

Bay Area Air Quality Management District

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**Permit Evaluation
and
Statement of Basis
for
MAJOR FACILITY REVIEW PERMIT
RENEWAL**

for
**Delta Energy Center, LLC
Facility #B2095**

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Application No. 16773

April 2011

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Title V Permit Evaluation/Statement of Basis

A. Background

Delta Energy Center, LLC (DEC) is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Title 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a Phase II Acid Rain facility as defined by BAAQMD Regulation 2-6-217, and because it is a “major facility” as defined by BAAQMD Regulation 2-6-212. It is an Acid Rain facility because it burns fossil fuel, serves a generator that is over 25 MW that is used to generate electricity for sale, and was built after November 15, 1990. It is a “major facility” because it has the potential to emit more than 100 tons per year of a regulated air pollutant.

Major Facility Operating permits (Title V permits) must meet specifications contained in 40 CFR Part 70 as contained in BAAQMD Regulation 2, Rule 6. The permits must contain all applicable requirements (as defined in BAAQMD Regulation 2-6-202), monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all monitoring at least every six months and compliance certifications at least every year.

In addition, Phase II Acid Rain facilities must meet the requirements of Title IV of the federal Clean Air Act, Acid Rain, and the Acid Rain regulations in 40 CFR Parts 72 through 78. These regulations were adopted and incorporated by reference by BAAQMD Regulation 2, Rule 7, Acid Rain. The main provisions of the regulations for natural gas fired acid rain sources, such as the ones at this facility, are the requirement to obtain one SO₂ allowance for each ton of SO₂ that is emitted, stringent monitoring requirements for NO_x, CO₂, and SO₂, and stringent recordkeeping and reporting requirements.

In the Bay Area, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit.

Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is B2095.

This facility received an Authority to Construct on March 23, 2000 pursuant to Application #19414 that was submitted to the District on January 14, 1999. The District conducted an extensive evaluation of the information received from the facility against the backdrop of all applicable regulations before issuing the Authority to Construct. The results of the evaluation are set forth in the Final Determination of Compliance (FDOC) that the District prepared pursuant to District Regulation 2, Rule 3, Power Plants. The FDOC summarizes how the proposed power plant will comply with all applicable District, state, and federal regulations. As the lead agency under CEQA, the California Energy Commission adopted the FDOC as part of the record for the licensing of power plants in the state of California.

This facility received its initial Title V permit on April 4, 2003. This application is for a permit renewal. Although the current permit expired on March 31, 2008, it continues in force until the District takes final action on the permit renewal. The proposed renewal permit shows all changes to the initial permit in strikeout/underline format.

Two applications (Nos. 9700 and 17657) have been submitted since the initial Title V application and the last significant revision to the Title V Permit in 2004 (pursuant to Application No. 8341). Application No. 9700 requested to install S-11 Natural Gas Emergency Generator to act as a black start engine (no grid power, no Gas Turbine/HRSGs in operation). Application No. 17657 requested to alter vanes and clearances between gas turbine sections. No combustion related components were altered. The evaluations for both recent applications have been included in the appendices.

B. Facility Description

DEC is a nominal 880-MW, natural-gas-fired, combined cycle merchant power plant owned and operated by Calpine Corporation. The power plant will be located on the Dow Chemical USA complex in the city of Pittsburg and will be composed of three nominal 200-MW combustion gas turbines, three heat recovery steam generators equipped with 200 MM BTU/hr duct burners, and one 300-MW steam turbine generator.

There has not been a significant change in emissions from the facility since the initial Title V permit was issued.

C. Permit Content

The legal and factual basis for the permit follows. The permit sections are described in the order presented in the permit.

