/Corrosion	2	2	1	
Discoloration	4	4	1	
FadinQ	3	3	1	
Loss of Gloss	3	3	1	
Mildew Defacement	1	1	1	
Moisture Blushing	1	1	1	
Orange Peel	1	3	1	
Wrinkling	1	1	1	
Chemical Attack	1	1	1	
High Temperature Attack	3	3	1	
Mottling	2	3	1	
Crackling	1	2	1	
Saponification	1	1	1	
Disbanding (peel/blister)	2	4	1	
Crawling (fish eye)	1	4	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	4
Discoloration	3
Fading	3
Loss of Gloss	1
Mildew Defacement	5
Moisture Blushing	1
Orange Peel	1
Wrinkling	1
Chemical Attack	2
High Temperature Attack	2
Mottling	1
Crackling	2
Saponification	3
Disbarding (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 2

	INLET AIR FILTER HOUSE	TURBINE/ GENERATOR	STACK	SCREENING
Chalking	3	3	1	NA
Erosion/Corrosion	2	2	1	
Discoloration	4	4	1	
Fading	3	4	1	
Loss of Gloss	3	3	1	
Mildew Defacement	2	3	1	
Moisture Blushing	1	1	1	
Orange Peel	1	1	1	
Wrinkling	1	1	1	
Chemical Attack	1	1	1	
High Temperature Attack	3	3	1	
Mottling	3	3	1	
Crackling	2	2	1	
Saponification	1	1	1	
Disbanding (peel/blister)	2	1	1	
Crawling (fish eye)	2	4	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	1	1
Erosion/Corrosion	1	1
Discoloration	3	3
Fading	3	3
Loss of Gloss	3	2
Mildew Defacement	4	2
Moisture Blushing	4	2
Orange Peel	1	1
Wrinkling	2	1
Chemical Attack	1	1
High Temperature Attack	2	2
Mottling	3	3
Crackling	2	2
Saponification	1	1
Disbanding (peel/blister)	2	1
Crawling (fish eye)	2	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	2	2
Erosion/Corrosion	2	2
Discoloration	5	5
Fading	4	4
Loss of Gloss	4	4
Mildew Defacement	2	1
Moisture Blushing	1	1
Orange Peel	1	1
Wrinkling	1	1
Chemical Attack	1	1
High Temperature Attack	3	3
Mottling	2	2
Crackling	2	2
Saponification	1	1
Disbanding (peel/blister)	2	2
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.

METCALF ENERGY CENTER
2020 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 of 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 Waste Water	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
	Corrosive 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
	Universal Waste	Recycle (Off-site)	Recycle (Off-site)

Metcalf Energy Center

Annual Compliance Report 2020

Water Usage Summary

Recycled Water	
month	consumption (gal)
January	19,066,520
February	13,092,992
March	7,444,844
April	10,887,140
May	5,043,764
June	20,303,712
July	25,901,744
August	38,267,680
September	29,632,020
October	34,338,436
November	21,680,780
December	34,894,200
Total	**260,553,832**

Potable Water	
month	consumption (gal)
January	6,714,699
February	6,559,728
March	4,652,014
April	5,510,927
May	4,954,932
June	10,758,925
July	7,652,025
August	7,735,300
September	7,351,112
October	7,837,058
November	7,568,496
December	9,920,724
Total	**87,215,940**

Metcalf Energy Center

Annual Compliance Report 2020

Water Usage Summary

Condition of Certification S&W-1

Recycled Water	
Cooling Tower for Steam Cycle Cooling	260,553,832
Total Gallons 2020	**260,553,832**

Potable Water	
Condenser Make-Up	31,617,584
Steam Attemperation	29,903,800
Inlet Air Cooling	8,111,219
Domestic	672,582
RO Reject	13,386,752
Filter Backwash	2,677,350
CT Wash Water	431,453
Plant Wash Down	616,362
Total Gallons 2020	**87,215,940**

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location: Metcalf
Date Inspected: 3/9/20
Owner/Company: Calpine
Inspected by: Mike Tucker Calpine King City
Company Contact:
Inspector:
Signature:
Signature: Mike Tucker
Owner's Tower Designation: Main Cooling Tower
Tower Manufacturer:
Model No.:
Serial No.:
Process Served by Tower:
Operation: Continuous ☐ Intermittent ☐ Seasonal ☐
Design Conditions: GPM ____ HW ____ °F CW ____ °F WB ____ °F
Cell No. 1 Number of Fan Cells 10 Tower Type: Crossflow ☐ Counterflow ☐
Date Tower was installed:

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

	1	2	3	Comments
Structure				
Casing Material: Concrete	✓			
Structural Material: Fiberglass	✓			
Fan Deck Material: Fiberglass	✓			
Stairway ☑ Material: "	✓			
Ladder ☑ Material: "	✓			
Handrail ☑ Material: "	✓			
Interior Walkway ☐ Material: "	✓			
Cold Water Basin Material: Concrete	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material: Concrete	✓			
Inlet Pipe Material: Carbon steel	✓			Rust spots on piping
Inlet Manifold Material	✓			
Flow Control Valves ____ Size	✓			
Nozzles–Orifice Diameter ____ Size	✓			
Silt, Algae, Debris	✓			
Spray Type System				
Header Pipe Material: ABS Plastic	✓			
Branch Pipe Material: ABS plastic	✓			19 Nozzle cages off
Nozzles–Orifice Diameter ____ Size	✓			
Up spray ☐ Down spray ☑				
Heat Transfer System				
Fill–Type & Material: ABS Plastic		✓		Brittle
Eliminators–Type & Material: "		✓		
Louvers–Type & Material: Aluminum		✓		Louvers slized
Biological Fouling		✓		

Use this space to list specific items needing attention:

#1

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 _____				
Fan Sheave Designation _____				
Motor Sheave Designation _____				
Gear Drive Unit				
Manufacturer Amarillo Model _____ Ratio _____				
Oil Level: Full ☑ Add Immediately ☐ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used _____				
Seals _____		✓		minor oil leaks at pinion
Backlash _____	✓			
Fan Shaft Endplay _____	✓			
Unusual Noises? No ☑ Yes ☐ Action Required _____				
Drive Shaft				
Manufacturer _____ Material carbon fiber	✓			
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer _____ Fixed Pitch ☑ Adjustable Pitch ☐				
Diameter _____ Number of Blades 10				
Blade Material _____	✓			Fiberglass
Hub Material _____	✓			
Hub Cover Material _____	✓			
Blade Assembly Hardware _____	✓			Stainless
Tip Clearance _____" min _____" max				
Vibration Level _____				
Fan Cylinder Height _____				
Mechanical Equipment Support _____				
Oil Fill and Drain Line _____	✓			Oil leaks at threaded fittings
Oil Level Sight Glass _____	✓			
Vibration Limit Switch _____	✓			
Motor				
Manufacturer Global XPE-Teco Westinghouse				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps _____ Frame 5009B S F _____ Special Info. _____				
Last Lubrication—Date _____ Serial # NP C48633-3				
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

Tower Location Met CAlf
Date Inspected 3/9/20
Owner/Company CALPINE
Inspected by Mike Tucker CALPINE King City
Company Contact
Inspector
Signature
Signature Mike Tucker
Owner's Tower Designation MAIN Cooling Tower
Tower Manufacturer
Model No.
Serial No.
Process Served by Tower
Operation: Continuous ☐ Intermittent ☐ Seasonal ☐
Design Conditions: GPM HW °F CW °F WB °F
Cell No. 2 Number of Fan Cells 10 Tower Type: Crossflow ☐ Counterflow ☐
Date Tower was installed

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

	1	2	3	Comments
Structure				
Casing Material	✓			
Structural Material Fiber glass	✓			
Fan Deck Material Fiber glass	✓			
Stairway ☐ Material " "	✓			
Ladder ☐ Material " "	✓			
Handrail ☐ Material " "	✓			
Interior Walkway ☐ Material	✓			
Cold Water Basin Material	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material Concrete	✓			
Inlet Pipe Material Carbon Steel	✓			Paint / Rust spots
Inlet Manifold Material	✓			
Flow Control Valves Size	✓			
Nozzles–Orifice Diameter Size		✓		4 Nozzles caps off
Silt, Algae, Debris	✓			
Spray Type System				
Header Pipe Material	✓			
Branch Pipe Material	✓			
Nozzles–Orifice Diameter Size	✓			
Up spray ☐ Down spray ☐				
Heat Transfer System				
Fill–Type & Material ABS Plastic		✓		Brittle - Big hole - 2 small holes
Eliminators–Type & Material ABS Plastic		✓		Brittle
Louvers–Type & Material Aluminum		✓		louvers are sloped
Biological Fouling	✓			

Use this space to list specific items needing attention:

H-2

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

Cell #2

Mechanical Equipment	1	2	3	Comments
Speed Reducer Type: Belt ☐ Gear ☑ Direct Drive ☐				
Belt Drive Unit				
Belt Designation				
Fan Sheave Designation				
Motor Sheave Designation				
Gear Drive Unit				
Manufacturer Amarillo Model Ratio				
Oil Level: Full ☑ Add Immediately ☐ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used				
Seals		✓		leaking - input shaft
Backlash		✓		
Fan Shaft Endplay				
Unusual Noises? No ☐ Yes ☐ Action Required				
Drive Shaft				
Manufacturer Material carbon fiber	✓			
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer Fixed Pitch ☑ Adjustable Pitch ☐				
Diameter Number of Blades 10				
Blade Material fiberglass	✓			
Hub Material	✓			
Hub Cover Material	✓			
Blade Assembly Hardware	✓			stainless
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support				
Oil Fill and Drain Line		✓		Minor oil leak at pipe fittings
Oil Level Sight Glass	✓			
Vibration Limit Switch	✓			
Motor				
Manufacturer Global XPE - TECO - westing house				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps Frame 5009 B S F Special Info.				
Last Lubrication—Date S				
Grease Used—Type Serial # HPC4 8633-1				
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

