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CALPINE CORPORATION

DELTA ENERGY CENTER
1200 ARCY LANE
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February 15, 2019

John Heiser
Compliance Project Manager
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

Re: Delta Energy Center, LLC 98-AFC-3
2018 Annual Compliance Report

Dear Mr. Heiser,

As required by various General and specific Conditions of Certification of Commission Decision 98-AFC-3, commencing from AQ-19 for the Delta Energy Center (DEC), this will serve to satisfy the requirement for the Annual Compliance Report for Calendar Year 2018.

Enclosed please find information documenting emissions and other verification confirming compliance with the Air Quality Conditions of Certification for your review.

If you have any questions or would like to discuss anything about this submittal, do not hesitate to contact Maria Barroso, EHS Specialist at (925) 259-8286 or myself at (925) 252-2096.

Sincerely,

Jody Batten
Authorized Signatory and General Manager

Enclosures

Delta Energy Center

Annual Compliance Report 2018

This Report will serve to satisfy the California Energy Commission Final Decision 98-AFC-3 for the Delta Energy Center (DEC) for an Annual Report for compliance with General Conditions of Certification. Included, herein, will be information and documentation to demonstrate compliance with the CEC Conditions and information where there may have been instances of non-compliance with any Conditions.

Updated Compliance Matrix

Included, as **Attachment 1**, is a current compliance matrix indicating the status of the Conditions of Certification. Omitted from the list are Conditions determined to have been completed by the CEC Compliance Project Manager (CPM). The remaining Conditions are generally those that require reporting on either a semi-annual or annual basis.

Summary of Current Project Operating Status

The DEC commenced Commercial Operation on June 17, 2002. On January 29, 2017 the DEC experience a catastrophic steam turbine failure that resulted in a fire and an offsite release of 150 gallons of mineral oil into Dowest Slough. On February 22, 2017, Delta Energy Center LLC, the owner/operator of the Delta Energy Center, submitted a petition requesting to modify the Delta Energy Center to make temporary modifications to the steam turbine condenser to run the facility in simple cycle mode. The modifications will allow the Delta Energy Center to continue repairs to the steam turbine while the facility returns to service in simple cycle mode to support the California Independent System Operator in resource planning for the summer of 2017. In simple cycle mode, Delta Energy Center would provide approximately 500 to 544 MW of capacity and voltage support to the applicable resource area. The steam turbine repairs were completed on December 28, 2017. The plant returned to combined cycle operation mode.

All three combustion turbine generators and steam turbine generator have been in normal operation since that date. The plant operated 13,309 hours during calendar year 2018. Unit 1 operated 4,692 hours, Unit 2 operated 4,516 hours and Unit 3 operated 4,101 hours during 2018.

Unit 1 had 1 hour in support of steam turbine cold startup. Unit 2 had 8.5 hours in support of steam turbine cold startup. Unit 3 had 12.5 hours in support of steam turbine cold startup. There were no tuning events performed on any of the units during the year. Refer to **Attachment 8**, Cold Steam Turbine Startup Report.

DEC continues to operate under an "Automatic Generation Control" (AGC) mode through the Independent System Operator (ISO). While in AGC mode, the ISO controls the loads of the units, raising or lowering the loads, as conditions require.

Documents and Information Required By Specific Conditions.

Several Conditions of Certification require the submittal of certain information and/or documentation to demonstrate compliance or to provide the CEC with specific information. Those Conditions are described below:

Hazardous Materials A list of hazardous materials used at DEC is required to be submitted to the CEC on an annual basis as required by **HAZ-1**. This list is included as **Attachment 2.**

Air Quality Emissions from DEC are monitored through the use of Continuous Emissions Monitoring Systems (CEMS). Numerous air quality conditions require the submittal of emissions data obtained from the CEMS. The emissions data for the Combustion Turbines is submitted in the Semi-Annual Report in July 2018 and January 2019 and will not be duplicated in this Annual Report. The following information is included: as:

Attachments 3 - 12 Month Periods for total mass emissions for 2018

Attachments 4 - Emissions of Toxic Air Contaminants projected for 2019

Other air quality conditions require a statement and/or confirmation that compliance has been maintained throughout the year. Non-compliance is to be reported on an "exception" basis. The following table affirms compliance with the conditions as noted in **Table 1 Air Quality Exceptions Report**. There were no enforcement actions or Notices of Violation (NOV) issued by the BAAQMD.

Waste Management Condition of Certification, **WASTE-1**, requires that DEC report on the methods used to dispose of the hazardous waste generated from the plant. The typical types of

hazardous wastes generated include used oil, oily debris and other waste generated during tank cleanings and maintenance activities. Used oil is collected under the Consolidated Manifest Program. The used oil is recycled through a licensed used oil recycler. A matrix of the hazardous waste generated at the facility during the reporting year is attached per CEC condition **WASTE-3**. The matrix is included as **Attachment 9**.

Transmission Line Safety and Nuisance Condition of Certification **TLSN-2** requires the reporting of any complaints of radio or television interference from operation of DEC. There have been no complaints of any interference since the plant has been in operation. Condition **TLSN-4** requires that the transmission line right of way be inspected annually and be maintained free of any combustible materials. The transmission line right-of-way is inspected semi-annually, **Attachment 5**. This year the inspections were conducted April and October during 2018. Planned Environments Group removes excessive vegetation and trash along the right-of-way and perimeters of the towers.

Site Maintenance Condition of Certification, **VIS-1** requires reporting on the status of the color treatment (paint) at DEC. Overall, the color treatment has held up well and extensive or touch up repainting has not been required.

Condition of Certification, **VIS-5**, requires complying with the City of Pittsburg Zoning Ordinance Section 18.82.045. DEC has maintained compliance with the ordinance in keeping the exterior of the buildings and other structures in a good state of repair and the exterior finish is clean and well maintained. There has been no need to repaint or touch up any of the equipment. Additionally, the site is 95% paved and landscaping was installed on the southern perimeter that has been kept in a neat and orderly manner, free of weeds, loose trash, debris and other litter.

Cooling Tower Drift Eliminators Condition of Certification, PH-1B, requires an annual inspection of the cooling tower drift eliminators, and to repair or replace any drift eliminator components which are broken or missing. The drift eliminators were inspected in 2018, **Attachment 6**. Repairs are scheduled for the spring outage in May 2019.

Post-Certification Changes

There have been seven Amendment requests submitted and approved by the CEC since the Final Decision was approved. **Amendment 7** was approved in March 2017, which approved temporary modifications to the steam turbine condenser to run the facility in simple cycle mode. The modifications will allow the Delta Energy Center to continue repairs to the steam turbine while the facility returns to service in simple cycle mode to support the California Independent System Operator in resource planning for the summer of 2017. In simple cycle mode, Delta Energy Center would provide approximately 500 to 544 MW of capacity and voltage support to the applicable resource area. The Delta Energy Center completed repairs to the steam turbine on December 28, 2017 and the plant returned to combined cycle mode that same day. **Amendment 6** was approved in September 2004, which requested a revision to the Permit to allow for additional emissions during cold Steam Turbine start ups and to allow for the periodic tuning of the combustion turbines. **Attachment 10** describes the six Amendments. There have also been five requests for Condition of Certification Verification Language changes and approved by the CPM. They are described in **Attachment 7**.

Submittal Deadlines Missed.

There was no submittal deadlines missed during this reporting period.

Filings Made To or Approved By Other Agencies.

During the calendar year 2018, several reports were submitted as required. Besides the CEC, other agencies to which reports were made include the BAAQMD, Contra Costa County, Delta Diablo Sanitation District, Department of Toxic Substance Control, EPA and the Regional and State Water Boards. The specific reports are described below:

BAAQMD

- Annual Information Update
- Annual STG cold start and tuning report

- Toxic Air Contaminants Estimates
- Annual Source Test Report and RATA
- Annual Source Test Plan
- CEMS Monthly Reports
- Title V Compliance Certification
- Title V Semi Annual Monitoring Reports
- Title V Administrative Amendment

Contra Costa County Health Services

- Hazardous Materials Business Plan and Inventory

Delta Diablo Sanitation District

- Monthly Industrial Blowdown Monitoring Reports
- Semi-Annual Wastewater Discharge Reports

Department of Toxic Substances Control

- Hazardous Waste Manifests and EPA Identification Number Verification Report

Environmental Protection Agency

- Annual Source Test and RATA test notifications
- Semi-Annual NSPS Reports
- Title IV Acid Rain Quarterly Electronic Data Reports
- Title V Compliance Certification Report

Regional Water Quality Control Board

- Annual Storm Water Monitoring Report

State Water Resources Control Board

- None

Compliance Activities Scheduled For Coming Year

There are several compliance activities that will occur during the upcoming year.

Additions to the On-Site Compliance File

The significant on-site compliance files for DEC currently consists of all of the Monthly Compliance Reports, copies of Amendment requests and approvals, Verification Language Requests, correspondence with the CPM and other CEC staff, and reports or permits granted by other governmental agencies. Other compliance files include EPA New Source Performance

Standards (NSPS) and Electronic Data Reporting (EDRs) submittals. Both the NSPS and EDR files are an on-going compliance activity and will be added to the on-site files as they are submitted. Other additions to the file would include BAAQMD correspondence and required reports, which include permit modification applications, any emissions Episodes Reports or Notices of Violation, monthly CEMS reports, and other operating data.

Evaluation of the On-Site Contingency Plan

The on-site Contingency Plan for DEC was developed and submitted to the CEC in March 2004. Information contained in other Calpine plans was reviewed for incorporation into the DEC contingency plan. All of the mechanisms remain in place that would facilitate the unexpected temporary or permanent closure of DEC. Evacuation and Emergency Action plans have already been developed in the event of an emergency evacuation and temporary shutdown of the plant. Maintenance procedures are in place to accommodate any extended shutdown. Insurance mechanisms are also in place to coordinate any unexpected or permanent plant closure.

Non-Compliance with Conditions of Certification

During this reporting period for DEC there were no instances of non-compliance with conditions contained in the BAAQMD Authority to Construct or the Final Decision. There were no excess emissions associated with start-up limitations or steady state conditions.

Table 1
Air Quality Exceptions Report

AQ Condition	Response
19	The CTs and HRSGs were fired exclusively on natural gas.
22	The combined heat input limit of 53,188,532 MMBTU/year for the CT/HRSGs was not exceeded.
23	The duct burners in either HRSG were not operated without a CT in operation.
24/25/26	There were no problems encountered with the SCR for any of the HRSGs.
27	There were no exceedances of the emission limits for NOx, CO, NH3 or POC during the operation of the CT/HRSGs.
28	There were no exceedances of emission limitations during a start up and shutdown for any CT/HRSG
30	All HRSGs are capable of having oxidation catalysts installed. The BAAQMD has not requested that they be installed.
31 – 37	Conditions for the Auxiliary Boiler were deleted by the BAAQMD.
38 – 45	Conditions for the CPPP were deleted by the BAAQMD. CPPP was decommissioned.
46	The combined daily fuel consumption limit of 162,360 MMBTU/day for all combustion sources was not exceeded. (150,072)
47	The combined cumulative heat input rate of 53,770,760 MMBTU/year for the CTs/HRSGs was not exceeded. (53,188,532)
48	The combined daily emission limits for all combustion sources, including during start up and shutdowns was not exceeded.
49	The cumulative combined emissions from all sources were not exceeded in any 12 month period.
50	The maximum projected TACs for were not exceeded.
51	There were no problems encountered with the CEMS.
52	There were no exceedances of the daily mass emissions limitations.
53	The maximum projected TAC emissions limitations were not exceeded. See Attachment No. 4.