I. Standard Conditions

This section contains administrative requirements and conditions that apply to all facilities. Since the Title IV (Acid Rain) requirements for fossil-fuel fired electrical generating facilities and the accidental release (40 CFR § 68) programs apply to this facility, the section will contain a standard condition pertaining to these programs. Many of the requirements and conditions in this section of the permit derive from 40 CFR § 70.6, Permit Content, which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

The standard conditions also contain references to BAAQMD Regulation 1 and Regulation 2. These are the District's General Provisions and Permitting rules.

The dates of adoption and approval of rules in Standard Condition 1.A have been updated.

BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants and Regulation 2, Rule 6 – Permits, Major Facility Review have been added to Standard Condition 1.A.

The following language was added to Standard Condition I.B.1: “If the permit renewal has not been issued by March 31, 2013, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application.” This is the “application shield” provided by BAAQMD Regulation 2-6-407.

The following language was added as Standard Condition I.B.12: “The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307).” The purpose is to reiterate that the Permit Holder is responsible for ensuring that all activities at the facility comply with all applicable requirements.

II. Equipment

This section of the permit lists all permitted or significant sources. Each source is identified by an S and a number (e.g., S24).

Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Rule 2-1-302.

Significant sources are those sources that have a potential to emit more than 2 tons per year of a “regulated air pollutant,” as defined in BAAQMD Rule 2-6-222, or 400 pounds per year of a “hazardous air pollutant,” as defined in BAAQMD Rule 2-6-210.

All abatement (control) devices that control permitted or significant sources are listed. Each abatement device whose primary function is to reduce emissions is identified by an A and a number (e.g., A-24). If a source is also an abatement device, such as when an engine controls VOC emissions, it will be listed in this table but will have an “S” number. An abatement device may also be a source of secondary emissions (such as selective catalytic reduction, which has secondary ammonia emissions). If the primary function of a device is to control emissions, it is considered an abatement (or “A”) device. If the primary function of a device is a non-control function, the device is considered to be a source (or “S”).

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as fuel types or the contents or sizes of tanks. This information is part of the factual basis of the permit.

Each of the permitted sources has previously been issued an authority to construct or a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District’s regulations. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

Changes to permit:

There have been several changes to the equipment proposed for the Delta Energy Center since the last Title V permit revision.

Application No. 9700 requested to install S-11 Natural Gas Emergency Generator to act as a black start engine (no grid power, no Gas Turbine/HRSGs in operation). S-11 will be added to list of Permitted Sources in Table II of the permit.

Application No. 17657 requested to alter vanes and clearances between gas turbine sections. No combustion related components were altered. The project evaluated whether or not these changes to the gas turbine could increase gas turbine efficiency. S-1's Model Number was changed in Table II from 501FD2 to 501FD3.

III. Generally Applicable Requirements

This section of the permit lists requirements that generally apply to all sources at a facility including not only permitted or significant sources, but also insignificant sources and portable equipment that may not require a District permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will appear in Sections IV and VII of the permit. Standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) will appear in this section only.

Changes to permit:

The following language was added to the text of Section III of the permit:

“Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered significant sources pursuant to the definition in BAAQMD Rule 2-6-239.”

“Portable equipment operating in accordance with the ARB portable equipment registration program and temporary equipment such as sandblasting equipment may be operated at the facility as long as the source is not significant under Rule 2-6-239. Otherwise the significant source would need to be included in the Title V permit.”

In addition, condition 17154, part 60 was added to the permit to require the facility to submit a Preplanned Abatement Strategy pursuant to BAAQMD Regulation 4 within 120 days of issuance of the Title V permit. This part was added because the rule does not contain deadlines for new facilities.