Tower Location: Metcalf
Owner/Company: Calpine
Company Contact:
Signature:
Owner's Tower Designation: Main Cooling Tower
Tower Manufacturer:
Process Served by Tower: STG cooling
Design Conditions: GPM ____ HW ____ °F CW ____ °F WB ____ °F
Cell No. 3 Number of Fan Cells 10
Date Tower was installed:

Date Inspected: 3/9/20
Inspected by: Mike Tucker Calpine King City
Inspector:
Signature: Mike Tucker
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				
Structural Material: Fiberglass	✓			
Fan Deck Material: " "	✓			
Stairway ☐ Material: " "	✓			
Ladder ☐ Material: " "	✓			
Handrail ☐ Material: " "	✓			
Interior Walkway ☐ Material: " "	✓			
Cold Water Basin Material: Concrete	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material: ~~Concrete~~ m-r				
Inlet Pipe Material: carbon steel	✓			Paint - Rust spots
Inlet Manifold Material				
Flow Control Valves ____ Size				
Nozzles–Orifice Diameter ____ Size				
Silt, Algae, Debris				
Spray Type System				
Header Pipe Material: ABS Plastic	✓			
Branch Pipe Material: ABS Plastic	✓			
Nozzles–Orifice Diameter ____ Size	✓			
Up spray ☐ Down spray ☐				
Heat Transfer System				
Fill–Type & Material: ABS plastic	m-r ✓	✓		Brittle
Eliminators–Type & Material		✓		Brittle
Louvers–Type & Material: Aluminum		✓		Louvers are Seized
Biological Fouling	✓			

Use this space to list specific items needing attention:

H 3

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

Cell #3

Mechanical Equipment	1	2	3	Comments
Speed Reducer Type: Belt ☐ Gear ☑ Direct Drive ☐				
Belt Drive Unit				
Belt Designation _____				
Fan Sheave Designation _____				
Motor Sheave Designation _____				
Gear Drive Unit				
Manufacturer Amarillo Model _____ Ratio _____				
Oil Level: Full ☑ Add Immediately ☐ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used _____				
Seals _____		✓		Minor oil leak at pinion seal
Backlash _____				~~Minor oil leaks at pt~~ m.t
Fan Shaft Endplay _____				
Unusual Noises? No ☐ Yes ☐ Action Required _____				
Drive Shaft				
Manufacturer _____ Material Carbon Fiber	✓			
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer _____ Fixed Pitch ☑ Adjustable Pitch ☐				
Diameter _____ Number of Blades 10				
Blade Material fiberglass	✓			
Hub Material _____	✓			
Hub Cover Material _____	✓			
Blade Assembly Hardware Stainless	✓			
Tip Clearance _____" min _____" max				
Vibration Level _____				
Fan Cylinder Height _____				
Mechanical Equipment Support _____				
Oil Fill and Drain Line _____		✓		Minor oil leaks
Oil Level Sight Glass _____	✓			
Vibration Limit Switch _____	✓			
Motor				
Manufacturer Global XPE - Teco - Westinghouse				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps _____ Frame 5009 B S F _____ Special Info. _____				
Last Lubrication—Date _____ Serial # HPC 486 32-3				
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

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation STG
Tower Manufacturer
Process Served by Tower
Design Conditions: GPM HW °F CW °F WB °F
Cell No. 4 Number of Fan Cells 10
Date Tower was installed

Date Inspected 3/10/20
Inspected by Mike Tucker Calpine King City
Inspector
Signature Mike Tucker
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				
Structural Material Fiber glass	✓			
Fan Deck Material Fiber glass	✓			
Stairway ☐ Material " "	✓			
Ladder ☐ Material " "	✓			
Handrail ☐ Material " "	✓			
Interior Walkway ☐ Material " "	✓			
Cold Water Basin Material Concrete	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material	✓			
Inlet Pipe Material Carbon steel	✓			
Inlet Manifold Material	✓			
Flow Control Valves Size	✓			
Nozzles–Orifice Diameter Size	✓			Tightened All retaining hose clamps
Silt, Algae, Debris		✓		Change 7 nozzles
Spray Type System				
Header Pipe Material ABS plastic	✓			
Branch Pipe Material ABS plastic	✓			
Nozzles–Orifice Diameter Size				
Up spray ☐ Down spray ☐				
Heat Transfer System				
Fill–Type & Material ABS Plastic		✓		Brittle
Eliminators–Type & Material		✓		Brittle
Louvers–Type & Material Aluminum		✓		
Biological Fouling	✓			

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
Speed Reducer Type: Belt ☐ Gear ☑ Direct Drive ☐				
Belt Drive Unit				
Belt Designation				
Fan Sheave Designation				
Motor Sheave Designation				
Gear Drive Unit				
Manufacturer Amarillo Model Ratio				
Oil Level: Full ☑ Add Immediately ☐ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used				
Seals		✓		Minor oil leak at input shaft
Backlash				
Fan Shaft Endplay				
Unusual Noises? No ☐ Yes ☐				Action Required Oil sample / oil fill line pipe leak at Thread connections mostly outside cell
Drive Shaft				
Manufacturer Material				
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer Fixed Pitch ☑ Adjustable Pitch ☐				
Diameter Number of Blades 10				
Blade Material Fiberglass	✓			
Hub Material	✓			
Hub Cover Material	✓			
Blade Assembly Hardware Stainless	✓			
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support				
Oil Fill and Drain Line		✓		Minor leaks at pipe threads
Oil Level Sight Glass				
Vibration Limit Switch	✓			
Motor				
Manufacturer Global XPE-TECO-Westing				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps Frame S F Special Info.				
Last Lubrication—Date Serial # HP248633-2				
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

Tower Location Metcalf
Owner/Company Calpine
Company Contact
Signature
Owner's Tower Designation Main Cooling Tower
Tower Manufacturer
Process Served by Tower STG Steam Condenser
Design Conditions: GPM HW °F CW °F WB °F
Cell No. 5 Number of Fan Cells 10
Date Tower was installed

Date Inspected
Inspected by Mike Tucker
Inspector
Signature Mike Tucker
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				
Structural Material Fiberglass	✓			
Fan Deck Material "	✓			
Stairway ☑ Material "	✓			
Ladder ☑ Material "	✓			
Handrail ☑ Material "	✓			
Interior Walkway ☐ Material "	✓			
Cold Water Basin Material Concrete	✓			
Silt, Debris Buildup OK	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material	✓			
Inlet Pipe Material	✓			
Inlet Manifold Material Carbon Steel	✓			
Flow Control Valves Size	✓			
Nozzles–Orifice Diameter Size	✓			Tightened All Clamps
Silt, Algae, Debris	✓			
Spray Type System				
Header Pipe Material 6" ABS Plastic				
Branch Pipe Material ABS Plastic				
Nozzles–Orifice Diameter Size				
Up spray ☐ Down spray ☑				
Heat Transfer System				
Fill–Type & Material ABS Plastic	✓			
Eliminators–Type & Material		✓		Brittle
Louvers–Type & Material Aluminum		✓		~~Brittle~~ m.r louvers seized
Biological Fouling	✓			

Use this space to list specific items needing attention:

Cell #5

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				
Fan Sheave Designation				
Motor Sheave Designation				
Gear Drive Unit				
Manufacturer Amarillo Model Ratio				
Oil Level: Full ☑ Add Immediately ☐ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used				
Seals		✓		Minor leaks at input shaft
Backlash				
Fan Shaft Endplay				
Unusual Noises? No ☐ Yes ☐ Action Required Oil Sample / Fill Tubes / leak at pipe Threads out side of Tower				
Drive Shaft				
Manufacturer Material Fiberglass	✓			
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer Fixed Pitch ☐ Adjustable Pitch ☐				
Diameter Number of Blades 10				
Blade Material Fiberglass	✓			
Hub Material	✓			
Hub Cover Material	✓			
Blade Assembly Hardware STAINLESS	✓			
Tip Clearance ____" min ____" max				
Vibration Level				
Fan Cylinder Height				
Mechanical Equipment Support	✓			
Oil Fill and Drain Line		✓		Slight leak at pipe Threads
Oil Level Sight Glass	✓			
Vibration Limit Switch	✓			
Motor				
Manufacturer Global XPE-TECO-Westinghouse				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps Frame 5009 B S F Special Info.				
Last Lubrication—Date Serial # HPC48632-4				
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				

* Missing gear box oil level indicator

Marley

Cooling Tower Inspection Checklist

SM-CKLIST

Tower Location Met Calf
Owner/Company CALPINE
Company Contact
Signature
Owner's Tower Designation Main Cooling Tower
Tower Manufacturer
Process Served by Tower Steam Condenser cooling

Date Inspected
Inspected by Mike Tucker
Inspector
Signature Mike Tucker
Model No. Serial No.
Operation: Continuous ☐ Intermittent ☐ Seasonal ☐
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

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

	1	2	3	Comments
Structure				
Casing Material				
Structural Material Fiber GLASS	✓			
Fan Deck Material " "	✓			
Stairway ☐ Material " "	✓			
Ladder ☐ Material " "	✓			
Handrail ☐ Material " "	✓			
Interior Walkway ☑ Material " "	✓			
Cold Water Basin Material Concrete	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material				
Inlet Pipe Material Carbon Steel	✓			
Inlet Manifold Material " "	✓			
Flow Control Valves Size	✓			
Nozzles–Orifice Diameter Size	✓			Tightened All clamps / boots clamps
Silt, Algae, Debris				
Spray Type System				
Header Pipe Material 6" ABS Plastic	✓			
Branch Pipe Material " "	✓			change 6 nozzles
Nozzles–Orifice Diameter Size				
Up spray ☐ Down spray ☐				
Heat Transfer System				
Fill–Type & Material ABS Plastic	✓			
Eliminators–Type & Material		✓		Brittle
Louvers–Type & Material		✓		louvers Siezed
Biological Fouling	✓			

Use this space to list specific items needing attention:

Cell #6 **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				
Fan Sheave Designation				
Motor Sheave Designation				
Gear Drive Unit				
Manufacturer Amarillo Model Ratio				
Oil Level: Full ☐ Add Immediately ☑ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used				
Seals		✓		Minor leak At input Shaft
Backlash				
Fan Shaft Endplay				
Unusual Noises? No ☐ Yes ☐				Action Required Oil fill / Sample line piping leaking at pipe threads
Drive Shaft				
Manufacturer Material Carbon Fiber	✓			
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer Fixed Pitch ☑ Adjustable Pitch ☐				
Diameter Number of Blades 10				
Blade Material Fiberglass	✓			
Hub Material	✓			
Hub Cover Material Fiberglass	✓			
Blade Assembly Hardware				
Tip Clearance ____" min ____" max				
Vibration Level	✓			
Fan Cylinder Height				
Mechanical Equipment Support	✓			
Oil Fill and Drain Line	✓			
Oil Level Sight Glass	✓			
Vibration Limit Switch	✓			
Motor				
Manufacturer Global XPE Teco-Westinghouse				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps Frame 5009 B S F Special Info.				
Last Lubrication—Date Serial # HPC48633-5				
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

Tower Location Met Calf
Owner/Company CALPINE
Company Contact
Signature
Owner's Tower Designation

Date Inspected
Inspected by Mike Tucker
Inspector
Signature Mike Tucker

Tower Manufacturer
Model No.
Serial No.