ATTACHMENT 1

DELTA ENERGY CENTER
CONDITIONS OF CERTIFICATION COMPLIANCE MATRIX
CALENDAR YEAR 2018

Condition Number	Requirements & Task Summary	Action required	Lead Response	Agency	Event	Required Submittal Date	Actual Submittal Date	Compliance Status/Comments
GEN-9A	The project owner shall file a **closure/decommissioning plan** with the City of Pittsburg and the CPM for review and approval at least 12 months (or other mutually agreed to time) prior to commencing the closure activities. If the project is abandoned before construction is completed, the project owner shall return the site to its original condition. (See P 66 for decommissioning details)	If the project is abandoned before construction is completed, the project owner shall return the site to its original condition.	Owner	N/A	Project is Abandoned Before Construction is Completed	Upon plant closure.	NA	Upon plant closure.
GEN-9B	The project owner shall file a **closure/decommissioning plan** with the City of Pittsburg and the CPM for review and approval at least 12 months (or other mutually agreed to time) prior to commencing the closure activities. If the project is abandoned before construction is completed, the project owner shall return the site to its original condition. (See P 66 for decommissioning details)	At least 12 months prior to closure or decommissioning activities, the project owner shall file a copy of the closure/decommissioning plan with The City of Pittsburg and the CPM for review and approval. Prior to the submittal of the closure plan, a meeting shall be held between the project owner and the CPM for discussing the specific contents of the plan	Owner	City of Pittsburg and CPM	Closure or Decommissioning	Upon plant closure.	NA	Upon plant closure.
TLSN-2	Identify and correct all **complaints of interference w/ radio and TV signals** from operation. of line and facilities. Maintain written records of complaints and corrective actions for 5 years.	All reports of line-related complaints shall be summarized and included in the Annual Compliance Report to the CPM	Owner	CPM	Annual Compliance Report	2/18/2019	2/15/2019	None received
TLSN-4	The project owner shall ensure that the **transmission line right-of-way is kept free of combustible material** as required under the provisions of Public Resources Code Section 4292;Title 14 of the California Code of Regulations, Section 1250 et seq. and GO-95.	The project owner shall provide a summary of inspection results and any fire prevention activities along the right-of-way in the annual compliance report.	Owner	CPM	Annual Compliance Report	2/18/2019	2/15/2019	Semi-Annual inspections Completed.
AQ-19	GTs (S-1, S-3, S-5) and HRSG (S-2, S-4, S-6) shall be fired exclusively on natural gas	As part of the semiannual Air Quality Reports (as required by AQ-43), the project owner shall indicate the date, time, and duration of any violation of this condition.	Owner	CPM	Semiannual Air Quality Reports After Commissioning	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-20	Combined heat input rate of each power train (S-1 & S-2, S-3 & S-4, S-5 & S-6) shall not exceed 2,125 MMBtu/hr (3-hour rolling average)	As part of the Air Quality monthly Reports, the owner/operator shall include information on the date and time when the hourly fuel consumption exceed this hourly limit.	Owner	CPM	Monthly Air Quality Reports After Commissioning	End of Month (EOM)	Monthly CEMS Reports 2018.	On-going.
AQ-21	Combined heat input rate of each power train (S-1 & S-2 and S-3 & S-4) shall not exceed 50,024 MMBtu/day	As part of the Air Quality monthly Reports, the owner/operator shall include information on the date and time when the hourly fuel consumption exceed this hourly limit.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-22	Combined heat input rate of all GTs (S-1, S-3, S-5) and all HRSGs(S-2, S-4 & S-6) shall not exceed 53,188,532 MMBtu/yr.	As part of the Air Quality annual Reports, the owner/operator shall include information on the date and time when the annual fuel consumption exceed this annual limit	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-23	HRSGs (S-2, S-4, S-6) should not be fired unless associated GTs (S-1, S-3, S-5) are in operation.	As part of the Air Quality Reports, the owner/operator shall include information on the date, time, and duration of any violation of this permit condition.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-24	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 bed has reached min. operating temperature.	As part of the semiannual Air Quality Reports, the owner/operator shall 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. The information shall include, at a minimum, the date and description of the problem and the steps taken to resolve the problem.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-25	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 bed has reached min. operating temperature.	As part of the semiannual Air Quality Reports, the owner/operator shall provide information on any major problem in the operation of the Oxidizing Catalyst and Selective Catalytic Reduction Systems for the Gas Turbines and HRSGs. The information shall include, at a minimum, the date and description of the problem and the steps taken to resolve the problem.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-26	GT/HRSG (S-5/S-6) shall be abated by the A-3 SCR system whenever fuel is combusted in these units and the A-3 bed has reached min. operating temperature.	As part of the semiannual Air Quality Reports, the owner/operator shall provide information on any major problem in the operation of the Oxidizing Catalyst and Selective Catalytic Reduction Systems for the Gas Turbines and HRSGs. The information shall include, at a minimum, the date and description of the problem and the steps taken to resolve the problem.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.

DELTA ENERGY CENTER
CONDITIONS OF CERTIFICATION COMPLIANCE MATRIX
CALENDAR YEAR 2018

Condition Number	Requirements & Task Summary	Action required	Lead Response	Agency	Event	Required Submittal Date	Actual Submittal Date	Compliance Status/Comments
AQ-27(a)	Emission requirements (excluding start-up and shutdown): Emission Point P-1 NOx (S-1/S-2/A-1) = 19.2 lbs/hr [0.00904 lbs/MMBtu (HHV) of nat. gas fired] Emission Point P-2 NOx (S-3/S-4/A-2) = 19.2 lbs/hr [0.00904 lbs/MMBtu (HHV) of nat. gas fired] Emission Point P-3 NOx (S-5/S-6/A-3) = 19.2 lbs/hr [0.00904 lbs/MMBtu (HHV) of nat. gas fired]	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-27(b)	NOx Emissions = 2.5 ppmvd (15% O2), 1-hr average {Emission Point P-1, P-2 and P-3}	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-27(d)	CO concentration = 10 ppmvd (dry basis, 15% O2) (3-hr rolling average) (Emission Point P-1, P-2, P-3). May seek higher emissions (24 ppm on dry basis, 15% O2) for power steam augmentation case if lower concentration limit cannot be met.	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-27(e)	Ammonia (NH3) emission concentration = 10 ppmvd (dry basis, 15% O2) (3-hour rolling process). Ammonia injection rate to A-1, A-2, A-3 to be verified through continuous recording of rate. Determine correlation rate between GT and HRSG heat input rate and SCR ammonia injection rates, and corresponding ammonia emission concentration at P-1, P-2, P-3 in accordance with Condition 54.	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-27©	CO emissions = 0.022 lbs/MMBtu (HHV) of natural gas fired or 46.75 lbs/hr (3-hour rolling average) (Emission Point P-1, P-2, P-3). May seek higher emissions (up to 113.7 lbs/hr or 0.00535) for power steam augmentation case if lower emission limit cannot be met.	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-27(f)	Precursor organic compounds (POC) emissions = 5.33 lbs/hr or 0.00251 lbs/MMBtu of natural gas fired. (Emission points P-1, P-2, P-3)	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-27(g)	Sulfur dioxide (SO 2) mass emission's at P-1 ,P-2 ,and P-3 each shall not exceed 1 .49 pounds per h our or 0 .00 07 lb /MM BTU of natural gas fired.(BACT)	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	N/A	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	Deleted under application 9249
AQ-27(h)	Particulate matter (PM10)mass emission s at P-1 ,P-2 ,and P-3 each shall not exceed 12 pounds per hour or 0.0 05 65 lb /M M BTU of natural gas fired.(BACT)	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-28	GT Start-up and Shutdown emission rates: ~~Cold~~ Start-up (lbs/event): NOx= 240, CO =2514, POC=48 ~~Hot Startup~~ Shutdown (lbs/event): NOx=80, CO=902, POC=16 ~~Shutdown (lbs/event): NOx=18.1, CO= 44.1, POC=8~~	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-29	Not more than one GT (S-1, S-2, S-3) shall be in start-up mode at any one time.	In the monthly compliance report the owner/operator shall indicate how this condition is being implemented.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-46	Combined heat rate for GT's (S-1, S-3, S-5) and HRSGs (S-2, S-4, S-6), and auxiliary boilers (S-7, S-8) shall not exceed 162,360 MMBtu per calendar day.	As part of the semiannual Air Quality Reports, the owner/operator shall include information on the date and time when the daily fuel consumption exceeds this daily limit.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-47	Cumulative heat rate for GT's (S-1, S-3, S-5), HRSGs (S-2, S-4, S-6), ~~and auxiliary boilers (S-7, S-8)~~ shall not exceed 53,770,760 MMBtu per year	As part of the semiannual Air Quality Reports, the owner/operator shall include information on the date and time when the annual fuel consumption exceeds this annual limit.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.

DELTA ENERGY CENTER
CONDITIONS OF CERTIFICATION COMPLIANCE MATRIX
CALENDAR YEAR 2018

Condition Number	Requirements & Task Summary	Action required	Lead Response	Agency	Event	Required Submittal Date	Actual Submittal Date	Compliance Status/Comments
AQ-48	Total combined emissions from GT's and HRSG's, ~~and Aux Boilers~~ (S-1, S-2, S-3. S-4, S-5, S-6, ~~S-7, S-8~~), excluding start-up and shutdown (lbs/day) shall not exceed: NOx= 2134.5, CO=13,204.4, POC=503.6, PM10=876.3, SO2=105.2	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-49	Total combined emissions from GT's and HRSG's, ~~and Aux Boilers~~ (S-1, S-2, S-3. S-4, S-5, S-6, ~~S-7, S-8~~), excluding start-up and shutdown (tons/12-month period) shall not exceed: NOx= 279.9, CO=1116, POC=74.4, PM10=140.57, SO2=18.6	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-50(a-c)	Maximum projected annual toxic air emissions from GT's and HRSG's, ~~and Aux Boilers~~ (S-1, S-2, S-3. S-4, S-5, S-6, ~~S-7, S-8~~): (a) formaldehyde = 5945 lbs/yr, (b) Benzene = 709 lbs/yr, (c) PAHs=120.5	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-50(d)	Perform health risk assessment using emission rates per Bay Area Air Quality Management District (BAAQMD) procedures. See Condition 50 (d) for cancer risk threshold criteria (1x10E-06).	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	Not necessary to date.
AQ-51 (a-d)	Demonstrate compliance with conditions 20-23, 27(a-d), 28, 29, ~~32-34, 37(a-d)~~, 46, 47, 48(b), 49(a-b) by using continuous monitors during all operating hours for the following parameters: (a) Firing hours, fuel flow rates (for S-1 & S-2, S-3 & S-4, S-5 & S-6, ~~S-7, S-8~~) (b) O2, NOx, CO for emission points P-1, P-2, P-3, ~~P-4 and P-5~~ (c) Ammonia injection rate for A-1, A-2, A-3, A-4, ~~A-5 and A-7~~ SCR systems (d) Steam injection rate at S-1, S-3, & S-5 GT combustors	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-51(e-f)	Use parameters in condition 51(a-d) and District approved methods to calculate: (e) Heat input rate for S-1 & S-2, S-3 & S-4, S-5 & S-6, ~~S-7, S-8~~. (f) Corrected NOx and CO concentrations and mass emissions at each exhaust point (P-1, P-2, P-3, ~~P-4, and P-5~~)	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-51(g-l)	For each source, source grouping, or exhaust point record parameters, per condition 51(e) and 51(f), at least once every 15 minutes (exclude calibration periods) and calculate and record: (g) Total heat input rate for every clock hour and average hourly Heat Input Rate for every rolling 3-hour average. (h) Cumulative Heat Input Rate (hourly basis) for each calendar day for each GT & HRSG unit, ~~each Aux Boiler~~, and all 6 ~~eight~~ sources combined (S-1 thru S-5 S-8) (i) Average NOx and CO mass emissions and corrected NOx and CO emission concentrations for each clock hour and for every rolling 3-hour period. (j) Cumulative Total NOx and CO mass emissions (hourly basis) for each calendar day for each GT & HRSG unit, ~~each Aux Boiler~~, and all ~~eight~~ six sources combined (S-1 thru S-5 S-8) (k) Average hourly Heat Input Rates, Corrected NOx and CO emission concentrations and corresponding mass emission rates for each GT and HRSG, ~~and Aux Boiler~~ for each calendar day. (l) Cumulative total NOx and CO mass emissions (daily basis) for previous 12-month period for all six ~~eight~~ sources (S-1 thru S-5 S-8).	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-52.(a-b)	Demonstrate compliance with conditions 27(f-h), 28, 48(c-e), 49(c-e) by calculating and recording on a daily basis POC, PM10, and SO2 mass emissions from each power train and the aux boilers. Present calculated emissions for: (a) POC, PM10, and SO2 emissions for each power train, ~~the Aux Boilers~~ and all six eight sources combined for each calendar day (b) Cumulative total POC, PM10, and SO2 emissions (daily basis) for each year for all ~~eight~~ (six) sources combined.	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.