Further, Table III, Generally Applicable Requirements, was revised to change the effectiveness dates of applicable District Rules and Regulations and to add new applicable requirements to the facility as shown below:

| Action | Title/Description |
|---|--|
| Revised Effective Dates for BAAQMD Rules and Regulations | |
| Verified federal enforceability status for each requirement listed in Table III | |
| Added SIP Version of Regulation 2-1-429 | Federal Emissions Statement |
| Added BAAQMD Regulation 2, Rule 2 | Permits, New Source Review |
| Added SIP Regulation 2, Rule 2 | Permits, New Source Review |
| Added BAAQMD Regulation 2, Rule 3 | Power Plants |
| Added BAAQMD Regulation 2, Rule 4 | Permits, Emissions Banking |
| Added SIP Regulation 2, Rule 4 | Permits, Emissions Banking |
| Added BAAQMD Regulation 2, Rule 5 | New Source Review of Toxic Air Contaminants (6/15/05) |
| Added BAAQMD Regulation 2, Rule 6 | Permits, Major Facility Review |
| Added SIP Regulation 2, Rule 6 | Permits, Major Facility Review |
| Added BAAQMD Regulation 2, Rule 9 | Permits, Interchangeable Emission Reduction Credits |
| Added BAAQMD Regulation 3 | Fees |
| Added BAAQMD Regulation 6, Rule 1 | Particulate Matter and Visible Emissions |
| Added SIP Regulation 6 | Particulate Matter and Visible Emissions |
| Added BAAQMD Regulation 8, Rule 2 | Organic Compounds – Miscellaneous Operations |
| Added SIP Regulation 8, Rule 2 | Organic Compounds – Miscellaneous Operations |
| Added BAAQMD Regulation 8, Rule 4 | General Solvent and Surface Coating |
| Added BAAQMD Regulation 8, Rule 15 | Organic Compounds – Emulsified and Liquid Asphalts |
| Added BAAQMD Regulation 8, Rule 40 | Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks |
| Added SIP Regulation 8, Rule 40 | Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks |
| Added BAAQMD Regulation 8, Rule 47 | Organic Compounds – Air Stripping and Soil Vapor Extraction Operations |

| Action | Title/Description |
|--|---|
| Added SIP Regulation 8, Rule 47 | Organic Compounds – Air Stripping and Soil Vapor Extraction Operations |
| Added California Health and Safety Code Section 41750 et seq. | Portable Equipment |
| Added California Code of Regulations (CCR) Title 17, Section 93115 | Airborne Toxic Control Measure for Stationary Compression Ignition Engines |
| Added 17 CCR 93116 | Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater |
| Added, 40 CFR Part 52.21 | PSD Permit Program |
| Added, 40 CFR Part 61, Subpart M | NESHAPS – National Emissions Standard for Asbestos |
| Added, 40 CFR Part 82 | Protection of Stratospheric Ozone |
| Added BAAQMD Condition No. 17154 Part 60 | BAAQMD Regulation 4, Air Pollution Episode Plan |

Table III, Generally Applicable Requirements, was revised to reflect that the Delta Energy Center is subject to the PSD Permit program contained in 40 CFR Part 52.21. The facility received a District Authority to Construct and a PSD Permit on March 23, 2000. The facility was subject to the BACT requirements contained in 40 CFR Part 52.21 (j) and the Air Quality Impact Analysis requirements contained in 40 CFR Part 52.21(k) at that time.

IV. Source-Specific Applicable Requirements

Section IV of the permit lists the applicable requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules
- SIP Rules (if any) are listed following the corresponding District rules. SIP rules are District rules that have been approved by EPA for inclusion in the California State Implementation Plan. SIP rules are “federally enforceable” and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes”. If the SIP rule is not the current District rule, the SIP rule or the necessary portion of the SIP rule is cited separately after the District rule. The SIP portion will be federally enforceable; the non-SIP version will not be federally enforceable, unless EPA has approved it through another program.
- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal requirements (other than SIP provisions)

- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

The text of the requirements is found in the regulations, which are readily available on the District's or EPA's websites, or in the permit conditions, which are reproduced in Section VI of the permit. All monitoring requirements are cited in Section IV. Section VII is a cross-reference between the limits and monitoring requirements. A discussion of monitoring is included in Section C.VII of this permit evaluation/statement of basis.