Process Served by Tower STEAM CONDENSER COOLING Operation: Continuous ☐ Intermittent ☐ Seasonal ☐

Design Conditions: GPM HW °F CW °F WB °F

Cell No. 7 Number of Fan Cells 12 Tower Type: Crossflow ☐ Counterflow ☐

Date Tower was installed

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

	1	2	3	Comments
Structure				
Casing Material				
Structural Material Fiber glass	✓			
Fan Deck Material "	✓			
Stairway ☐ ✓ Material "	✓			
Ladder ☐ ✓ Material "	✓			
Handrail ☐ ✓ Material "	✓			
Interior Walkway ☐ ✓ Material "	✓			
Cold Water Basin Material CONCRETE	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material	✓			
Inlet Pipe Material Carbon Steel	✓			
Inlet Manifold Material "	✓			
Flow Control Valves Size				
Nozzles–Orifice Diameter Size				
Silt, Algae, Debris	✓			
Spray Type System				
Header Pipe Material 6" ABS PLASTIC				
Branch Pipe Material "				
Nozzles–Orifice Diameter Size				Tight reveal Nozzle / coupling clamps
Up spray ☐ Down spray ✓				
Heat Transfer System				
Fill–Type & Material ABS plastic	✓			
Eliminators–Type & Material		✓		Brittle
Louvers–Type & Material Aluminum		✓		louvers seized
Biological Fouling	✓			

Use this space to list specific items needing attention:

Cell #7

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 _____				
Fan Sheave Designation _____				
Motor Sheave Designation _____				
Gear Drive Unit				
Manufacturer Amarillo Model _____ Ratio _____				
Oil Level: Full ☐ Add Immediately ☑ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used _____				
Seals _____		✓		Minor leak At w put shaft
Backlash _____				
Fan Shaft Endplay _____				
Unusual Noises? No ☐ Yes ☐ Action Required OIL fill / sample lug leaking at pipe fittings outside of Tower				
Drive Shaft				
Manufacturer _____ Material Fiberglass	✓			
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer _____ Fixed Pitch ☑ Adjustable Pitch ☐				
Diameter _____ Number of Blades 16				
Blade Material Fiberglass	✓			
Hub Material _____	✓			
Hub Cover Material _____	✓			
Blade Assembly Hardware Stainless	✓			
Tip Clearance _____" min _____" max				
Vibration Level _____	✓			
Fan Cylinder Height _____				
Mechanical Equipment Support _____	✓			
Oil Fill and Drain Line _____	✓			
Oil Level Sight Glass _____	✓			
Vibration Limit Switch _____	✓			
Motor				
Manufacturer Global XPE-TECO - westing housing				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps 31.5 Frame 5009B S F _____ Special Info. _____				
Last Lubrication—Date _____ Serial # HPC48832-5				
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

Tower Location Metcalf
Owner/Company CALPINE
Company Contact
Signature
Owner's Tower Designation Main Cooling Tower
Tower Manufacturer
Process Served by Tower Steam Condenser Cooling
Design Conditions: GPM HW ° F CW ° F WB ° F
Cell No. 8 Number of Fan Cells 10
Date Tower was installed

Date Inspected
Inspected by Mike Tucker
Inspector
Signature Mike Tucker
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				
Structural Material Fiber glass	✓			
Fan Deck Material " "	✓			
Stairway ☑ Material " "	✓			
Ladder ☑ Material " "	✓			
Handrail ☑ Material " "	✓			
Interior Walkway ☐ Material " "	✓			
Cold Water Basin Material Concrete	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material	✓			
Inlet Pipe Material Carbon Steel	✓			
Inlet Manifold Material " "	✓			
Flow Control Valves Size	✓			
Nozzles–Orifice Diameter Size	✓			Tightened All Nozzle/coupling Clams
Silt, Algae, Debris	✓			
Spray Type System				
Header Pipe Material 6" ABS Plastic	✓			
Branch Pipe Material ABS Plastic	✓			
Nozzles–Orifice Diameter Size				
Up spray ☐ Down spray ☑				
Heat Transfer System				
Fill–Type & Material ABS Plastic	✓			
Eliminators–Type & Material		✓		Brittle
Louvers–Type & Material Aluminum		✓		louvers seized
Biological Fouling	✓			

Use this space to list specific items needing attention:

Cell #8

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 _____				
Fan Sheave Designation _____				
Motor Sheave Designation _____				
Gear Drive Unit				
Manufacturer Amarillo Model _____ Ratio _____				
Oil Level: Full ☐ Add Immediately ☑ Low, check again soon ☐				
Oil Condition: Good ☐ Contains Water ☐ Contains Metal ☐ Contains Sludge ☐				
Oil Type Used _____				
Seals _____		✓		Minor leak at input shaft
Backlash _____				
Fan Shaft Endplay _____				
Unusual Noises? No ☐ Yes ☐ Action Required Oil fill / sampling leaky at pipe fitting (Gear box leaking)				
Drive Shaft				
Manufacturer _____ Material Fiberglass	✓			
Fan				
Fan Type: Propeller ☑ Blower ☐				
Manufacturer _____ Fixed Pitch ☑ Adjustable Pitch ☐				
Diameter _____ Number of Blades 10				
Blade Material Fiberglass	✓			
Hub Material _____	✓			
Hub Cover Material _____	✓			
Blade Assembly Hardware Stainless	✓			
Tip Clearance _____" min _____" max				
Vibration Level _____	✓			
Fan Cylinder Height _____				
Mechanical Equipment Support _____	✓			
Oil Fill and Drain Line _____	✓			
Oil Level Sight Glass _____	✓			
Vibration Limit Switch _____	✓			
Motor				
Manufacturer Global XPE-TECO-Westinghouse				
Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000				
F L Amps 31.5 Frame _____ S F _____ Special Info. _____				
Last Lubrication—Date _____ Serial # HP C486633-4				
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

Tower Location Metcalf
Owner/Company CALPINE
Company Contact
Signature
Owner's Tower Designation Main Cooling Tower
Tower Manufacturer
Process Served by Tower Steam Condenser Cooling

Date Inspected
Inspected by Mike Tucker
Inspector
Signature Mike Tucker
Model No. Serial No.
Operation: Continuous ☐ Intermittent ☐ Seasonal ☐

Design Conditions: GPM HW °F CW °F WB °F
Cell No. 9 Number of Fan Cells Tower Type: Crossflow ☐ Counterflow ☐
Date Tower was installed

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

	1	2	3	Comments
Structure				
Casing Material				
Structural Material Fiberglass	✓			
Fan Deck Material "	✓			
Stairway ☐ Material "	✓			
Ladder ☐ Material "	✓			
Handrail ☐ Material "	✓			
Interior Walkway ☐ Material "	✓			
Cold Water Basin Material Concrete	✓			
Silt, Debris Buildup	✓			
Water Distribution System				
Open Basin System				
Distribution Basin Material				
Inlet Pipe Material Carbon Steel	✓			
Inlet Manifold Material "	✓			
Flow Control Valves Size	✓			
Nozzles–Orifice Diameter Size	✓			Tightened All Nozzle / coupling clamps
Silt, Algae, Debris	✓			
Spray Type System				
Header Pipe Material 6" ABS PLASTIC	✓			
Branch Pipe Material ABS PLASTIC	✓			Tightened All nozzles / coupling clamps
Nozzles–Orifice Diameter Size	✓			Change 1 nozzle
Up spray ☐ Down spray ☐				
Heat Transfer System				
Fill–Type & Material ABS Plastic	✓			
Eliminators–Type & Material		✓		Brittle
Louvers–Type & Material Aluminium		✓		louvers sized
Biological Fouling	✓			

Use this space to list specific items needing attention:

Cell #9

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				
Fan Sheave Designation				
Motor Sheave Designation				

Gear Drive Unit

Manufacturer Amarillo Model _____ Ratio _____

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

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

Oil Type Used _____

Seals				
Backlash				
Fan Shaft Endplay				

Unusual Noises? No ☐ Yes ☐ Action Required _____

Drive Shaft

Manufacturer _____ Material Fiberglass

	✓			

Fan

Fan Type: Propeller ☑ Blower ☐

Manufacturer _____ Fixed Pitch ☑ Adjustable Pitch ☐

Diameter _____ Number of Blades 10

Blade Material Fiber glass	✓			
Hub Material	✓			
Hub Cover Material ~~SStaw less~~	✓			
Blade Assembly Hardware Staw less	✓			
Tip Clearance ____" min ____" max				
Vibration Level	✓			
Fan Cylinder Height				
Mechanical Equipment Support	✓			
Oil Fill and Drain Line	✓			
Oil Level Sight Glass	✓			
Vibration Limit Switch	✓			