DELTA ENERGY CENTER
CONDITIONS OF CERTIFICATION COMPLIANCE MATRIX
CALENDAR YEAR 2018

Condition Number	Requirements & Task Summary	Action required	Lead Response	Agency	Event	Required Submittal Date	Actual Submittal Date	Compliance Status/Comments
AQ-53	Calculate and record on annual basis the max. projected annual emissions of formaldehyde, benzene, Specified Poly-Aromatic Hydrocarbons (PAH's) (Use max heat input rate of 32,912,920 MMBtu/year and highest emission factor determined by any source test of the GT and HRSG and Aux Boiler.)	As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.
AQ-54A	Conduct a District-approved source test on exhaust points P-1, P-2, and P-3 to determine the corrected ammonia concentration to determine compliance with condition 27(e). The test will determine the correlation between heat input rates of the GT and associated HRSG, A-1, A-2, A-3 SCR System ammonia injection rate and the corresponding ammonia (NH3) emission concentration at P-1, P-2, P-3. Test shall be conducted over the expected operating range (70%, 85%, and 100% loads) to establish the range of ammonia injection rated needed to achieve NOx reductions while maintaining ammonia slip levels.	Approval of the source test protocols and the source test reports shall be deemed as verification for this condition. The owner/operator shall notify the District and the CEC CPM within seven (7) working days before the execution of the source tests required in this condition.	Owner	CPM and BAAQMD	Execution of the Source Tests per AQ-54	8/7/2018	7/2/2018	On-going.
AQ-60	Submit all reports as required by District Rules or Regulations and in accordance with Rule, Regulation, Manual of Procedures, or Enforcement Division Policies & Procedures Manual	Submittal of the reports to the CEC CPM constitutes verification of compliance with this condition. All reports shall be submitted to the CEC CPM within thirty (30)days after they are due according to District Rules and Regulations.	Owner	CPM	AQ Reports Due According to BAAQMD Rules	EOM	Monthly CEMS Reports 2018.	On-going.
AQ-61	Maintain records and reports on site for a minimum of 5 years. These records shall include: CEM records, source test and analytical records, natural gas sulfur content analysis results, emission calculation records, record of plant upsets and related incidents.	During site inspection, the owner/operator shall make all records and reports available to the District, California Air Resources Board, and CEC staffs.	Owner	BAAQMD and CPM	AQ Inspection per AQ-61		N/A	On-going.
AQ-62	Notify District and CPM of any violations of these permit conditions. Submit notifications in a timely manner in accordance with Rule, Regulation, Manual of Procedures, or Enforcement Division Policies & Procedures Manual	Submittal of these notifications as required by this condition is the verification of these permit conditions .In addition, as part of the Air Quality Reports, the owner/operator shall include information on the dates when these violations occurred and when the owner/operator notified the District and the CEC CPM.	Owner	CPM	Violation of Permit Conditions Per AQ-62		As necessary	On-going.
AQ-71	Take monthly samples of natural gas combusted at DEC and analyze these samples for sulfur content using District-approved lab methods. Retain results on site for five years.	The owner/operator shall maintain on site the records of all the guarantees received from its natural gas suppliers indicating that the fuel delivered to DEC complies with the 40 CFR Part 60,Subpart GG. These records shall be made available to the District or the CEC CPM upon request during on- site compliance inspections.	Owner	CPM	On-site Compliance Inspections per AQ 71	EOM	Monthly samples 2018	On-going.
AQ-72A	Cooling towers shall be properly maintained to minimize drift losses - they will be equipped with high-efficiency mist eliminators with a max guaranteed drift rate of 0.0006%. Max total dissolved solids (TDS) measured at the base of the towers or at point of return to wastewater facility shall not be higher than 5233 ppmvw (mg/l). Sample water at least once per day.	Cooling towers shall equipped with high-efficiency mist eliminators with a max guaranteed drift rate of 0.0006%. Max total dissolved solids (TDS) measured at the base of the towers or at point of return to wastewater facility shall not be higher than 5233 ppmvw (mg/l).	Owner	N/A	Issue of Cooling Tower Specification	N/A	N/A	On-going.
AQ-72B	Cooling towers shall be properly maintained to minimize drift losses - they will be equipped with high-efficiency mist eliminators with a max guaranteed drift rate of 0.0006%. Max total dissolved solids (TDS) measured at the base of the towers or at point of return to wastewater facility shall not be higher than 5233 ppmvw (mg/l). Sample water at least once per day.	Submit a performance guarantee letter from the cooling tower manufacturer prior to its installation - keep records on-site on the TSC content of the water in the cooling tower.	Owner	CPM	Installation of Cooling Tower per AQ-72	9/26/2001	N/A	On-going.
AQ-73a	Perform visual inspection of cooling tower drift eliminators once per calendar year and repair or replace any drift eliminators which are broken or missing. In years 5 and 15 perform a source test to determine PM10 emission rate from the tower to verify continued compliance with vendor-guaranteed drift rate (Condition 71)	As part of the monthly Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation.	Owner	CPM	Semi-Annual Report July 2017 & Jan 2018; Annual Report February 2018.	7/31/18 & 1/31/2019	7/31/18 & 1/22/2019	On-going.

DELTA ENERGY CENTER
CONDITIONS OF CERTIFICATION COMPLIANCE MATRIX
CALENDAR YEAR 2018

Condition Number	Requirements & Task Summary	Action required	Lead Response	Agency	Event	Required Submittal Date	Actual Submittal Date	Compliance Status/Comments
Public Health-1B	The project owner shall perform a **visual inspection of the cooling tower drift eliminators** once per calendar year, and repair or replace any drift eliminator components which are broken or missing. Prior to initial operation of the project, the project owner shall 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 CPM may, in years 5 and 15 of project operation, require the project owner to perform a source test of the PM10 emissions rate from the cooling tower to verify continued compliance with the vendor guaranteed drift rate	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. The initial compliance report will include a copy of he cooling tower vendors field representatives inspection report of the drift eliminator installation. If the CPM requires a source test as specified in Public Health-1, the project owner shall submit to the CPM for approval a detailed source test procedure 60 days prior to the test. The project owner shall incorporate the CPM s comments, conduct testing, and submit test results to the CPM within 60 days following the tests.	Owner	CPM	Annual Compliance Report	2/18/2019	2/15/2019	On-going.
HAZ-1	The project owner shall not use any hazardous material in reportable quantities, as specified in Title 40,Code of Federal Regulations, Part 355, Subpart J, Section 355.50, that is not listed by chemical name in **HAZMAT** Table 8.12-12 (appended hereto),unless approved in advance by the CPM.	The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.	Owner	CPM	Annual Compliance Report	2/18/2019	2/15/2019	On-going.
WASTE-2	Upon becoming aware of any impending **waste management-related enforcement action**, the project owner shall notify the CPM of any such enforcement action taken or proposed to be taken against it, or against any waste hauler, disposal facility, or treatment facility operator with which the owner contracts.	The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action.	Owner	CPM	Waste Management - Pending Enforcement Action per WASTE-2		None	On-going.
SOIL & WATER-4A	The project owner shall use tertiary treated **effluent from the Delta Diablo Wastewater Treatment Facility for cooling water make-up** whenever possible. If water from the Contra Costa Canal is used for cooling water make-up for more than 14 days, the project owner shall notify staff in writing of this fact and explain why the backup source is being used	Design Cooling Water System for makeup water from Delta Diablo Wastewater Treatment Facility or Contra Costa Canal	BPC	N/A	Cooling Water System Design per SOIL & WATER-4			On-going.
SOIL & WATER-4B	The project owner shall use tertiary treated **effluent from the Delta Diablo Wastewater Treatment Facility for cooling water make-up** whenever possible. If water from the Contra Costa Canal is used for cooling water make-up for more than 14 days, the project owner shall notify staff in writing of this fact and explain why the backup source is being used.	The project owner shall notify the Energy Commission CPM in writing if the backup water supply is used for cooling water make-up for more than 14 consecutive days. The notification should explain the cause of the interruption and the anticipated time when treated effluent will again be available.	Owner	CPM	14 Consecutive Days of Back-up Water Use per SOIL & WATER-4			On-going.
CUL-16	Include in **facility closure plan** a description regarding facility closure activity's potential to impact cultural resources. Conditions of closure will be determined when a facility closure plan is submitted to the CPM 12 months prior to closure of facility.	Submit facility closure plan that addresses closure impacts on cultural resources.	Owner	CPM	Facility Closure			Upon plant closure.
PAL-7	Include a description of the **facility's closure activities** potential to impact paleontological resources in the facility closure plan.	Include a description of the facility's closure activities potential to impact paleontological resources in the facility closure plan.	Owner	CPM	Facility Closure Plan			Upon plant closure.
LAND-4	Upon the **permanent closure of the facility**, the project owner shall comply with Antioch Zoning Ordinance section 9-5.3826(g)(2) that requires **pipelines** no longer in use to be **abandoned** to the satisfaction of the City Engineer and in compliance with all applicable Environmental Protection Agency (EPA)requirements for such abandonment.	The project owner shall include abandonment of the natural gas pipeline in compliance with Antioch Zoning Ordinance section 9-5.3826(g)(2) and EPA requirements in its facility closure plan.	Owner	N/A	Closure of the Facility			At closure
VIS-5	The project owner shall comply with the requirements of Section 18.82.045 of the City of Pittsburg Zoning Ordinance regarding **site maintenance**.	In each Annual Compliance Report the project owner shall submit a statement that the requirements of Section 18.82.045 of the City of Pittsburg Zoning Ordinance have been met.	Owner	CPM	Annual Compliance Report	2/18/2019	2/15/2019	On-going.