Some notable applicability determinations regarding DEC's gas turbines and heat recovery steam generators are as follows:

- Accidental Release: Ammonia storage at this facility is subject to 40 CFR 68, Accidental Release, because more than 10,000 pounds of anhydrous (100%) ammonia is stored. The requirement is in Standard Condition I.K.
- Acid Rain: The facility is subject to the Acid Rain program because it is a utility unit that serves a generator with a capacity greater than 25 MW in accordance with 40 CFR Part 72.6. The NO_x and CO CEMs meet the requirements for a continuous compliance determination method contained in 40 CFR Part 64.1. The NO_x and CO CEMs are a monitoring method required by the Part 70 (Title V) operating permit.
- Compliance Assurance Monitoring (CAM): Per 40 CFR 64.2(a), an emission unit is subject to 40 CFR 64, Compliance Assurance Monitoring, if the unit is subject to a federally enforceable requirement for a pollutant, the pollutant is controlled by an abatement device, and the emissions of the pollutant before abatement are more than 100% of the major source thresholds. There are several exemptions in the regulation. In the case of Delta Energy, there are three turbines. Each has an associated fired heat recovery steam generator (HRSG). Each turbine/HRSG set is considered an emission unit for the purposes of 40 CFR 64. Each turbine/HRSG set has the potential to emit more than 100 tons per year of CO and NO_x. There is no abatement device for CO, therefore the emission units are not subject to CAM for CO. NO_x is abated by selective catalytic reduction and is subject to several federally enforceable limitations. However, the turbine/HRSG sets will be exempt from CAM pursuant to 40 CFR 64.2(b)(iii) because the NO_x emissions and monitoring are governed by Acid Rain program requirements.
- Clean Air Act section 112(j): The facility is not subject to the case-by-case MACT determination requirement in 112(j) of the Clean Air Act because it is not a major facility for hazardous air pollutants (HAPs). This facility's potential to emit HAPs can be found in Table 3 of the FDOC. Note that ammonia, propylene, and aluminum are not HAPs pursuant to 112(b) of the Clean Air Act.

Changes to permit:

Previously, each gas turbine and each heat recovery steam generator (HRSG) had its own table of applicable requirements: Table IV-A through IV-F. However, all of the sources of each type (i.e., gas turbine or HRSG) are identical with the similar applicable requirements. Accordingly, to reduce redundancy and promote readability in the renewal permit, the District has consolidated the gas turbine applicable requirements and heat recovery steam generator units into Table IV-A. Tables IV-B and F have been removed from the permit.

The District has revised the tables in this section of the permit as shown below:

Gas Turbines #1, 2 & 3 (S-1, S-3 & S-5), Heat Recovery Steam Generators #1, 2, & 3 (S-2, S-4, S-6)

Table IV-A (now applicable to all gas turbines S-1, S-3 and S-5 and heat recovery steam generators S-2, S-4, and S-6) was revised to change the effectiveness dates of applicable District Rules and Regulations, to add new applicable requirements, and combine applicable requirements for the gas turbines and heat recovery steam generators:

| Action | Title/Description |
|---|---|
| Added BAAQMD Regulation 1-520 | Continuous Emission Monitoring (CEM). |
| Added BAAQMD Regulation 1-520.1 | CEM of NO _x , CO ₂ and O ₂ . |
| Added BAAQMD Regulation 1-520.8 | CEM (monitors as required under BAAQMD Regulation 2-1-403). |
| Added BAAQMD Regulation 6-1-301 | Ringelmann Number 1 Limitation |
| Added BAAQMD Regulation 6-1-304 | Tube Cleaning |
| Added BAAQMD Regulation 6-1-305 | Visible Particles |
| Added BAAQMD Regulation 6-1-310 | Particulate Weight Limitation |
| Added BAAQMD Regulation 6-1-310.3 | Heat Transfer Operations |
| Added BAAQMD Regulation 6-1-401 | Appearance of Emissions |
| Added SIP Versions of Regulation 6 | Particulate Matter |
| Addend BAAQMD Regulation 9-3 | NO _x from Heat Transfer Operations |
| Added BAAQMD Regulation 9-9-301.1.3 | Emission Limits Turbines Rated ≥ 10 MW with SCR |
| Added BAAQMD Regulation 9-9-301.2 | Emission Limits General |
| Added BAAQMD Regulation 9-9-401 | Certification, Efficiency |
| Added SIP Versions of Regulation 9, Rule 9 | Nitrogen Oxides from Stationary Gas Turbines |
| Added Reference to BAAQMD Regulation 10, Subpart GG | Standards of Performance for New Stationary Sources (NSPS) for Gas Turbines |
| Action | Title/Description |