Motor

Manufacturer Global XPE-TECO-Westinghouse Model AENGWT002

Name Plate Data: HP 250 RPM 1786 Phase 3 Hz 60 Volts 4006

F L Amps 31.5 Frame 5009 B S F _____ Special Info. _____

Last Lubrication—Date _____ Serial # HPC48632-2

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

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

Date Inspected
Inspected by Mike Tucker
Inspector
Signature Mike Tucker
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					
Structural Material	Fiberglass	✓			
Fan Deck Material	"	✓			
Stairway ☑ Material	"	✓			
Ladder ☑ Material	"	✓			
Handrail ☑ Material	"		✓		
Interior Walkway ☐ Material	"	✓			
Cold Water Basin Material	Concrete	✓			
Silt, Debris Buildup		✓			
Water Distribution System					
Open Basin System					
Distribution Basin Material	Concrete	✓			
Inlet Pipe Material	Carbon Steel	✓			
Inlet Manifold Material	"	✓			
Flow Control Valves	Size				
Nozzles–Orifice Diameter	Size				
Silt, Algae, Debris		✓			
Spray Type System					
Header Pipe Material	6" ABS Plastic	✓			
Branch Pipe Material	ABS Plastic	✓			Tightened All Nozzle / coupling clamps
Nozzles–Orifice Diameter	Size	✓			Changed 7 Nozzles
Up spray ☐ Down spray ☑					
Heat Transfer System					
Fill–Type & Material	ABS Plastic	✓			
Eliminators–Type & Material			✓		Brittle
Louvers–Type & Material	Aluminum		✓		Louvers Sized
Biological Fouling		✓			

Use this space to list specific items needing attention:

CELL #10

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				
Fan Sheave Designation				
Motor Sheave Designation				

Gear Drive Unit

Manufacturer Amarillo Model _____ Ratio _____

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

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

Oil Type Used _____

Seals		✓		
Backlash				
Fan Shaft Endplay				

Unusual Noises? No ☐ Yes ☐ Action Required Oil fill / Sample/we looking at Piping Threads

Drive Shaft

Manufacturer _____ Material Fiberglass

✓			

Fan

Fan Type: Propeller ☑ Blower ☐

Manufacturer _____ Fixed Pitch ☑ Adjustable Pitch ☐

Diameter _____ Number of Blades 10

Blade Material Fiberglass	X			
Hub Material	✓			
Hub Cover Material	✓			
Blade Assembly Hardware STAINLESS	✓			
Tip Clearance ____" min ____" max				
Vibration Level	✓			
Fan Cylinder Height				
Mechanical Equipment Support	✓			
Oil Fill and Drain Line	✓			
Oil Level Sight Glass	✓			
Vibration Limit Switch	✓			

Motor

Manufacturer Global XPE-Teco Westing house Model AEHG WT002

Name Plate Data: HP 250 RPM 1780 Phase 3 Hz 60 Volts 4000

F L Amps 31.5 Frame 5009 B S F _____ Special Info. _____

Last Lubrication—Date _____ Serial # HP C48 632-1

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				

METCALF ENERGY CENTER, LLC

TRANS-3 HAZARDOUS MATERIAL DELIVERIES

JANUARY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	1/20/2020	49,980	LBS
UNIVAR SOLUTIONS	BLEACH	1/12/2020	45,001	LBS
HILL BROTHERS	AQUEOUS AMMONIA	1/23/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	1/10/2020	50,325	LBS
HILL BROTHERS	AQUEOUS AMMONIA	1/16/2020	50,324	LBS
HILL BROTHERS	AQUEOUS AMMONIA	1/3/2020	50,317	LBS
CHEMTREAT	BL152	1/29/2020	2,157	LBS
CHEMTREAT	BL152	1/31/2020	1,684	LBS
CHEMTREAT	CL240	1/10/2020	2,370	LBS

FEBRUARY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
UNIVAR SOLUTIONS	BLEACH	2/12/2020	45,002	LBS
HILL BROTHERS	AQUEOUS AMMONIA	2/15/2020	50,324	LBS
HILL BROTHERS	AQUEOUS AMMONIA	2/27/2020	50,332	LBS
HILL BROTHERS	AQUEOUS AMMONIA	2/11/2020	50,317	LBS
CHEMTREAT	BL152	2/5/2020	1,684	LBS
CHEMTREAT	BL152	2/6/2020	2,823	LBS

MARCH				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
HILL BROTHERS	AQUEOUS AMMONIA	3/19/20	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	3/20/20	43,558	LBS
CHEMTREAT	RL9007	3/9/20	1,084	LBS
CHEMTREAT	BL152	3/10/20	1,684	LBS

APRIL				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
HILL BROTHERS	AQUEOUS AMMONIA	4/13/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	4/6/2020	50,354	LBS

MAY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	5/14/2020	49,680	LBS
HILL BROTHERS	AQUEOUS AMMONIA	5/27/2020	50,474	LBS

JUNE				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	6/27/2020	49,120	LBS
UNIVAR SOLUTIONS	BLEACH	6/4/2020	45,450	LBS
UNIVAR SOLUTIONS	BLEACH	6/29/2020	47,091	LBS
HILL BROTHERS	AQUEOUS AMMONIA	6/25/2020	48,822	LBS
HILL BROTHERS	AQUEOUS AMMONIA	6/17/2020	50,752	LBS
HILL BROTHERS	AQUEOUS AMMONIA	6/5/2020	50,362	LBS
CHEMTREAT	CL240	6/4/2020	2,370	LBS
CHEMTREAT	CL4500	6/2/2020	5,065	LBS

JULY				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	7/24/2020	49,000	LBS
UNIVAR SOLUTIONS	BLEACH	7/23/2020	44,988	LBS
HILL BROTHERS	AQUEOUS AMMONIA	7/9/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	7/17/2020	48,815	LBS
HILL BROTHERS	AQUEOUS AMMONIA	7/24/2020	48,815	LBS

AUGUST				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	8/18/2020	49,540	LBS.
UNIVAR SOLUTIONS	BLEACH	8/21/2020	45,494	LBS.
UNIVAR SOLUTIONS	BLEACH	8/5/2020	44,991	LBS.
HILL BROTHERS	AQUEOUS AMMONIA	8/1/2020	48,815	LBS.
HILL BROTHERS	AQUEOUS AMMONIA	8/26/2020	50,317	LBS.
HILL BROTHERS	AQUEOUS AMMONIA	8/10/2020	50,309	LBS.
HILL BROTHERS	AQUEOUS AMMONIA	8/21/2020	50,317	LBS.
HILL BROTHERS	AQUEOUS AMMONIA	8/15/2020	50,339	LBS.
CHEMTREAT	BL152	8/28/2020	1,674	LBS.
CHEMTREAT	BL152	8/19/2020	2,753	LBS.

SEPTEMBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	9/24/2020	50,220	LBS
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	9/2/2020	49,980	LBS
UNIVAR SOLUTIONS	BLEACH	9/1/2020	44,975	LBS
UNIVAR SOLUTIONS	BLEACH	9/10/2020	45,126	LBS
HILL BROTHERS	AQUEOUS AMMONIA	9/6/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	9/1/2020	46,937	LBS
HILL BROTHERS	AQUEOUS AMMONIA	9/17/2020	46,937	LBS
HILL BROTHERS	AQUEOUS AMMONIA	9/25/2020	50,414	LBS
CHEMTREAT	CT709	9/15/2020	812	LBS
CHEMTREAT	BL152	9/15/2020	837	LBS
CHEMTREAT	CL4428	9/15/2020	548	LBS
CHEMTREAT	BL152	9/8/2020	2,753	LBS

OCTOBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	10/13/2020	49,920	LBS
UNIVAR SOLUTIONS	BLEACH	10/12/2020	44,011	LBS
UNIVAR SOLUTIONS	BLEACH	10/26/2020	43,007	LBS
UNIVAR SOLUTIONS	BLEACH	10/1/2020	45,001	LBS
UNIVAR SOLUTIONS	BLEACH	10/8/2020	2,479	LBS
HILL BROTHERS	AQUEOUS AMMONIA	10/16/2020	48,822	LBS
HILL BROTHERS	AQUEOUS AMMONIA	10/28/2020	50,324	LBS
HILL BROTHERS	AQUEOUS AMMONIA	10/8/2020	48,815	LBS
HILL BROTHERS	AQUEOUS AMMONIA	10/2/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	10/22/2020	46,562	LBS
CHEMTREAT	CL240	10/22/2020	2,326	LBS

NOVEMBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	11/4/2020	49,740	LBS
UNIVAR SOLUTIONS	BLEACH	11/5/2020	46,475	LBS
HILL BROTHERS	AQUEOUS AMMONIA	11/13/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	11/6/2020	56,324	LBS
HILL BROTHERS	AQUEOUS AMMONIA	11/2/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	11/30/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	11/23/2020	50,332	LBS

DECEMBER				
VENDOR NAME	CHEMICAL	RECEIVED	QUANTITY	UOM
NORTHSTAR CHEMICAL	SULFURIC ACID 93%	12/8/2020	50,040	LBS
UNIVAR SOLUTIONS	BLEACH	12/14/2020	44,982	LBS
UNIVAR SOLUTIONS	BLEACH	12/1/2020	45,441	LBS
HILL BROTHERS	AQUEOUS AMMONIA	12/16/2020	50,317	LBS
HILL BROTHERS	AQUEOUS AMMONIA	12/10/2020	46,562	LBS
HILL BROTHERS	AQUEOUS AMMONIA	12/4/2020	50,317	LBS
				LBS

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: Aqueous Ammonia Storage Area

CERS ID: 10097278
FacilityID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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	**AMMONIA** CAS No: 7664-41-7 ✔EHS Map: 1 Grid: 4G	**Pounds** State: Liquid Type: Mixture	**27527.7** Storage Container: Aboveground Tank Days on Site: 365	**32382**	27527.7 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Ammonia	28 %	✔	7664-41-7