ATTACHMENT 2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **AIR COMPRESSOR AREA**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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)	**AMERCOR KB** CAS No 1336-21-6	**Gallons** State Liquid Type Mixture	**800** Storage Container Tank Inside Building Days on Site: 365	**400**	600 Pressue Temperature	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	AMMONIUM HYDROXIDE MONOETHANOLAMINE	50 % 50 %		1336-21-6 141-43-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **BOTTLE STORAGE AREA**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	ARGON COMPRESSED GAS	**Cu. Feet**	**2000**	**2000**	1500		- Physical Gas Under Pressure - Health Simple Asphyxiant				
	CAS No 7440-37-1	State Gas	Storage Container Cylinder		Pressue > Ambient	Waste Code					
		Type Pure	Days on Site: 365		Temperature Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **Bottled Gas Storage**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 2.1 - Flammable Gases Flammable Gas	**ACETYLENE GAS** CAS No 74-86-2	**Cu. Feet** State Gas Type Pure	**2400** Storage Container Cylinder Days on Site: 365	**400**	2400 Pressue > Ambient Temperature Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **CEMS BUILDINGS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	NOX/CO/NO/N CALIBRATION GAS	**Cu. Feet**	**3760**	**235**	2820		- Physical Gas	CARBON MONOXIDE	9 %		630-08-0
							Under Pressure	NITRIC OXIDES	9 %		10102-43-9
Oxidizing Gas, Gaseous	CAS No 124-38-9	State Gas	Storage Container Cylinder		Pressue > Ambient	Waste Code	- Physical Oxidizer	NITROGEN	9 %		7727-37-9
		Type Mixture	Days on Site: 365		Temperature Ambient		- Health Simple Asphyxiant	NOX	9 %		10024-97-2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **COMBUSTION TURBINE GENERATORS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	HYDRAULIC FLUID - NON HAZARDOUS	**Gallons**	**525**	**175**	525						
	CAS No	State: Liquid	Storage Container: Other		Pressue: Ambient	Waste Code					
		Type: Mixture	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **COMBUSTION TURBINES**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**FIREWASH F-3 (NON HAZARDOUS)** CAS No	**Gallons** State: Liquid Type: Pure	**400** Storage Container: Tote Bin Days on Site: 365	**400**	400 Pressue: Ambient Temperature: Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	Alcohol, C9-C11, ethoxylated 2-(2-butoxyethoxy)ethanol non-ionic surfactants	10 % 10 % 5 %		68439-46-3 112-34-5
	FM 200 CAS No 431890	**Cu. Feet** State: Gas Type: Pure	**8750** Storage Container: Cylinder Days on Site: 365	**600**	4750 Pressue: Ambient Temperature: > Ambient	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **COMBUSTION TURBINES & STEAM TURBINE OIL RESERVOIRS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	TURBINE OIL - HIGHLY REFINED MINERAL OIL (NON-HAZARDOUS)	**Gallons**	**19500**	**7300**	19500			Highly refined mineral oil (C15 - C50)	99 %		MIXTURE
	CAS No 6474884	State Liquid	Storage Container Aboveground Tank		Pressue Ambient	Waste Code					
		Type Mixture	Days on Site: 365		Temperature Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **COOLING TOWER**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	DREWPLUS FG720 CAS No	**Gallons** State: Liquid Type:	**550** Storage Container: Tote Bin Days on Site: 365	**275**	275 Pressue: Ambient Temperature: Ambient	Waste Code					
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**JUSTEQ07** CAS No 2893-78-9	**Gallons** State: Liquid Type: Mixture	**5000** Storage Container: Tote Bin Days on Site: 365	**270**	2700 Pressue: Ambient Temperature: Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard	Sodium Hydroxide, conc=50% Sodium Bromide Sodium Hypochlorite, solution, conc active chlorine=12.5%	10 % 10 % 70 %		1310-73-2 7647-15-6 7681-52-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **COOLING TOWER AREA**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	Biosperse BP 8310 Biopenetrant CAS No 254504001-5448	**Gallons** State Liquid Type Mixture	**550** Storage Container Tote Bin Days on Site: 365	**275**	275 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	SULFONIC ACID ALKYL DERIVATIVE SULFONIC ACID DERIVATIVE	15 % 2 %		254504001-5448 254504001-5896
	BIOSPERSE CN2150 CAS No	**Gallons** State Liquid Type Mixture	**1100** Storage Container Tote Bin Days on Site: 365	**275**	550 Pressue Ambient Temperature Ambient	Waste Code	- Physical Oxidizer - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE MAGNESIUM CHLORIDE 2-METHYL-4-ISOTHIAZOLIN-3-ONE	2 % 2 % 1 %		26172-55-4 7786-30-3 2682-20-4
	BIOSPERSE CX9400 CAS No	**Gallons** State Liquid Type	**2750** Storage Container Tote Bin Days on Site: 365	**275**	1100 Pressue Ambient Temperature Ambient	Waste Code					
	MILLSPERSE MS7200 CAS No	**Gallons** State Liquid Type Mixture	**5000** Storage Container Aboveground Tank Days on Site: 365	**5000**	3000 Pressue Ambient Temperature Ambient	Waste Code	- Health Serious Eye Damage Eye Irritation	INORGANIC SALT PHOSPHORUS COMPOUND	15 % 5 %		254504001-5294 254504001-6286
	PERFORMAX DC5202 CAS No	**Gallons** State Liquid Type	**5000** Storage Container Aboveground Tank Days on Site: 365	**5000**	3000 Pressue Ambient Temperature Ambient	Waste Code					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **DIESEL FIRE PUMP ROOM**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Quantities: Largest Cont.	Quantities: Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class III-A	**NO. 2 DIESEL FUEL** CAS No 68476-34-6	**Gallons** State Liquid Type Pure	**700** Storage Container Aboveground Tank Days on Site: 365	**500**	600 Pressue Ambient Temperature Ambient	Waste Code	- Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **GAS COMPRESSOR BUILDING STORAGE AREA**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	COMPRESSED ARGON/CO2 GAS CAS No	**Cu. Feet** State: Gas Type: Mixture	**2800** Storage Container: Cylinder Days on Site: 365	**381**	2800 Pressue Temperature	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant	ARGON CARBON DIOXIDE	75 % 25 %		7440-37-1 124-38-9
	OXYGEN COMPRESSED GAS CAS No 7782-44-7	**Cu. Feet** State: Gas Type: Pure	**5600** Storage Container: Cylinder Days on Site: 365	**281**	3000 Pressue: > Ambient Temperature: Ambient	Waste Code	- Physical Gas Under Pressure - Physical Oxidizer				
Flammable Gas	**PROPANE GAS** CAS No 74-98-6	**Pounds** State: Gas Type: Pure	**8000** Storage Container: Cylinder Days on Site: 365	**80**	800 Pressue: > Ambient Temperature: Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **HAZARDOUS WASTE STORAGE AREA**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	OILY SOLIDS	**Gallons**	**550**	**55**	110	2500					
	CAS No	State: Solid	Storage Container: Steel Drum		Pressue: Ambient	Waste Code: 223					
		Type: Waste	Days on Site: 365		Temperature: Ambient						
Combustible Liquid, Class III-A	**USED OIL**	**Gallons**	**220**	**150**	110	1895	- Health Aspiration Hazard				
	CAS No	State: Liquid	Storage Container: Aboveground Tank, Steel Drum		Pressue: Ambient	Waste Code: 221					
		Type: Waste	Days on Site: 365		Temperature: Ambient						
	USED OIL FILTERS	**Pounds**	**500**	**55**	30						
	CAS No	State: Solid	Storage Container: Steel Drum		Pressue: Ambient	Waste Code: 223					
		Type: Waste	Days on Site: 365		Temperature: Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **HEAT RECOVERY STEAM GENERATORS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	**Ametrol HT2399 - deposit inhibitor** CAS No 1310-73-2	**Gallons** State Liquid Type Mixture	**1600** Storage Container Tote Bin Days on Site: 365	**400**	800 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard	Sodium Hydroxide	5 %		1310-73-2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **HIGH VOLTAGE SWITCHYARD**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	SF6 GAS	**Cu. Feet**	**1700**	**253**	1595		- Physical Gas Under Pressure - Health Skin Corrosion Irritation - Health Simple Asphyxiant				
	CAS No 2551-62-4	State Gas	Storage Container Cylinder		Pressue > Ambient	Waste Code					
		Type Pure	Days on Site: 365		Temperature > Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **HRSG AREAS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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**	**16416**	**340**	16000		- Physical Gas Under Pressure - Health Simple Asphyxiant				
	CAS No: 7727-37-9	State: Gas	Storage Container: Cylinder		Pressue: Ambient	Waste Code					
		Type: Pure	Days on Site: 365		Temperature: Cryogenic						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **STEAM TURBINE GENERATOR**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities: Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only): Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**CARBON DIOXIDE** CAS No 124-38-9	**Pounds** State Gas Type Pure	**300** Storage Container Cylinder Days on Site: 365	**300**	300 Pressue Ambient Temperature Cryogenic	Waste Code	- Physical Gas Under Pressure - Health Simple Asphyxiant				
DOT: 2.1 - Flammable Gases Flammable Gas	**HYDROGEN GAS COMPRESSED** CAS No 1333-74-0	**Cu. Feet** State Gas Type Pure	**38000** Storage Container Cylinder Days on Site: 365	**44000**	33000 Pressue Ambient Temperature > Ambient	Waste Code	- Physical Flammable - Physical Gas Under Pressure - Health Acute Toxicity - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **SW CORNER OF COOLING TOWER**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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	**SODIUM HYPOCHLORITE >12.5%-15%** CAS No 7681-52-9	**Gallons** State Liquid Type Pure	**7500** Storage Container Aboveground Tank Days on Site: 365	**7500**	3500 Pressue Ambient Temperature Ambient	Waste Code	- Physical Contact Water Emits Flammable Gas - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	SODIUM hypochlorite SODIUM HYDROXIDE WATER	16 % 2 % 98 %		7681-52-9 1310-73-2 7732-18-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **Turbine Packages and Gas Compressor**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
Combustible Liquid, Class III-A	**NATURAL GAS CONDENSATE** CAS No 68919-39-1	**Gallons** State Liquid Type Mixture	**100** Storage Container Aboveground Tank Days on Site: 365	**150**	50 Pressue > Ambient Temperature Ambient	Waste Code		Natural gas condensate Water	80 % 20 %		68919-39-1 7732-18-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **VARIOUS PLANT BLDG A/C UNITS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	**R22 REFRIGERANT** CAS No 75-45-6	**Pounds** State Gas Type Pure	**353** Storage Container Cylinder Days on Site: 365	**40**	300 Pressue > Ambient Temperature < Ambient	Waste Code	- Physical Gas Under Pressure - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **VARIOUS PLANT MOTOR CONTROL CENTERS & BATTERY ROOMS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities Max. Daily	Largest Cont.	Avg. Daily	Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only) Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Water Reactive, Class 2, Toxic, Oxidizing, Class 1	**LEAD ACID BATTERIES** CAS No 7664-93-9 ✓EHS State: Liquid Type: Mixture	**Pounds** Storage Container: Other Days on Site: 365	**14096**	**52**	14096 Pressue: > Ambient Temperature: Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	sulfuric acid water	40 % 60 %	✓	7664-93-9