| | |
|---|--|
| Updated regulatory citations for 40 CFR Part 60, Subpart A | NSPS, General Provisions |
| Updated regulatory citations for 40 CFR Part 60 Subpart Db | NSPS, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units |
| Updated regulatory citations for 40 CFR Part 60, Subpart GG | NSPS, Standards of Performance for Stationary Gas Turbines |
| Updated regulatory citations for 40 CFR Part 72 Added detailed list of applicable requirements | Acid Rain Permit Program |
| Updated regulatory citations for 40 CFR Part 75 Added detailed list of applicable requirements | Continuous Emission Monitoring |
| Added regulatory citations for 40 CFR Part 98 | Mandatory GHG Reporting, Federal |
| Added regulatory citations for ARB Mandatory Reporting Rule, CA Code of Regulations, Title 17, Subchapter 10, Article 2 | Mandatory GHG Reporting, State |
| Added BAAQMD Condition 17154 Parts 19, 20 and 21 for gas turbines (S-1, S-3, S-5) and heat recovery steam generators (S-2, S-4, S-6). | SCR System requirement (BACT for NOx) |
| Removed TRMP and replaced with Regulation 2, Rule 5 throughout BAAQMD Condition 17154 | New Source Review of Toxic Air Contaminants |
| Deleted Part 61 of BAAQMD Condition 17154 | This part of the condition was dated and was not necessary for the facility to meet the requirements of 40 CFR Part 60, Subpart GG (NSPS, Standards of Performance for Stationary Gas Turbines). 40 CFR Part 60, Subpart GG allows the facility to monitor sulfur content of the fuel on a regular basis to indicate compliance with SO _x limits (40 CFR 60.334(h)). The facility may also use natural gas specification information or representative fuel sampling to demonstrate that the sulfur content is less than 20 grains/100 scf. The DEC facility currently collects sulfur data on a monthly basis to determine the sulfur content of the fuel and meet the requirements of 40 CFR Part 60, Subpart GG. |

40 CFR Part 60, Subpart Db

The facility is expected to continue to comply with the requirements of this subpart.

40 CFR Part 60, Subpart GG

60.332(a)(1) has a NO_x limit of nominally 75 ppm. The emissions units meet a permit limit of 2.5 ppm @ 15 % O₂ and therefore comply with the Subpart GG NO_x limit.

Section 60.333(a) requires an owner/operator of stationary turbines to demonstrate compliance with either one of the following two conditions:

- Discharge SO₂ at less than or equal to 0.015% by volume at 15% oxygen on a dry basis or
- Combust fuel with sulfur content less than or equal to 0.8% by weight (8000 ppmw).