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 B LANCHARD RD, SAN JOSE 95013
Chemical Location: AUXILLARY TRANSFORMERS
CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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	**HYTRANS 61** CAS No Map: 1 Grid: 5D, 3D, D1, 5E	**Gallons** State: Liquid Type: Mixture	**1956** Storage Container: Other Days on Site: 365	**489**	1956 Pressue: < Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Serious Eye Damage Eye Irritation	OIL, HYDRO LIGHT NAPH DIST 2, 6-DI-T-BUTYL-P-CRESOL (BHT)	99 % 1 %		64742-53-6 128-37-0
DOT: 2.2 - Nonflammable Gases	**NITROGEN, COMPRESSED** CAS No 7727-37-9 Map: 1 Grid: 2D, 3D, 5E, 5D	**Cu. Feet** State: Gas Type: Pure	**920** Storage Container: Cylinder Days on Site: 365	**230**	920 Pressue Temperature	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
4 BLANCHARD RD, SAN JOSE 95013

Chemical Location: BALANCE OF PLANT

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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)	**LEAD-ACID BATTERY**	**Gallons**	**865**	**14.4**	865			LEAD, LEAD COMPONENTS	60 %		7439-92-1
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code		SULFURIC ACID	30 %	✔	7664-93-9
Corrosive	Map: 1 Grid: 2E	Type: Pure	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013
Chemical Location: BOILER FEED PUMPS
CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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	**CONOCO PHILLIPS MEGA FLOW 32** CAS No Map: 1 Grid: 2H, 3H	**Gallons** State: Liquid Type: Mixture	**520** Storage Container: Other Days on Site: 365	**130**	520 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Boiler Water Chemical Treatment Area | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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.
	CHEMTREAT BL-152	**Gallons**	**800**	**400**	680		- Physical	AMMONIUM HYDROXIDE	30 %		1336-21-6
	CAS No	State: Liquid	Storage Container: Tote Bin		Pressue: Ambient	Waste Code	Corrosive To Metal	ETHANOLAMINE	10 %		141-43-5
	Map: 1 Grid: 2G	Type: Mixture	Days on Site: 365		Temperature: Ambient		- Health Acute Toxicity				
							- Health Skin Corrosion Irritation				
							- Health Serious Eye Damage Eye Irritation				
DOT: 8 - Corrosives (Liquids and Solids)	**CHEMTREAT BL1794**	**Gallons**	**400**	**400**	340		- Health Acute Toxicity	Sodium phosphate, tribasic	5 %		7601-54-9
	CAS No	State: Liquid	Storage Container: Tote Bin		Pressue: Ambient	Waste Code	- Health Skin Corrosion Irritation				
	Map: 1 Grid: 2G	Type: Mixture	Days on Site: 365		Temperature: Ambient		- Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENERGY CENTER | Chemical Location | CERS ID: 10097278

Facility Name: METCALF ENERGY CENTER | COMBUSTION TURBINE #1 | Facility ID: 43-060-409545

1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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)	**LEAD-ACID BATTERY**	**Gallons**	**324**	**2.7**	324			LEAD, LEAD COMPONENTS	60 %		7439-92-1
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code		SULFURIC ACID	30 %	✔	7664-93-9
Corrosive	Map: 1 Grid: 4E	Type: Pure	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013
Chemical Location: COMBUSTION TURBINE #2
CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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)	**LEAD-ACID BATTERY**	**Gallons**	**324**	**2.7**	324			LEAD, LEAD COMPONENTS	60 %		7439-92-1
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code		SULFURIC ACID	30 %	✔	7664-93-9
Corrosive	Map: 1 Grid: 2E	Type: Pure	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: Combustion Turbine Lube Oil

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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 Combustible Liquid, Class III-B	**76 TURBINE OIL 68** CAS No Map: 1 Grid: 2E, 4E	**Gallons** State: Solid Type: Mixture	**7200** Storage Container: Other Days on Site: 365	**3600**	7200 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: Connex Near Storm Water Pond

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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.
	Sodium Carbonate	**Pounds**	**300**	**50**	300		- Physical Hazard Not Otherwise Classified - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization				
	CAS No 497-19-8 Map: 1 Grid: 6K	State Solid	Storage Container Bag		Pressue Ambient	Waste Code					
		Type Pure	Days on Site: 365		Temperature Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: MET CALF ENGERGY CENTER
Facility Name: MET CALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013
Chemical Location: Cooling Tower Chemical Treatment Area
CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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 CL240** CAS No NA Map: 1 Grid: 5D	**Gallons** State Liquid Type Mixture	**1500** Storage Container Aboveground Tank Days on Site: 365	**1500**	1350 Pressue Ambient Temperature Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
DOT: 9 - Misc. Hazardous Materials	**CHEMTREAT CL4500** CAS No Map: 1 Grid: 5D	**Gallons** State Liquid Type Mixture	**1500** Storage Container Aboveground Tank Days on Site: 365	**1500**	750 Pressue Ambient Temperature Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization - Health Aspiration Hazard				
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**SODIUM HYPOCHLORITE 12.5%** CAS No Map: 1 Grid: 5D	**Gallons** State Liquid Type Mixture	**8000** Storage Container Aboveground Tank Days on Site: 365	**8000**	6800 Pressue Ambient Temperature Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	SODIUM HYDROXIDE SODIUM HYPOCHLORITE >12.5%-15% SODIUM CHLORIDE WATER	1 % 13 %		1310-73-2 7681-52-9 7647-14-5 7732-18-5
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Water Reactive, Class 1	**SULFURIC ACID 93%** CAS No ✔EHS 7664-93-9 Map: 1 Grid: 5D	**Pounds** State Liquid Type Pure	**42762.8** Storage Container Aboveground Tank Days on Site: 365	**85526**	42762.8 Pressue Ambient Temperature Ambient	Waste Code	- Physical Corrosive To Metal - Physical Contact Water Emits Flammable Gas - Health Skin Corrosion Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location
CT CONTROL OIL TANK

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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	**MOBIL DTE 26** CAS No Map: 1 Grid: 2F, 3F	**Gallons** State: Liquid Type: Pure	**200** Storage Container: Other Days on Site: 365	**100**	200 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Respiratory Skin Sensitization				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: CT WASH WATER SUMP

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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	**CT WATER WASH**	**Gallons**	**3200**	**1600**	3200						
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code					
	Map: F2 Grid: F3	Type: Mixture	Days on Site: 365		Temperature: < Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | CYLINDER GAS STORAGE | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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	**ARGON, COMPRESSED** CAS No 7440-37-1 Map: 1 Grid: H3	**Cu. Feet** State Gas Type Pure	**625** Storage Container Cylinder Days on Site: 365	**336**	586 Pressue Temperature	Waste Code	- Physical Gas Under Pressure - Health Hazard Not Otherwise Classified				
DOT: 2.2 - Nonflammable Gases	**ARGON/CARBON MONOXIDE** CAS No Map: 1 Grid: H3	**Cu. Feet** State Gas Type Mixture	**752** Storage Container Cylinder Days on Site: 365	**376**	376 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure				
DOT: 2.2 - Nonflammable Gases	**CALIBRATION GAS (NITROGEN, CARBON MONOXIDE)** CAS No Map: 1 Grid: 3H	**Cu. Feet** State Gas Type Mixture	**580** Storage Container Cylinder Days on Site: 365	**145**	580 Pressue < Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant	NITROGEN OXYGEN CARBON MONOXIDE	83 % 12 % 5 %		7727-37-9 7782-44-7 124-38-9
DOT: 2.2 - Nonflammable Gases	**HELIUM** CAS No 7440-59-7 Map: 1 Grid: 3H	**Cu. Feet** State Gas Type Pure	**876** Storage Container Cylinder	**292**	584 Pressue Temperature	Waste Code	- Physical Gas Under Pressure - Health Aspiration Hazard				
DOT: 2.2 - Nonflammable Gases	**NITROGEN** CAS No 7727-37-9 Map: 1 Grid: 3H	**Cu. Feet** State Gas Type Pure	**8050** Storage Container Cylinder Days on Site: 365	**230**	8050 Pressue < Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Serious Eye Damage Eye Irritation				
DOT: 2.2 - Nonflammable Gases	**NITROGEN / NITRIC OXIDE CALIBRATION GAS** CAS No Map: 1 Grid: 3H	**Cu. Feet** State Gas Type Mixture	**1450** Storage Container Cylinder Days on Site: 365	**145**	1160 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	NITRIC OXIDE NITROGEN	0 % 99 %	✔	10102-43-9 7727-37-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013
Chemical Location: CYLINDER GAS STORAGE
CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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 / OXYGEN CALIBRATION GAS** CAS No Map: 1 Grid: 3H	**Cu. Feet** State: Gas Type: Storage Container: Cylinder Days on Site: 365	**870**	**145**	870 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 Oxidizing, Class 2	**Oxygen Gas** CAS No 7782-44-7 Map: 1 Grid: H3	**Cu. Feet** State: Gas Type: Pure Storage Container: Cylinder Days on Site: 365	**843**	**281**	562 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Physical Oxidizer				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: DIESEL FIRE PUMP HOUSE | CERS ID: 10097278

Facility Name: METCALF ENERGY CENTER | Facility ID: 43-060-409545

1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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	**LEAD-ACID BATTERY** CAS No Map: 1 Grid: 5I	**Gallons** State Liquid Type Mixture	**12** Storage Container Other Days on Site: 365	**6**	12 Pressue Ambient Temperature Ambient	Waste Code 792	- Physical Flammable - Physical Explosive - Physical Corrosive To Metal - Health Carcinogenicity - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	Sulfuric Acid Lead, Lead Components	40 % 60 %	✔	7664-93-9 7439-92-1