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **VARIOUS TRANSFORMERS**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	DIELECTRIC OIL ?	**Gallons**	**82000**	**17795**	82000						
	CAS No	State: Liquid	Storage Container: Steel Drum, Other		Pressue: Ambient	Waste Code					
		Type: Mixture	Days on Site: 365		Temperature: > Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **WATER TREATMENT BLDG**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	BIOBROM C103L	**Gallons**	**550**	**275**	275		- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	VARIOUS			
	CAS No	State: Liquid Type: Mixture	Storage Container: Tote Bin Days on Site: 365		Pressue: Ambient Temperature: Ambient	Waste Code					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **WATER TREATMENT BUILDING**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	AMEROYAL 710 CAS No 7647-14-5	**Gallons** State Liquid Type Mixture	**1600** Storage Container Tote Bin Days on Site: 365	**400**	800 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard	SODIUM CHLORIDE	10 %		7647-14-5
Toxic, Water Reactive, Class 1	**AMEROYAL C801** CAS No 254504001-6208	**Gallons** State Liquid Type Mixture	**330** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**55**	330 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard	ORGANIC ACID SALT ORGANIC SALT AROMATIC ETHER SULFONATE	15 % 10 % 5 %		254504001-6208 254504001-5135 254504001-5818
DOT: 9 - Misc. Hazardous Materials	**CHARGEPAC 60** CAS No 254504001-5015	**Gallons** State Liquid Type Pure	**1600** Storage Container Tote Bin Days on Site: 365	**400**	800 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	INORGANIC SALT METAL SALT	40 % 5 %		254504001-5015 254504001-5046
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic	**DREW 6134 DECHLORINATING AGENT** CAS No 7631-90-5	**Gallons** State Liquid Type Mixture	**825** Storage Container Tote Bin Days on Site: 365	**275**	550 Pressue Ambient Temperature Ambient	Waste Code	- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	sodium bisulfite	40 %		7631-90-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **WATER TREATMENT BUILDING**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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.
	DREWCLEAN 2010 RO CLEANER CAS No 254504001-5226	**Gallons** State Liquid Type Mixture	**440** Storage Container Plastic/Non-metalic Drum Days on Site: 365	**55**	440 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard	ORGANIC ACID (OH-ET) ETHYLENEDIAMINETRIACETIC AC, 3NA	60 % 5 %		254504001-5226 139-89-9
	DREWFLOC 2250 CAS No 254504001-5164	**Gallons** State Liquid Type Mixture	**800** Storage Container Tote Bin Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard	ALIPHATIC HYDROCARBON POLYOXYETHYLENE ISOTRIDECYL ETHER	30 % 2 %		254504001-5164 9043-30-5
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic	**DREWGARD 315** CAS No 254504001-5271	**Gallons** State Liquid Type Mixture	**110** Storage Container Tote Bin Days on Site: 365	**55**	110 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity	INORGANIC SALT TRIAZOLE DERIVATIVE sodium hydroxide	15 % 5 % 2 %		254504001-5271 254504001-5183 1310-73-2

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **WATER TREATMENT BUILDING**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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)	**Multi-Chlor Bleach 12%** CAS No 7681-52-9	**Gallons** State Solid Type Mixture	**800** Storage Container Tote Bin Days on Site: 365	**400**	400 Pressue Ambient Temperature Ambient	Waste Code	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	Water Sodium hypochlorite	88 % 13 %		7732-18-5 7681-52-9
	ZOK 27 GAS TURBINE COMPRESSOR CLEANING FLUID CAS No	**Gallons** State Liquid Type Mixture	**400** Storage Container Tote Bin Days on Site: 365	**400**	300 Pressue Ambient Temperature Ambient	Waste Code	- Health Serious Eye Damage Eye Irritation	ISOTRIDECYLALCOHOL, ETHOXYLATED 3-BUTOXYPROPAN-2-OL Water	10 % 5 %		9043-30-5 5131-66-8 7732-18-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **WATER TREATMENT BUILDING / WEST COOLING TOWER**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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)	**SULFURIC ACID** CAS No 7732-18-5 ✓EHS State Liquid Type Mixture	**Pounds** Storage Container Aboveground Tank, Tote Bin Days on Site: 365	**84150**	**5000**	76500 Pressue Ambient Temperature Ambient	Waste Code	- Physical Corrosive To Metal - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard	WATER	7 %		7732-18-5

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. **DELTA ENERGY CENTER**
Facility Name **DELTA ENERGY CENTER**
1200 Arcy Ln, Pittsburg 94565

Chemical Location **WEST OF COOLING TOWER**

CERS ID **10017064**
Facility ID **07-000-773111**
Status **Draft**

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, Flammable Gas	**AMMONIA** CAS No 7664-41-7 ✔EHS State: Gas Type: Pure	**Pounds** Storage Container: Aboveground Tank Days on Site: 365	**72420**	**85200**	56800 Pressue: > Ambient Temperature: > Ambient	Waste Code: 141	- Physical Flammable - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Aspiration Hazard - Health Simple Asphyxiant				

ATTACHMENT 3

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

January - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	713.7	2951.8	22.6	149	10.6	0.0	80594
02	894.2	3121.2	32.6	221	18.0	0.0	116208
03	921.4	421.9	37.3	257	20.9	0.0	134624
04	887.0	417.4	35.0	243	18.8	0.0	127600
05	859.9	612.9	33.7	233	18.4	0.0	122204
06	832.6	504.8	33.8	231	18.1	0.0	121629
07	867.0	541.0	35.4	242	19.3	0.0	126933
08	918.2	306.8	36.9	257	20.1	0.0	134908
09	762.2	580.4	31.2	213	16.8	0.0	111229
10	629.9	7559.6	17.3	115	10.9	0.0	58021
11	1.1	101.4	0.2	0	0.0	0.0	12
12	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
13	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
14	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
15	127.7	1425.5	0.4	2	0.1	0.0	1128
16	982.6	5331.0	28.7	195	14.8	0.0	103499
17	873.7	600.5	35.9	244	19.3	0.0	128139
18	829.7	566.7	35.1	237	18.5	0.0	124040
19	769.8	698.7	31.4	213	16.7	0.0	112197
20	558.9	6418.2	15.3	98	8.0	0.0	51575
21	521.3	4118.2	15.8	109	9.9	0.0	55581
22	892.0	3736.9	31.5	217	18.1	0.0	112792
23	854.3	945.3	34.9	237	19.2	0.0	124604
24	828.2	2443.9	33.2	225	18.7	0.0	117439
25	828.6	2647.2	33.1	223	18.9	0.0	115959
26	558.4	611.9	22.6	163	14.8	0.0	81437
27	608.6	8435.6	14.0	96	9.6	0.0	47315
28	546.8	4777.8	16.4	115	10.8	0.0	56964
29	937.0	2048.9	32.7	227	18.5	0.0	118161
30	834.7	841.3	34.0	231	18.4	0.0	121356
31	843.5	718.6	33.9	230	18.1	0.0	120552
Total	20683.0	63485.4	764.9	5223	424.3	0	2726700
12-Mo Rlng Tons	18.4	118.0	0.6	3.45	0.30	0.0	3973434

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

February - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	794.5	790.9	31.8	216	17.0	0.0	113382
02	847.2	2352.7	32.2	220	17.6	0.0	115592
03	592.0	5973.3	15.1	99	9.0	0.0	50285
04	470.3	4386.3	13.2	87	8.5	0.0	44751
05	493.0	3942.5	17.1	115	11.2	0.0	59725
06	526.6	4034.3	18.1	120	12.0	0.0	62448
07	636.6	3735.1	20.4	143	14.3	0.0	72182
08	357.4	1015.3	14.2	104	12.4	0.0	50108
09	392.8	5077.9	7.7	47	3.9	0.0	25357
10	50.3	931.7	1.9	11	1.1	0.0	5631
11	341.1	4690.9	4.0	26	2.9	0.0	12880
12	625.8	1676.6	22.1	142	13.0	0.0	74532
13	182.4	3973.5	1.5	6	0.3	0.0	3642
14	121.9	4283.4	1.5	6	0.3	0.0	3683
15	279.0	3458.9	1.1	4	0.5	0.0	2144
16	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
17	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
18	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
19	193.6	2015.4	0.5	3	0.4	0.0	1397
20	265.5	3533.8	1.3	5	0.3	0.0	2664
21	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
22	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
23	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
24	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
25	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
26	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
27	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
28	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
Total	7170.0	55872.5	203.7	1354	124.7	0	700403
12-Mo Rlng Tons	22.0	146.0	0.7	4.13	0.37	0.0	4673837

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

March - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
02	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
03	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
04	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
05	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
06	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
07	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
08	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
09	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
10	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
11	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
12	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
13	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
14	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
15	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
16	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
17	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
18	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
19	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
20	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
21	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
22	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
23	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
24	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
25	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
26	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
27	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
28	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
29	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
30	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
31	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
Total	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
12-Mo Rlng Tons	22.0	146.0	0.7	4.13	0.37	0.0	4673837

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

April - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
02	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
03	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
04	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
05	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
06	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
07	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
08	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
09	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
10	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
11	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
12	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
13	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
14	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
15	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
16	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
17	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
18	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
19	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
20	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
21	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
22	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
23	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
24	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
25	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
26	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
27	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
28	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
29	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
30	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
Total	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
12-Mo Rlng Tons	22.0	146.0	0.7	4.13	0.37	0.0	4673837

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

May - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
02	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
03	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
04	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
05	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
06	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
07	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
08	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
09	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
10	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
11	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
12	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
13	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
14	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
15	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
16	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
17	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
18	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
19	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
20	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
21	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
22	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
23	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
24	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
25	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
26	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
27	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
28	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
29	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
30	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
31	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
Total	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
12-Mo Rlng Tons	22.0	146.0	0.7	4.13	0.37	0.0	4673837

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

June - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
02	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
03	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
04	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
05	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
06	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
07	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
08	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
09	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
10	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
11	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
12	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
13	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
14	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
15	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
16	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
17	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
18	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
19	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
20	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
21	199.8	2643.5	1.4	7	0.5	0.0	3939
22	134.3	2546.1	4.1	24	1.6	0.0	13817
23	753.5	3320.6	20.1	129	9.2	0.0	70682
24	668.4	1929.6	26.5	177	13.6	0.0	93220
25	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
26	494.8	5715.4	6.5	40	3.1	0.0	21714
27	755.8	2427.4	28.4	192	15.6	0.0	101018
28	618.1	4302.6	22.0	140	10.3	0.0	75880
29	609.6	2116.7	24.8	167	13.6	0.0	85968
30	740.9	462.6	31.2	211	16.6	0.0	111221
Total	4975.2	25464.5	165.0	1087	84.1	0	577459
12-Mo Rlng Tons	23.1	143.2	0.7	4.57	0.40	0.0	5098409

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

July - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	633.4	3804.0	24.7	162	12.0	0.0	85235
02	640.7	793.9	29.7	200	15.4	0.0	105175
03	631.5	801.5	29.2	196	15.0	0.0	102981
04	664.3	2075.2	27.2	187	15.3	0.0	96805
05	698.4	842.2	29.6	199	15.4	0.0	104385
06	770.9	484.5	31.9	218	17.4	0.0	114857
07	767.0	316.2	33.0	226	18.0	0.0	118863
08	685.0	1825.1	27.3	193	16.1	0.0	99113
09	793.7	357.4	32.3	223	18.0	0.0	117526
10	800.6	341.7	33.9	232	18.4	0.0	122152
11	854.7	299.7	35.2	242	19.0	0.0	127180
12	865.5	289.5	35.5	244	19.2	0.0	128147
13	861.1	316.8	35.3	242	19.2	0.0	127195
14	815.4	412.3	33.8	233	18.2	0.0	122121
15	710.7	671.3	30.3	205	15.8	0.0	107607
16	717.7	651.5	30.4	207	16.2	0.0	108289
17	736.1	677.7	30.3	206	15.9	0.0	107913
18	753.8	544.6	31.0	211	16.5	0.0	111029
19	796.5	518.2	32.5	222	17.7	0.0	116228
20	820.7	443.6	33.4	228	18.4	0.0	120041
21	763.3	467.2	33.0	226	18.1	0.0	118808
22	780.4	531.9	32.4	222	17.7	0.0	116359
23	802.9	448.9	33.3	227	18.0	0.0	119188
24	803.7	447.4	33.9	232	18.0	0.0	121993
25	839.3	292.3	35.7	245	19.1	0.0	128357
26	780.5	440.7	33.5	230	17.9	0.0	120285
27	864.2	352.3	34.9	240	18.9	0.0	125995
28	829.8	418.0	33.7	231	18.3	0.0	121123
29	788.2	419.6	33.4	229	18.1	0.0	120451
30	828.8	271.7	36.0	247	19.2	0.0	129723
31	811.8	286.6	35.2	243	19.1	0.0	127585
Total	23910.6	20843.5	1001.5	6848	539.5	0	3592709
12-Mo Rlng Tons	33.7	141.6	1.2	7.86	0.65	0.0	8495943

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

August - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	839.6	271.0	35.2	242	18.9	0.0	126966
02	794.3	305.2	33.9	233	18.5	0.0	122726
03	795.7	243.9	35.1	241	19.2	0.0	126582
04	853.2	337.6	34.8	236	18.7	0.0	124261
05	809.6	417.9	33.0	225	17.8	0.0	118134
06	860.7	372.3	34.8	239	18.9	0.0	125856
07	876.5	335.3	36.0	248	19.2	0.0	130569
08	843.1	296.8	35.4	244	19.1	0.0	127921
09	883.1	272.9	36.0	249	19.2	0.0	130664
10	861.1	298.4	35.6	243	19.1	0.0	127460
11	831.5	359.6	34.1	234	18.6	0.0	122668
12	852.9	314.5	35.3	242	19.2	0.0	126799
13	869.9	271.7	35.5	246	19.2	0.0	128915
14	852.7	392.3	34.4	237	18.5	0.0	124464
15	872.2	365.0	35.5	244	19.2	0.0	127925
16	841.0	388.6	34.3	235	18.6	0.0	123368
17	843.7	409.6	34.4	237	18.9	0.0	124039
18	687.1	854.8	29.1	193	14.6	0.0	101384
19	797.7	479.9	33.2	225	18.1	0.0	118454
20	757.1	583.4	31.2	214	17.2	0.0	112910
21	725.0	805.3	30.5	207	16.3	0.0	108862
22	778.6	695.8	31.9	217	17.5	0.0	114355
23	729.3	845.1	30.3	205	16.2	0.0	107848
24	512.8	1456.8	21.1	140	12.8	0.0	73856
25	9.8	484.4	0.3	1	0.0	0.0	373
26	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
27	140.5	1300.1	1.6	10	0.4	0.0	5387
28	410.6	3941.2	9.0	60	4.3	0.0	30735
29	725.5	1675.6	26.8	189	16.0	0.0	95802
30	503.7	885.2	21.4	154	13.4	0.0	76892
31	474.1	436.3	20.1	144	12.6	0.0	71695
Total	21632.6	20096.5	879.8	6034	480.2	0	3157870
12-Mo Rlng Tons	41.5	121.8	1.6	10.51	0.85	0.0	11070167

Calpine - Delta Energy Center

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Facility Monthly Mass Emissions Report

September - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	294.0	502.8	12.3	88	10.3	0.0	41730
02	283.8	32.1	12.0	86	9.8	0.0	41095
03	292.5	47.8	12.0	89	10.8	0.0	42224
04	637.6	2698.8	18.9	133	13.2	0.0	66883
05	726.1	808.1	29.9	200	15.5	0.0	105453
06	738.8	699.9	31.0	208	16.3	0.0	109390
07	768.8	577.1	32.3	219	17.1	0.0	115087
08	661.1	2081.7	26.2	178	15.3	0.0	93504
09	616.9	2211.9	24.4	165	14.1	0.0	86519
10	757.2	531.2	31.6	215	16.8	0.0	112953
11	647.7	1812.6	25.5	176	14.9	0.0	89764
12	527.9	541.6	21.9	154	13.2	0.0	76831
13	549.4	203.2	22.4	161	14.1	0.0	80172
14	559.6	244.3	23.0	163	13.9	0.0	81511
15	626.6	2376.0	23.0	155	13.7	0.0	80731
16	285.8	63.8	12.0	88	10.3	0.0	41672
17	594.0	1625.5	21.1	152	13.6	0.0	75943
18	764.7	3176.8	28.6	195	16.0	0.0	100686
19	666.9	3910.8	25.7	176	15.2	0.0	90907
20	641.6	1937.6	26.2	181	15.2	0.0	93027
21	627.7	1898.2	25.6	177	14.9	0.0	90920
22	635.8	2302.1	24.8	173	14.6	0.0	88608
23	622.9	3997.0	22.2	152	13.7	0.0	77080
24	649.6	2185.7	25.3	176	14.8	0.0	90151
25	736.5	493.3	31.5	214	16.6	0.0	112301
26	660.9	2149.0	26.9	188	15.6	0.0	96438
27	745.9	562.8	30.8	210	16.6	0.0	110712
28	547.5	745.9	22.4	158	13.6	0.0	79923
29	640.8	1877.8	23.9	170	14.4	0.0	86188
30	621.5	3265.7	22.6	155	14.5	0.0	78811
Total	18130.1	45561.1	716.0	4955	428.6	0	2537214
12-Mo Rlng Tons	49.4	131.2	1.9	12.87	1.05	0.0	13425388

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

October - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	865.1	336.4	35.2	241	18.8	0.0	126618
02	879.7	313.3	35.9	247	19.2	0.0	129476
03	822.5	516.5	33.4	228	18.2	0.0	119680
04	801.8	598.4	32.4	221	17.4	0.0	116069
05	749.7	1002.0	31.0	211	16.6	0.0	111042
06	508.5	222.5	22.1	158	13.8	0.0	78874
07	580.3	1752.6	23.5	163	13.6	0.0	83465
08	804.6	351.7	34.1	233	18.4	0.0	122156
09	783.3	501.3	32.0	99	7.2	0.0	115193
10	862.2	363.9	34.6	108	8.3	0.0	125431
11	772.5	514.9	32.6	101	7.6	0.0	116985
12	724.3	521.4	31.3	96	7.3	0.0	111916
13	728.7	544.0	31.3	96	7.6	0.0	112173
14	725.6	509.4	31.3	96	7.4	0.0	112486
15	813.7	409.9	34.6	108	8.4	0.0	125605
16	854.7	383.5	36.0	113	9.1	0.0	131531
17	886.4	484.7	35.7	112	9.1	0.0	130332
18	867.4	508.0	35.2	110	8.6	0.0	127353
19	823.1	476.3	34.6	107	8.6	0.0	124760
20	844.2	476.1	34.1	106	8.2	0.0	122891
21	898.7	356.3	35.8	112	9.0	0.0	129934
22	818.7	499.6	33.8	104	7.7	0.0	121528
23	822.1	555.0	33.5	103	7.3	0.0	120082
24	836.6	374.5	34.4	107	7.9	0.0	123914
25	840.9	434.8	35.1	110	8.7	0.0	127619
26	794.4	575.0	32.8	101	7.5	0.0	117698
27	840.9	461.8	34.0	106	7.9	0.0	122467
28	700.6	1858.2	28.4	85	6.6	0.0	100898
29	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
30	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
31	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
Total	22251.2	15902.0	918.7	3782	296.0	0	3308176
12-Mo Rlng Tons	59.9	129.0	2.3	14.69	1.19	0.0	16660134

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

November - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
02	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
03	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
04	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
05	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**	**Down**
06	321.7	7238.9	2.1	6	0.4	0.0	5823
07	603.5	3891.9	17.4	63	3.8	0.0	61319
08	740.6	1815.0	26.8	71	5.2	0.0	98425
09	887.7	498.1	37.4	115	9.1	0.0	133451
10	791.9	2258.4	34.3	103	8.5	0.0	122070
11	226.3	3626.6	8.0	28	2.1	0.0	25389
12	642.0	5114.3	14.7	51	3.7	0.0	52659
13	914.7	631.4	38.2	119	9.6	0.0	136090
14	820.3	2355.4	34.2	104	8.5	0.0	121148
15	852.7	2504.8	35.4	107	8.7	0.0	125223
16	796.7	2609.6	31.6	96	7.7	0.0	114098
17	777.4	2451.9	30.5	91	7.1	0.0	109131
18	803.6	2626.6	31.9	96	8.0	0.0	114146
19	870.7	642.9	34.8	108	7.7	0.0	127020
20	810.4	815.2	32.9	101	7.2	0.0	117820
21	742.6	1004.9	31.2	97	7.2	0.0	112297
22	541.2	3762.1	19.5	68	5.7	0.0	66894
23	541.6	4554.5	20.1	73	5.6	0.0	69233
24	572.6	3218.3	20.6	74	6.1	0.0	70184
25	748.3	2268.1	29.2	102	7.4	0.0	102887
26	787.0	2673.5	31.0	98	6.7	0.0	109287
27	746.3	974.1	30.8	94	7.5	0.0	110089
28	712.2	2281.9	28.1	81	7.2	0.0	99611
29	825.8	514.9	34.2	106	8.0	0.0	122651
30	808.8	688.9	33.2	101	7.4	0.0	118951
Total	17886.6	61022.2	688.1	2153	166.1	0	2445896
12-Mo Rlng Tons	68.8	159.5	2.7	15.77	1.28	0.0	19106030

Calpine - Delta Energy Center

Pittsburg, CA

Facility Monthly Mass Emissions Report

December - 2018

Daily Emission Limits		12-Month Rolling Emission Limits	
NOx lbs/day - 1990.8	PM lbs/day - 648	NOx tons/year - 240.2	PM tons/year - 118.26
CO lbs/day - 12756.4	POC lbs/day - 478.2	CO tons/year - 1105.4	POC tons/year - 64.68
		SOx tons/year - 18.4	Heat Input mmBtu/year - 53,188,532