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: Fire Pump House | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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-B	**DIESEL** CAS No 68334-30-5 Map: 1 Grid: 5I	**Gallons** State Liquid Type Mixture	**572** Storage Container Aboveground Tank Days on Site: 365	**572**	550 Pressue Ambient Temperature Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity - Health Respiratory Skin Sensitization - Health Aspiration Hazard	FUELS, DIESEL, NO. 2 GAS OIL, LIGHT HYDRODESULFURIZED MIDDLE DISTILLATE	100 % 0 % 0 %		 64741-44-2 64742-80-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: | CERS ID: 10097278

Facility Name: METCALF ENERGY CENTER | FUEL GAS COMPRESSORS | Facility ID: 43-060-409545

1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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	**LUBRICATING OIL**	**Gallons**	**135**	**45**	135		- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization				
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code					
	Map: 1 Grid: 5J, 6J	Type: Mixture	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Chemical Location: GSU Transformers
CERS ID: 10097278

Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013
Facility ID: 43-060-409545

Status: Submitted on 2/26/2021 7:38 AM

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	**HYTRANS 61**	**Gallons**	**47883**	**18345**	47883		- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	OIL, HYDRO LIGHT NAPH DIST	99 %		64742-53-6
	CAS No	State: Liquid	Storage Container: Other		Pressue: < Ambient	Waste Code		2, 6-DI-T-BUTYL-P-CRESOL (BHT)	1 %		128-37-0
	Map: 1 Grid: 2D, 3D, 4E	Type: Mixture	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Hazardous Material Storage Area | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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 Liquid, Class I-C	**DEBRIS/RAGS CONTAMINATED WITH PETROLEUM/OIL** CAS No Map: 1 Grid: 5G, 5H	**Pounds** State: Solid Type: Waste	**100** Storage Container: Steel Drum Days on Site: 365	**55**	25 Pressue: Ambient Temperature: Ambient	500 Waste Code: 352	- Physical Flammable - Health Hazard Not Otherwise Classified				
	USED OIL CAS No NA Map: 1 Grid: 5G, 5H	**Gallons** State: Liquid Type: Waste	**400** Storage Container: Tote Bin Days on Site: 365	**400**	200 Pressue: Ambient Temperature: Ambient	660 Waste Code: 221	- Physical Combustible Dust - Health Hazard Not Otherwise Classified				
Flammable Solid	**USED OIL FILTERS** CAS No Map: 1 Grid: 5G, 5H	**Pounds** State: Solid Type: Waste	**100** Storage Container: Steel Drum Days on Site: 365	**100**	25 Pressue: Ambient Temperature: Ambient	200 Waste Code:	- Physical Flammable - Health Hazard Not Otherwise Classified				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Lube Oil Storage | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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.
	76 Triton 5005 GEO SAE 30 CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Steel Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Skin Corrosion Irritation				
DOT: 3 - Flammable and Combustible Liquids	**76 TURBINE OIL 68** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**220** Storage Container: Steel Drum Days on Site: 365	**55**	220 Pressue: Ambient Temperature: Ambient	Waste Code					
Flammable Liquid, Class I-A	**Megaflow AW HVI Hydraulic Oil** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**55** Storage Container: Steel Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
DOT: 3 - Flammable and Combustible Liquids	**MISCELLANEOUS LUBE OIL** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**220** Storage Container: Carboy Days on Site: 365	**5**	185 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Respiratory Skin Sensitization				
Flammable Liquid, Class I-B	**MOBIL DTE 26** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Pure	**110** Storage Container: Steel Drum Days on Site: 365	**55**	110 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
Flammable Liquid, Class I-B	**MULTIPURPOSE R+O OIL 220** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**165** Storage Container: Steel Drum Days on Site: 365	**55**	165 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	LUBRICANT BASE OIL ADDITIVES	99 % 1 %		
	Phillips Turbine Oil 100 CAS No Map: 1 Grid: 5H	**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 Hazard Not Otherwise Classified				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Lube Oil Storage | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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	**Release Number 1 VOC** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**55** Storage Container: Steel Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization				
	Reolube HYD 46 CAS No 107028-44-4 Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Pure	**110** Storage Container: Steel Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
DOT: 9 - Misc. Hazardous Materials	**Shell Morlina S3 BA 220** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**220** Storage Container: Steel Drum Days on Site: 365	**55**	165 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Skin Corrosion Irritation				
	SHELL TELLUS OIL CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Pure	**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				
DOT: 9 - Misc. Hazardous Materials	**Shell Turbo Oil DR 46** CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**55** Storage Container: Steel Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Carcinogenicity - Health Reproductive Toxicity - Health Respiratory Skin Sensitization - Health Specific Target Organ Toxicity - Health Aspiration Hazard				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: Lube Oil Storage

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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.
	TURBO T OIL 32 CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Pure	**385** Storage Container: Steel Drum Days on Site: 365	**55**	330 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				
	Vaprotec Light CAS No Map: 1 Grid: 5H	**Gallons** State: Liquid Type: Mixture	**55** Storage Container: Steel Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | MAINTENANCE SHOP | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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-B	***MISCELLANEOUS FLAMMABLE LIQUID, CLASS IB** CAS No Map: 1 Grid: 3J	**Gallons** State: Liquid Type: Pure	**65** Storage Container: Can, Glass Bottle or Jug, Plastic Bottle or Jug Days on Site: 365	**1**	65 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				
DOT: 2.1 - Flammable Gases Unstable (Reactive), Class 2, Flammable Gas	**ACETYLENE** CAS No 74-86-2 Map: 1 Grid: 3J	**Cu. Feet** State: Gas Type: Pure	**185** Storage Container: Cylinder Days on Site: 365	**185**	185 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Aspiration Hazard				
DOT: 2.2 - Nonflammable Gases	**ARGON / CARBON DIOXIDE** CAS No Map: 1 Grid: 3J	**Cu. Feet** State: Gas Type: Mixture	**501** Storage Container: Cylinder Days on Site: 365	**376**	501 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				
DOT: 2.2 - Nonflammable Gases	**ARGON, COMPRESSED** CAS No 7440-37-1 Map: 1 Grid: 3J	**Cu. Feet** State: Gas Type: Pure	**250** Storage Container: Cylinder Days on Site: 365	**250**	250 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Hazard Not Otherwise Classified				
DOT: 2.2 - Nonflammable Gases Oxidizing, Class 2	**OXYGEN** CAS No 7782-44-7 Map: 1 Grid: 3J	**Cu. Feet** State: Gas Type: Pure	**281** Storage Container: Cylinder Days on Site: 365	**281**	281 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Oxidizer - Health Hazard Not Otherwise Classified				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Chemical Location: OIL/WATER SEPARATOR
CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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 Toxic	**USED OIL** CAS No 70514-12-4 Map: 5 Grid: C	**Gallons** State Liquid Type Waste	**600** Storage Container Aboveground Tank Days on Site: 365	**600**	600 Pressue Ambient Temperature Ambient	500 Waste Code 352	- Physical Flammable - Health Respiratory Skin Sensitization				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | PROPANE STORAGE | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-B	***MISCELLANEOUS FLAMMABLE LIQUID, CLASS IB** CAS No Map: 1 Grid: 3H	**Gallons** State: Liquid Type: Pure	**55** Storage Container: Can, Plastic Bottle or Jug Days on Site: 365	**1**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Acute Toxicity - Health Serious Eye Damage Eye Irritation				
DOT: 2.1 - Flammable Gases Flammable Liquid, Class I-A	**PROPANE** CAS No 74-98-6 Map: 1 Grid: 3H	**Cu. Feet** State: Gas Type: Pure	**225** Storage Container: Cylinder Days on Site: 365	**15**	150 Pressue: < Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Aspiration Hazard				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: STATION SERVICE TRANSFORMERS

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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	**HYTRANS 61**	**Gallons**	**7038**	**3519**	7038		- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization	OIL, HYDRO LIGHT NAPH DIST	99 %		64742-53-6
	CAS No	State: Liquid	Storage Container: Other		Pressue: < Ambient	Waste Code		2, 6-DI-T-BUTYL-P-CRESOL (BHT)	1 %		128-37-0
	Map: 1 Grid: 2D, 3D	Type: Mixture	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: STEAM TURBINE CONTROL OIL TANK

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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 Turbo Oil DR 46** CAS No Map: 1 Grid: 4F	**Gallons** State: Liquid Type: Mixture	**200** Storage Container: Other Days on Site: 365	**200**	200 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: Steam Turbine Flammable Locker

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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-B	***MISCELLANEOUS FLAMMABLE LIQUID, CLASS IB** CAS No Map: 1 Grid: 4E	**Gallons** State: Liquid Type: Pure	**210** Storage Container: Can, Glass Bottle or Jug, Plastic Bottle or Jug Days on Site: 365	**1**	210 Pressue: Ambient Temperature: Ambient	Waste Code					
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class II	**Diesel Fuel** CAS No 68334-30-5 Map: 1 Grid: 4F	**Gallons** State: Liquid Type: Pure	**20** Storage Container: Can, Cylinder Days on Site: 365	**5**	10 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization				
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-B	**GASOLINE** CAS No 8006-61-9 Map: 1 Grid: 4F	**Gallons** State: Liquid Type: Pure	**70** Storage Container: Can Days on Site: 365	**5**	70 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Carcinogenicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - 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: METCALF ENGERGY CENTER
Chemical Location
CERS ID: 10097278

Facility Name: METCALF ENERGY CENTER
STEAM TURBINE PACKAGE
Facility ID: 43-060-409545

1 BLANCHARD RD, SAN JOSE 95013
Status: Submitted on 2/26/2021 7:38 AM

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	**CONOCO PHILLIPS TURBINE OIL 32** CAS No Map: 1 Grid: 4G	**Gallons** State: Liquid Type: Mixture	**6850** Storage Container: Other Days on Site: 365	**6650**	6850 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Health Hazard Not Otherwise Classified	TERT-BUTYLATED TRIPHENYL PHOSPHATES TRIPHENYL PHOSPHATE			68937406 115-86-6