Day	Facility NOx lbs	Facility CO lbs	Facility SOx lbs	Facility PM lbs	Facility POC lbs	Facility HAP's lbs	Facility Heat Input mmBtu
01	751.9	4346.9	30.4	99	6.9	0.0	106945
02	743.4	2305.7	32.5	103	6.9	0.0	115010
03	830.5	926.7	34.5	105	8.3	0.0	123760
04	751.1	902.6	30.9	94	7.6	0.0	110170
05	833.6	683.5	33.8	104	8.2	0.0	121492
06	873.7	565.0	35.6	109	8.4	0.0	127276
07	787.1	855.4	33.2	102	7.8	0.0	119503
08	756.3	3552.4	31.2	102	7.1	0.0	111470
09	733.6	3034.0	28.7	105	7.6	0.0	103101
10	846.8	835.8	35.3	108	8.6	0.0	125672
11	784.8	940.6	32.7	100	7.8	0.0	117204
12	713.9	976.4	30.6	93	7.2	0.0	109640
13	769.4	899.3	32.7	101	7.4	0.0	117978
14	838.0	613.0	35.6	111	8.3	0.0	128906
15	667.6	2378.2	26.7	98	6.6	0.0	94828
16	688.4	2592.3	26.0	96	6.3	0.0	93191
17	789.8	801.3	32.1	99	7.2	0.0	115727
18	668.5	2599.5	26.2	93	6.4	0.0	92798
19	743.4	2587.5	30.6	99	7.0	0.0	109097
20	734.8	963.8	31.4	96	7.2	0.0	112818
21	631.3	2564.9	24.4	89	5.8	0.0	86681
22	180.1	3204.0	4.2	14	1.0	0.0	13012
23	589.2	2674.8	18.0	64	3.9	0.0	64365
24	692.4	2657.3	27.1	90	6.5	0.0	96214
25	596.0	3857.2	22.4	80	6.0	0.0	77287
26	679.9	2146.4	26.6	96	6.3	0.0	93158
27	711.7	6866.2	23.3	76	5.8	0.0	81486
28	833.9	2400.0	32.7	97	7.1	0.0	117014
29	678.6	6531.4	19.9	76	5.3	0.0	68110
30	448.2	5650.3	10.5	42	2.7	0.0	35026
31	446.2	4579.1	9.3	39	2.4	0.0	33172
Total	21794.1	76491.5	849.1	2780	201.6	0	3022111
12-Mo Rlng Tons	79.2	192.4	3.1	17.11	1.37	0.0	22068538

ATTACHMENT 4

Delta Energy Center
Toxic Air Contaminant Calculations
PROJECTIONS 2019 Year

Emission Factor Reference:
Formaldehyde: Source tests performed on Unit 3 on 8/13/2014

Condition 45

	Emission Test Result (lbs/MMbtu)[1]	Emission Factor (lbs/MMbtu)	Annual Fuel Limit (MMbtu/yr)[2]	Maximum Annual Emissions (lbs/yr)	Annual Emissions Limit (lbs/yr)[3]	Test Waiver Limit (lbs/yr)[4]
Formaldehyde	7.80E-06	7.80E-06	53,188,532	414.9	5691.0	1834.0

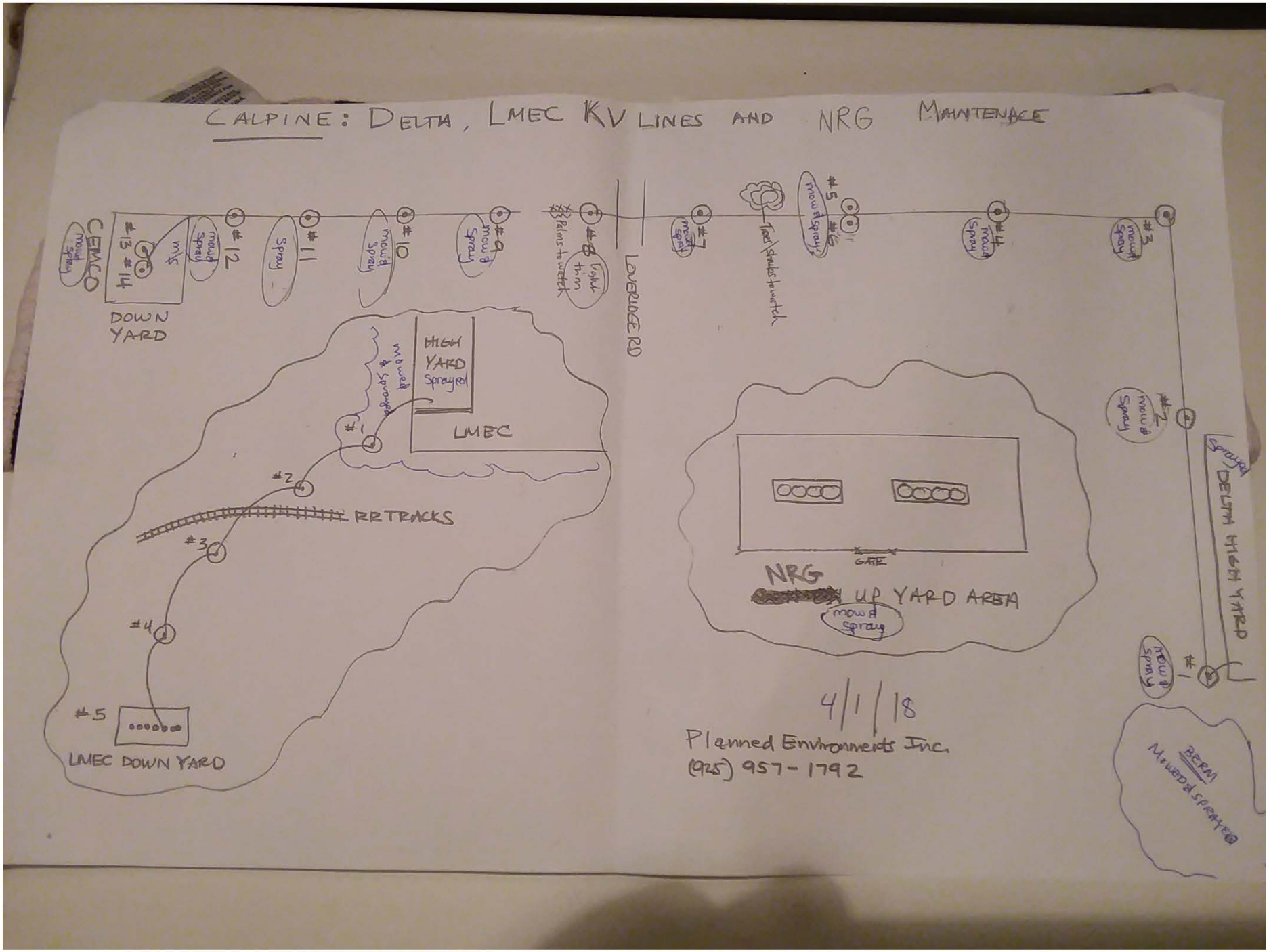
Notes:
1. If emission test results are non-detect (designated as < value), emission factors are 50% of detection limits, per condition 45.
2. Annual fuel use value is facility total, and as specified by permit conditions 41 and 45.
3. Annual emissions limit from condition 38.
4. Source test waiver limit from condition 45(b).

Condition 41 - Maximum Projected Annual Concentrations

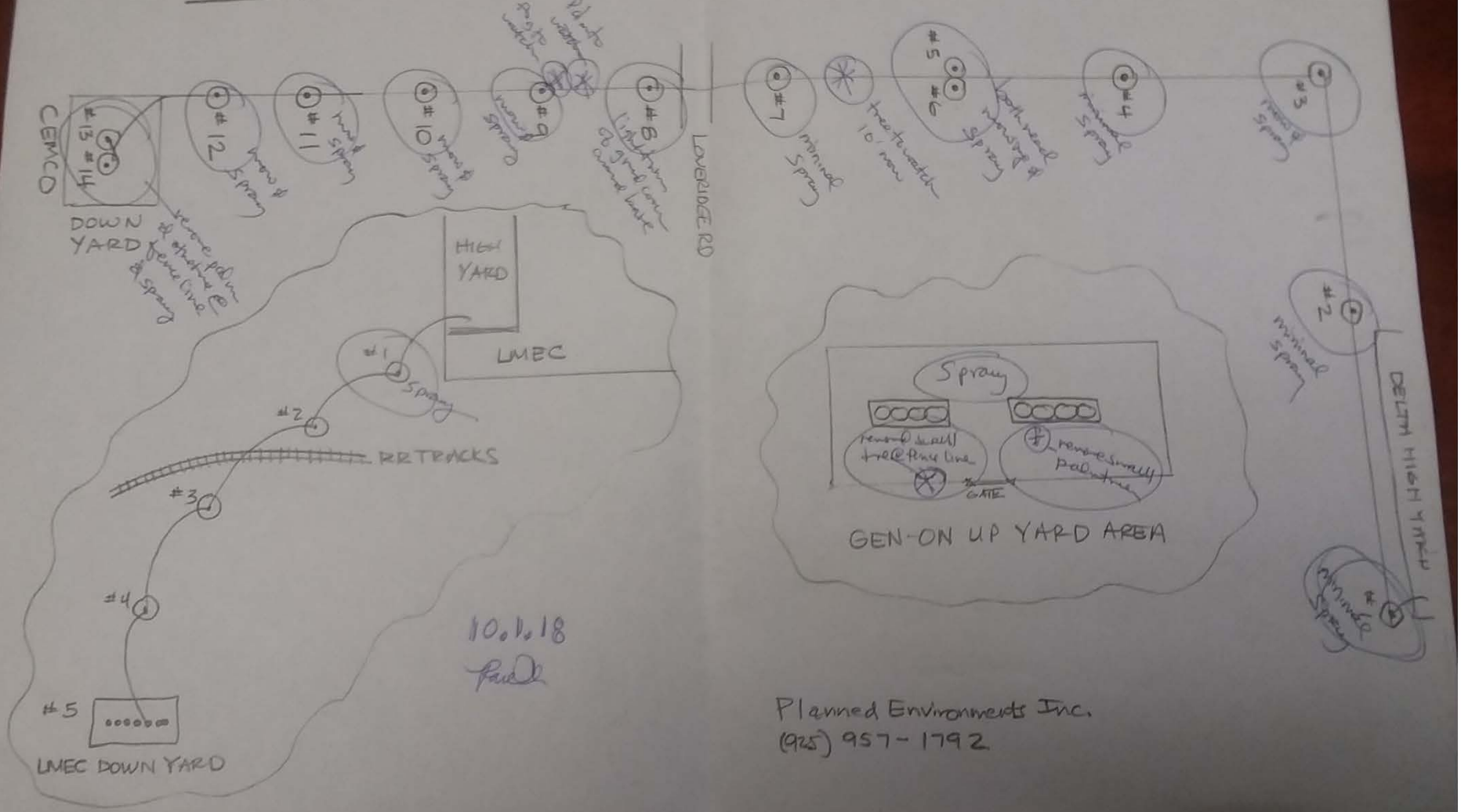
	Emission Test Result (lbs/MMbtu)[1]	Emission Factor (lbs/MMbtu)	Annual Fuel Limit (MMbtu/yr)[2]	Maximum Annual Emissions (lbs/yr)	Annual Emissions Limit (lbs/yr)[3]	Test Waiver Limit (lbs/yr)[4]	Test Year[5]
Formaldehyde	5.78E-05	5.78E-05	53,188,532	3074.3	5691.0	1834.0	2008
Benzene*	< 4.88E-06	2.44E-06	53,188,532	129.8	704.0	221.0	2006
Specified PAHs	< 2.23E-08	1.12E-08	53,188,532	0.6	120.0	38.0	2004

Notes:
1. If emission test results are non-detect (designated as < value), emission factors are 50% of detection limits, per condition 45.
2. Annual fuel use value is facility total, and as specified by permit conditions 41 and 45.
3. Annual emissions limit from condition 38.
4. Source test waiver limit from condition 45(b).
5. Source test year with highest recorded emission factor