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: Steam Turbine Under Deck

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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 Turbo Oil DR 46** CAS No Map: 1 Grid: H5	**Gallons** State: Liquid Type: Mixture	**55** Storage Container: Steel Drum Days on Site: 365	**55**	55 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization				
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class II	**USED OIL** CAS No NA Map: 1 Grid: F4	**Gallons** State: Liquid Type: Waste	**200** Storage Container: Tote Bin Days on Site: 365	**300**	100 Pressue: Ambient Temperature: Ambient	660 Waste Code: 221	- Physical Hazard Not Otherwise Classified - Health Respiratory Skin Sensitization				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: SWITCH YARD | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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	**FLOODED LEAD-CALCIUM BATTERY** CAS No Map: 1 Grid: 4B	**Gallons** State: Liquid Type: Pure	**9** Storage Container: Other Days on Site: 365	**0.6**	9 Pressue: Ambient Temperature: Ambient	Waste Code		LEAD, LEAD COMPONENTS	65 %		7439-92-1
								SULFURIC ACID	8 %	✓	7664-93-9
DOT: 2.2 - Nonflammable Gases	**SULFUR HEXAFLUORIDE** CAS No 2551-62-4 Map: 1 Grid: 4B	**Cu. Feet** State: Gas Type: Pure	**2970** Storage Container: Other Days on Site: 365	**594**	2970 Pressue: < Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013

Chemical Location: UNIT 1 CEMS GASES

CERS ID: 10097278
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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: 4H	**Cu. Feet** State: Gas Type: Mixture	**725** Storage Container: Cylinder Days on Site: 365	**145**	435 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	NITRIC OXIDE NITROGEN	0 % 99 %	✔	10102-43-9 7727-37-9
DOT: 2.2 - Nonflammable Gases	**NITROGEN / OXYGEN CALIBRATION GAS** CAS No Map: 1 Grid: 4H	**Cu. Feet** State: Gas Type:	**580** Storage Container: Cylinder Days on Site: 365	**145**	580 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: 4H	**Cu. Feet** State: Gas Type: Mixture	**280** Storage Container: Cylinder Days on Site: 365	**145**	280 Pressue: < Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant	NITROGEN OXYGEN CARBON MONOXIDE	83 % 12 % 5 %		7727-37-9 7782-44-7 124-38-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: | CERS ID: 10097278

Facility Name: METCALF ENERGY CENTER | UNIT 1 NITROGEN STORAGE | Facility ID: 43-060-409545

1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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**	**Cu. Feet**	**1380**	**230**	1380		- Physical Gas Under Pressure - Health Serious Eye Damage Eye Irritation				
	CAS No: 7727-37-9 Map: 1 Grid: 3E	State: Gas Type: Pure	Storage Container: Cylinder Days on Site: 365		Pressue: < Ambient Temperature: Ambient	Waste Code					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: UNIT 2 CEMS GASES | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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: 2H	**Cu. Feet** State: Gas Type: Mixture	**725** Storage Container: Cylinder Days on Site: 365	**145**	725 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	NITRIC OXIDE NITROGEN	0 % 99 %	✔	10102-43-9 7727-37-9
DOT: 2.2 - Nonflammable Gases	**NITROGEN / OXYGEN CALIBRATION GAS** CAS No Map: 1 Grid: 2H	**Cu. Feet** State: Gas Type:	**580** Storage Container: Cylinder Days on Site: 365	**145**	580 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: 2H	**Cu. Feet** State: Gas Type: Mixture	**280** Storage Container: Cylinder Days on Site: 365	**145**	280 Pressue: < Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Simple Asphyxiant	NITROGEN OXYGEN CARBON MONOXIDE	83 % 12 % 5 %		7727-37-9 7782-44-7 124-38-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location | CERS ID: 10097278

Facility Name: METCALF ENERGY CENTER | UNIT 2 NITROGEN STORAGE | Facility ID: 43-060-409545

1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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**	**Cu. Feet**	**1380**	**230**	1380		- Physical Gas Under Pressure - Health Serious Eye Damage Eye Irritation				
	CAS No: 7727-37-9	State: Gas	Storage Container: Cylinder		Pressue: < Ambient	Waste Code					
	Map: 1 Grid: 2E	Type: Pure	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER
Chemical Location: VARIOUS
CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER
1 BLANCHARD RD, SAN JOSE 95013
Facility ID: 43-060-409545
Status: Submitted on 2/26/2021 7:38 AM

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: F4 Grid: F2; F3	**Cu. Feet** State Gas Type Pure	**1320** Storage Container Cylinder Days on Site: 365	**220**	1320 Pressue Ambient Temperature Ambient	Waste Code	- Physical Gas Under Pressure - Health Acute Toxicity - Health Aspiration Hazard				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | WATER TREATMENT BUILDING | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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: 4J	**Gallons** State: Liquid Type: Mixture	**440** Storage Container: Plastic/Non-metalic Drum	**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	AMMONIUM HYDROXIDE Ethanolamine	30 % 10 %		1336-21-6 141-43-5
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT CL2250** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**30** Storage Container: Carboy Days on Site: 365	**5**	20 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	5-chloro-2-methyl-4-isothiazolin-3-one 2-methyl-4-isothiazolin-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: 4J	**Gallons** State: Liquid Type: Mixture	**75** Storage Container: Plastic/Non-metalic Drum, Other Days on Site: 365	**55**	60 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				
	CHEMTREAT P873L CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**400** Storage Container: Aboveground Tank, Other Days on Site: 365	**400**	400 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Hazard Not Otherwise Classified	Poly(dimethyldiallylammonium chloride)	30 %		26062-79-3
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT RL1245** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**565** Storage Container: Tank Inside Building Days on Site: 365	**400**	565 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Skin Corrosion Irritation	SODIUM BISULFITE			7631-90-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: WATER TREATMENT BUILDING | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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 RL9007** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**565** Storage Container: Tank Inside Building Days on Site: 365	**400**	510 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Hazard Not Otherwise Classified - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Diethylenetriamine penta methylene phosphonic acid	30 %		22042-96-2
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**CHEMTREAT-BL-1795** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**165** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue: Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	SODIUM PHOSPHATE, TRIBASTIC SODIUM HYDROXIDE	5 % 5 %		7601-54-9 1310-73-2
DOT: 9 - Misc. Hazardous Materials	**CONNTECT 6000** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**110** Storage Container: Plastic/Non-metalic Drum Days on Site: 365	**55**	110 Pressue: Temperature:	Waste Code	- Physical Hazard Not Otherwise Classified - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Ethylene Glycol Monobutyl Ether Ethoxylated Alcohols, C9 - C11	20 % 40 %		111-76-2 68439-46-3
DOT: 8 - Corrosives (Liquids and Solids)	**FERROQUEST FQ7101** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**5** Storage Container: Carboy Days on Site: 365	**5**	5 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org: METCALF ENGERGY CENTER | Chemical Location: WATER TREATMENT BUILDING | CERS ID: 10097278
Facility Name: METCALF ENERGY CENTER | Facility ID: 43-060-409545
1 BLANCHARD RD, SAN JOSE 95013 | Status: Submitted on 2/26/2021 7:38 AM

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	**FERROQUEST FQ7102** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**5** Storage Container: Carboy Days on Site: 365	**5**	5 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	PHOSPHONIC ACID,(1-HYDROXYETHYLIDINE)BIS FORMIC ACID GLYCOLIC ACID	20 % 13 % 5 %		2809-21-4 64-18-6 79-14-1
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**FERROQUEST LP7200** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**5** Storage Container: Carboy Days on Site: 365	**5**	5 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 - Health Germ Cell Mutagenicity				
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**SODIUM HYPOCHLORITE 12.5%** CAS No Map: 1 Grid: 4J	**Gallons** State: Liquid Type: Mixture	**300** Storage Container: Tank Inside Building Days on Site: 365	**400**	150 Pressue: Ambient Temperature: Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	SODIUM HYDROXIDE 10-60% SODIUM HYPOCHLORITE >12.5%-15% SODIUM CHLORIDE WATER	1 % 13 %		1310-73-2 7681-52-9 7647-14-5 7732-18-5

ECMPS Client Tool

Version 1.* 2020 Q1

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

April 27, 2020 11:25 AM

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. Finally, a summary of ECMPS`s Evaluation Results is included.

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 2020 QTR 1
Feedback Status Level:	Informational Message
Submission Date/Time:	04/27/2020 11:25:57 AM
Submitter User ID:	rsilva
Submission ID:	1334452
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@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; however, the Evaluation Results at the end of this Feedback Report contain one or more Informational Messages. If any of the Informational Messages indicates a reporting problem, the EPA strongly encourages you to correct the problem(s) and resubmit the data. 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 e-mail 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.

TECHNICAL SUPPORT: please visit the ECMPS Technical Support website at: https://ecmps.camdsupport.com for information about ECMPS software downloads, ECMPS News, Technical Support, documentation, tutorials, FAQs, and more.

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

If you have any questions regarding this correspondence, please feel free to contact your EPA Analyst listed in Table1 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	961					961
Operating Time (hrs)	907.30					907.30
SO2 Mass (tons)	0.4					0.4
CO2 Mass (tons)	88,196.0					88,196.0
Heat Input (mmBtu)	1,484,073					1,484,073
NOx Emission Rate (lb/mmBtu)	0.011					0.011

EVALUATION RESULTS

General

Severity	Check Code / Result	Result Message
INFORM	HOURGEN-14-A	You reported one or more daily calibration tests that will not fulfill your daily calibration testing requirement, because these tests were performed while the unit was not operating and you have not reported a prior online-offline calibration demonstration. These tests have been assigned a CalculatedTestResult of "IGNORED", and they can be viewed on the Daily Calibration tab of the View Detailed Emissions Screen. If you intend to use offline tests to fulfill your daily calibration testing requirement, you must conduct an online-offline calibration demonstration.

ECMPS Client Tool

Version 1.* 2020 Q1

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

April 27, 2020 11:26 AM

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 2020 QTR 1
Feedback Status Level:	No Errors
Submission Date/Time:	04/27/2020 11:26:08 AM
Submitter User ID:	rsilva
Submission ID:	1334456
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@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.

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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.

Facility Name: Metcalf Energy Center

Facility ID (ORISPL): 55393 State: CA

ECMPS Feedback

April 27, 2020 11:26 AM

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	1,165					1,165
Operating Time (hrs)	1,105.24					1,105.24
SO2 Mass (tons)	0.5					0.5
CO2 Mass (tons)	106,358.8					106,358.8
Heat Input (mmBtu)	1,789,694					1,789,694
NOx Emission Rate (lb/mmBtu)	0.012					0.012

ECMPS Client Tool

Version 1.* 2020 Q2 SP1

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

July 22, 2020 10:01 AM

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 2020 QTR 2
Feedback Status Level:	No Errors
Submission Date/Time:	07/22/2020 10:01:05 AM
Submitter User ID:	rsilva
Submission ID:	1350868
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@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.

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If you have any questions regarding this correspondence, please feel free to contact your EPA Analyst listed in Table1 as soon as possible. Thank you for your attention to this matter.

Facility Name: Metcalf Energy Center

Facility ID (ORISPL): 55393 State: CA

ECMPS Feedback

July 22, 2020 10:01 AM

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	961	564				1,525
Operating Time (hrs)	907.30	537.13				1,444.43
SO2 Mass (tons)	0.4	0.3				0.7
CO2 Mass (tons)	88,196.0	53,458.5				141,654.5
Heat Input (mmBtu)	1,484,073	899,533				2,383,606
NOx Emission Rate (lb/mmBtu)	0.011	0.011				0.011

ECMPS Client Tool

Version 1.* 2020 Q2 SP1

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

July 22, 2020 10:01 AM

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 2020 QTR 2
Feedback Status Level:	No Errors
Submission Date/Time:	07/22/2020 10:01:27 AM
Submitter User ID:	rsilva
Submission ID:	1350878
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@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.

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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.

Facility Name: Metcalf Energy Center

Facility ID (ORISPL): 55393 State: CA

ECMPS Feedback

July 22, 2020 10:01 AM

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	1,165	1,100				2,265
Operating Time (hrs)	1,105.24	1,030.52				2,135.76
SO2 Mass (tons)	0.5	0.5				1.0
CO2 Mass (tons)	106,358.8	100,513.5				206,872.3
Heat Input (mmBtu)	1,789,694	1,691,320				3,481,014
NOx Emission Rate (lb/mmBtu)	0.012	0.014				0.013

ECMPS Client Tool

Version 1.* 2020 Q3 SP1

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

October 8, 2020 06:32 AM

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 2020 QTR 3
Feedback Status Level:	No Errors
Submission Date/Time:	10/08/2020 6:32:54 AM
Submitter User ID:	rsilva
Submission ID:	1364165
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@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.

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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	961	564	1,991			3,516
Operating Time (hrs)	907.30	537.13	1,948.64			3,393.07
SO2 Mass (tons)	0.4	0.3	1.0			1.7
CO2 Mass (tons)	88,196.0	53,458.5	192,340.7			333,995.2
Heat Input (mmBtu)	1,484,073	899,533	3,236,507			5,620,113
NOx Emission Rate (lb/mmBtu)	0.011	0.011	0.008			0.009

ECMPS Client Tool

Version 1.* 2020 Q3 SP1

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

October 8, 2020 06:33 AM

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 2020 QTR 3
Feedback Status Level:	No Errors
Submission Date/Time:	10/08/2020 6:33:12 AM
Submitter User ID:	rsilva
Submission ID:	1364169
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@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 Table1 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.

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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.

Facility Name: Metcalf Energy Center

Facility ID (ORISPL): 55393 State: CA

ECMPS Feedback

October 8, 2020 06:33 AM

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	1,165	1,100	1,455			3,720
Operating Time (hrs)	1,105.24	1,030.52	1,401.09			3,536.85
SO2 Mass (tons)	0.5	0.5	0.7			1.7
CO2 Mass (tons)	106,358.8	100,513.5	137,963.2			344,835.5
Heat Input (mmBtu)	1,789,694	1,691,320	2,321,485			5,802,499
NOx Emission Rate (lb/mmBtu)	0.012	0.014	0.009			0.011

ECMPS Client Tool

Version 1.* 2020 Q4

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

January 5, 2021 09:36 AM

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 2020 QTR 4
Feedback Status Level:	No Errors
Submission Date/Time:	01/05/2021 9:36:50 AM
Submitter User ID:	rsilva
Submission ID:	1384695
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@epa.gov Stacey Zintgraff; (202) 564-2204; zintgraff.stacey@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.

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If you have any questions regarding this correspondence, please feel free to contact your EPA Analyst listed in Table1 as soon as possible. Thank you for your attention to this matter.

Facility Name: Metcalf Energy Center

Facility ID (ORISPL): 55393 State: CA

ECMPS Feedback

January 5, 2021 09:36 AM

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	961	564	1,991	2,003		5,519
Operating Time (hrs)	907.30	537.13	1,948.64	1,977.46		5,370.53
SO2 Mass (tons)	0.4	0.3	1.0	1.0		2.7
CO2 Mass (tons)	88,196.0	53,458.5	192,340.7	200,777.9		534,773.1
Heat Input (mmBtu)	1,484,073	899,533	3,236,507	3,378,482		8,998,595
NOx Emission Rate (lb/mmBtu)	0.011	0.011	0.008	0.008		0.009

ECMPS Client Tool

Version 1.* 2020 Q4

United States Environmental Protection Agency (EPA)
Emissions Collection and Monitoring Plan System (ECMPS) Feedback

January 5, 2021 09:37 AM

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.

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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 2020 QTR 4
Feedback Status Level:	No Errors
Submission Date/Time:	01/05/2021 9:37:12 AM
Submitter User ID:	rsilva
Submission ID:	1384700
Resubmission Required:	No
EPA Analyst:	Christopher Worley; (434) 817-4150; Worley.Christopher@epa.gov Stacey Zintgraff; (202) 564-2204; zintgraff.stacey@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.

TECHNICAL SUPPORT: please visit the ECMPS Technical Support website at: https://ecmps.camdsupport.com for information about ECMPS software downloads, ECMPS News, Technical Support, documentation, tutorials, FAQs, and more.

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/airmarkets/ecmps-reporting-instructions.

If you have any questions regarding this correspondence, please feel free to contact your EPA Analyst listed in Table1 as soon as possible. Thank you for your attention to this matter.

Facility Name: Metcalf Energy Center

Facility ID (ORISPL): 55393 State: CA

ECMPS Feedback

January 5, 2021 09:37 AM

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	1,165	1,100	1,455	1,704		5,424
Operating Time (hrs)	1,105.24	1,030.52	1,401.09	1,661.48		5,198.33
SO2 Mass (tons)	0.5	0.5	0.7	0.8		2.5
CO2 Mass (tons)	106,358.8	100,513.5	137,963.2	167,811.9		512,647.4
Heat Input (mmBtu)	1,789,694	1,691,320	2,321,485	2,823,747		8,626,246
NOx Emission Rate (lb/mmBtu)	0.012	0.014	0.009	0.008		0.010

Appendix 3

Operating Data Summary January 2020 - December 2020

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	65,641	771.9	January	69,161	814.4	January	80,543	4.89
February	35,378	413.8	February	52,870	630.9	February	51,970	10.01
March	24,453	288.5	March	28,039	334.5	March	30,879	5.85
April	19,386	226.4	April	53,222	630.0	April	41,785	8.67
May	-	-	May	29,005	355.7	May	17,009	9.60
June	55,372	658.7	June	57,265	675.7	June	69,211	32.79
July	85,003	1,024.2	July	45,832	543.9	July	82,159	29.31
August	100,178	1,185.4	August	83,268	980.8	August	119,927	74.46
September	81,185	967.6	September	61,839	735.2	September	91,888	49.39
October	99,466	1,174.2	October	75,442	885.2	October	110,317	37.00
November	76,288	901.5	November	64,209	753.0	November	83,665	18.59
December	110,915	1,289.3	December	101,739	1,177.6	December	129,933	46.57

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION		5/29/2005					
THROUGH YEAR END OF 2020		12/31/2020					
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by 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
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
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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION		5/29/2005					
THROUGH YEAR END OF 2020		12/31/2020					
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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	Monthly		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
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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION		5/29/2005					
THROUGH YEAR END OF 2020		12/31/2020					
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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
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
AQ-44	MEC shall comply with the continuous emission monitoring requirements of 40 CFR Part 75			Ongoing	Ongoing		Ongoing
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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION	5/29/2005						
THROUGH YEAR END OF 2020	12/31/2020						
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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
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
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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION		5/29/2005					
THROUGH YEAR END OF 2020		12/31/2020					
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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	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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION		5/29/2005					
THROUGH YEAR END OF 2020		12/31/2020					
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by 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
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
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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION		5/29/2005					
THROUGH YEAR END OF 2020		12/31/2020					
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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	Monthly		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
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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
START OF COMERCIAL OPERATION		5/29/2005					
THROUGH YEAR END OF 2020		12/31/2020					
Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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
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
AQ-44	MEC shall comply with the continuous emission monitoring requirements of 40 CFR Part 75			Ongoing	Ongoing		Ongoing
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

METCALF ENERGY CENTER - COMPLIANCE MATRIX							
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Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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
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
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

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Condition No.	**Requirements & Task Summary**	**Action required**	**Event**	**Required Submittal Date**	**Date submitted to CPM**	**Date approved by CPM**	**Status/ Comments**
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	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

- 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
- TLSN-2: Radio and TV Interference
- TLSN-4: Transmission Right-of-Way
- 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 Specialist, at 408-361-4954.

Sincerely,

Charles Spandri
Interim Plant Manager
Metcalf Energy Center, LLC.

Enclosures: Via Email

California Energy Commission
2020 Annual Compliance Report
Metcalf Energy Center – 99-AFC-3

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