ATTACHMENT 5



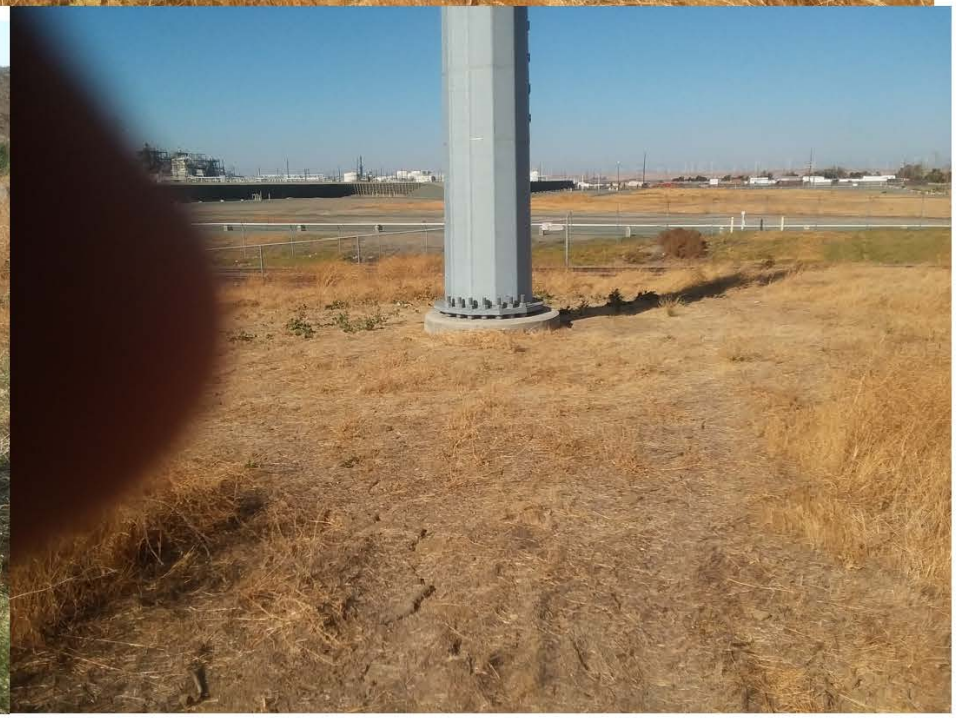
CALPINE: DELTA, LMEC KV LINES AND GEN-ON MAINTENACE



10.1.18

Planned Environments Inc.
(925) 957-1792


DANGER
HIGH VOLTAGE



ATTACHMENT 6

TO: Jody Batten, Maria Barroso, Rick Lloyd, Jason Jin

From: Rick Lloyd / Jason Jin

Copy: Terence Robertson

Subject: Delta Energy Center Cooling Tower Drift Eliminator Inspection

Date: 12/28/2018

During the extended outage of STG failure in 2017, the cooling tower was opened for inspection. The contractor, American Cooling Tower Inc. was brought in to clean all laterals and repair the nuzzles, replace the fill media under fallen laterals, clean drift eliminator areas, refasten all structural hardware from top of fil up to fan desk, and replace the broken lumber on lateral supports.

Since we did not do the inspection during the spring outage of 2018, we took the opportunity of the half day outage on Dec 22 to do visual inspection via selfie stick. During the inspection, the north side risers have been closed while the south side cells' fans were in low speed and the south risers got water through. We did not have chance to go into the layer between the fill media and eliminator to inspect the laterals and nozzles. The pictures images confirmed that drift eliminators are in place and all appear to be structurally sound. The stand pipes on south cells were seen water out due to the over pressure and overflow. There were minor debris and trash on the drift eliminators in several cells.

There is no recommendation for immediate action. But suggest to do thorough inspection on laterals, nozzles, and any deposit buildup on the drift eliminator material during the spring outage of 2019.

See pictures taken during the inspection.

ATTACHMENT 7

DELTA ENERGY CENTER

VERIFICATION LANGUAGE CHANGES

Condition	Date	Topic	Description
LAND-5	01/01	8th Street Linear Green Belt	Extension of completion date.
SOIL & WATER-3	05/01	Storm Water Pollution Prevention Plan	Eliminates unnecessary approval by the RWQCB prior to submittal to the CEC.
BIO-6	08/01	Upland habitat mitigation	Request to substitute the Pixley Wildlife Refuge as mitigation for the loss of upland habitat at DEC.
AQ-54, 55	03/02	Completion of Source Tests and Reports	Extension of time to complete the compliance source tests and submittal of final reports.
AQ 19 - 53	12/02	Duplicate reporting of air quality conditions information	Request to discontinue the redundant and duplicative reporting of information.
AQ-54, 55 & 59	03/04	Source Test Report submittals	Changes submittal period from 30 to 60 days of completion of source tests.
AQ-58	03/04	Approval of source test protocols	Modifies Condition of Certification requirement for official approval of test protocols to automatic approval if protocol contains only approved test methods or written rejection is received.

CALPINE CORPORATION

DELTA ENERGY CENTER
1200 ARCY LANE
P.O. BOX 551
PITTSBURG, CA 94565

ATTACHMENT 8

January 28, 2019

Mr. Robert Bartley
Air Quality Engineering Manager
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Re: Delta Energy Center LLC, Plant ID# 12095
Cold Steam Turbine Startups and Combustion Turbine Tuning Events
January 1, 2018 to December 31, 2018

Dear Mr. Bartley:

As required by condition 62 contained in the BAAQMD Permit to Operate (PTO) and Major Facility Review Permit (Title V) for the Delta Energy Center, LLC (DEC), please see the attached report that summarizes the combustion gas turbine startup hours in support of a Cold Steam Turbine startup.

The facility did not record any tuning hours.

If you have any questions, do not hesitate to contact me at (925) 259-8286.

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

Sincerely,

Jody Batten
Authorized Signatory and General Manager

cc: California Energy Commission

Attachment

Events

Calpine - Delta Energy Center
for 1/1/2018 thru 12/31/2018, in Order by Parameter

Parameter	Start	End	Duration	Value
Turbine 1 Cold Startup	2/19/2018 10:11 PM	11:06 PM	0:56	
Total (1 Event)			0:56	
Turbine 2 Cold Startup	2/15/2018 7:25 PM	8:07 PM	0:43	
Turbine 2 Cold Startup	2/20/2018 1:51 AM	2:46 AM	0:56	
Turbine 2 Cold Startup	8/28/2018 11:37 AM	12:48 PM	1:12	
Turbine 2 Cold Startup	11/6/2018 6:41 AM	10:17 AM	3:37	
Turbine 2 Cold Startup	11/6/2018 5:46 PM	6:15 PM	0:30	
Turbine 2 Cold Startup	11/6/2018 10:32 PM	11:59 PM	1:28	
Total (6 Events)			8:26	
Turbine 3 Cold Startup	1/15/2018 10:45 PM	1/16/2018 2:53 AM	4:09	
Turbine 3 Cold Startup	2/20/2018 12:07 AM	1:00 AM	0:54	
Turbine 3 Cold Startup	6/21/2018 5:19 PM	9:04 PM	3:46	
Turbine 3 Cold Startup	6/22/2018 2:07 PM	5:50 PM	3:44	
Total (4 Events)			12:33	

ATTACHMENT 9

WASTE-3
Actual Waste Management Methods - 2018
Delta Energy Center, 98-AFC-3

Manifest #	Date	Waste Description	Total	Unit	Category	Waste Code	Management Method	Total Lbs.	Monthly Waste Lbs.
018141723JJK	1/17/2018	OILY DEBRIS	1200	LBS	NON-RCRA	352	H141	1200	
012762956JJK	1/17/2018	USED OIL	200	GALS.	NON-RCRA	221	RECYCLED	1480	
014700350JJK	1/17/2018	USED ANTIFREEZE	5	GALS.	NON-RCRA	343	RECYCLED	46.5	
018141724JJK	1/17/2018	UN 3077, METAL SHAVINGS	600	LBS.	RCRA	D007	H141	600	1800
018146021JJK	2/14/20118	USED OIL	30	GALS.	NON-RCRA	221	H141	222	
011950768JJK	2/23/2018	WASTE LIQUID	200	GALS.	NON-RCRA	331	H141	1600	1840
0118146076JJK	3/1/2018	OILY WATER	400	GALS.	NON-RCRA	223	H141	3200	
018146339JJK	3/1/2018	USED OIL	350	GALS.	NON-RCRA	221	RECYCLED	2590	5790
NA	5/1/2018	AEROSOL FLAMMABLES	100	LBS	UNIVERSAL	NA	RECYCLED		
018144751JJK	5/1/2018	USED OIL	100	GALS.	NON-RCRA	221	RECYCLED	740	
018790702JJK	5/1/2018	OILY DEBRIS	300	LBS	NON-RCRA	223	H141	300	
018790703JJK	5/1/2018	UN1325 WASTE FLAMMABLE SOLIDS	100	LBS	RCRA	513,D001,F003	H141	100	1140
011950779JJK	6/20/2018	NA3077 WASTE SOLID CHROMIUM	6	YARDS	RCRA	571, D007	H141	13200	13200
018290407JJK	7/2/2018	USED OIL	50	GALS.	NON-RCRA	221	H141	370	
019177574JJK	7/24/2018	OILY WATER	15	GALS.	NON-RCRA	223	H141	120	
019175595JJK	7/24/2018	OILY DEBRIS	450	LBS.	NON-RCRA	352	H141	450	
NA	7/24/2018	AEROSOL FLAMMABLES	75	LBS	UNIVERSAL	NA	RECYCLED		
019175595JJK	7/24/2018	OILY SLUDGE	50	GALS.	NON-RCRA	223	H141	400	1340
019174474JJK	9/20/2018	USED OIL	15	GALS.	NON-RCRA	221	RECYCLED	111	
019174474JJK	9/20/2018	OILY DEBRIS	300	LBS	NON-RCRA	352	H141	300	
019912272JJK	11/20/2018	USED OIL	100	GALS.	NON-RCRA	221		740	1151
019912125JJK	11/28/2018	OILY WATER	2700	LBS.	NON-RCRA	352	H141	2700	2700
						TOTAL	**POUNDS**	**30,470**	
							TONS	**15.23**	

ATTACHMENT 10

DELTA ENERGY CENTER

POST-CERTIFICATION CHANGES

Amendment	Date	Description
1	June 2000	1. Minor revision to facility site plan. 2. Reduction is size of cooling tower from 12 cells to 10 3. Location of Reclaimed Water Facility adjacent to DEC. 4. Relocation of main access gate and road to northeast section of plant. 5. Relocation of ammonia tank and unloading area to adjacent to cooling tower. 6. Switchyard arrangement to eliminate seven of the nine take-off towers. 7. Reduction in total output of emergency generator from 2,275 kW to 1,200 kW. 8. Change in interconnection of potable water supply to current Dow Chemical supply line. 9. Modification of 230 kV underground transmission line to use solid dielectric cable instead of oil-filled pipe.
2	December 2000	1. Reduction in size of Cooling Tower. 2. Relocation of Fire Pump. 3. Removal of Auxiliary Boilers.
3	March 2001	Requested the interconnection of two Calpine gas pipelines to DEC.
4	April 2001	1. Reduction in annual emissions at DEC. 2. Eliminate certain emission limits from CPPP. 3. Increase NOx limit imposed on CPPP.
N/A	April 2002	Simple Project Description Change: 1. Requested disconnection of proposed steam line connection to Dow Chemical Company.
5	July 2002	Requested modification to Cooling Tower to increase to 14 cells.
6	March 2003	1. Requested increase in emissions and time allowed for the cold steam turbine start up. 2. Periodic tuning of combustion turbines.
7	March 2017	1. Requested temporary modifications to steam turbine condenser to operate the facility in simple cycle mode.