The typical annual average sulfur concentration of the PUC quality natural gas combusted in the turbines is 0.25 grains/100 scf. PG&E natural gas typically has a sulfur concentration of 1 grain/100 scf (See PG&E Gas Rule 21, Section C). The SO₂ content in the natural gas can be compared to Section 60.333(a) as follows:

$$\text{lb S/MMBtu} = 1 \text{ grains/100 scf} \times \text{lb/7000 grains} \times \text{scf/1020 Btu} \times 1 \text{ E06 Btu/MMBtu}$$

$$\text{lb S/MMBtu} = 1.4 \text{ E-03}$$

$$\text{lb SO}_2/\text{MMBtu} = 1.4 \text{ E-03 lb/MMBtu} \times (64 \text{ lb SO}_2/\text{lb-mol}/32 \text{ lb S/lb-mol})$$

$$\text{lb SO}_2/\text{MMBtu} = 2.8 \text{ E-03}$$

Gas Turbines and Heat Recovery Steam Generators

$$\text{SO}_2 \text{ lb/hour} = 2.8 \text{ E-03 lb/MMBtu} \times 467.6 \text{ MMBtu/hour} = 1.31$$

$$\text{SO}_2 \text{ ppm} = (1.31 \text{ lb/hour} \times 1/64 \text{ lb/lb-mol} \times 386.8 \text{ scf/lb-mol}) / (8710 \text{ dscf/MMBtu} \times 467.6 \text{ MMBtu/hour} \times (20.95/(20.95 - 15))) \times 1 \text{ E06}$$

$$\text{SO}_2 \text{ ppm} = 0.6 \text{ ppm @ 15\% O}_2$$

The calculations demonstrate that the gas turbines at the facility meet Section 60.333(a).

40 CFR Part 72, Acid Rain Program

Part 72, Subpart A, establishes general provisions and operating permit program requirements for sources and affected units under the Acid Rain program, pursuant to Title IV of the Clean Air Act. The gas turbines are affected units subject to the program in accordance with 40 CFR Part 72, Subpart A, Section 72.6(a)(3)(i). The facility continues to meet 72.9 Standard Requirements which requires the submission of a complete acid rain permit application, the possession of a

valid acid rain permit, meeting the monitoring requirements of part 75, and holding sufficient allowances, and comply with the acid rain SO₂ limit. The facility must hold sufficient SO₂ allowances by March 1 (February 29 of a leap year) of every year to offset each ton of SO₂ emitted for the previous calendar year. The facility is expected to comply with the excess emissions, recordkeeping and reporting requirements in 72.9(e) and 72.9(f).

Part 72, Subpart C, contains requirements for acid rain permit applications and compliance plans. The facility is expected to continue to meet these requirements.

Part 72, Subpart E, contains the requirements for the acid rain permit which must include all elements of a complete acid rain application.

40 CFR Part 75, Continuous Emission Monitoring

Part 75, Subpart A, contains the applicability criteria, compliance dates, and prohibitions. The emissions units at the facility are subject to Part 72 and are therefore subject to Part 75. The NO_x monitoring is subject to part 75 per 75.2(c). The facility is expected to continue to meet the compliance dates and prohibitions contained in part 75 Subpart A.

Part 75, Subpart B, contains specific monitoring provisions for each pollutant subject to part 75. The emissions units at this facility are required to meet the SO₂, NO_x, CO₂ monitoring requirements contained in 75.10(a)(1), 75.10(a)(2), 75.10(a)(3) Opacity monitoring under 75.10(a)(4) is not required for gas fired units in accordance with 75.14(c). 75.10(b) requires each CEM to meet equipment, installation, and performance specification in part 75 Appendix A and quality assurance/quality control in Appendix B. 75.10(c) requires heat input rate monitoring to meet requirements contained in part 75 Appendix F. The facility is expected to continue to comply with the requirements contained in 75.10(b) and (c).

75.10(d) contains primary equipment hourly operating requirements that require the CEM to monitor emissions when the emissions unit combusts fuel except as specified in 75.11(e) and during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to §75.21 and appendix B of this part, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to §75.20. This section also contains requirements for calculating hourly averages from four 15-minute periods and validity of data and data substitution. Emission concentrations for a given hour are not considered valid unless it is based on four valid measurements. The data substitution requirements are contained in Subpart D. The facility is expected to continue to comply with the requirements contained in 75.10(d). 75.10(f) specifies minimum measurement capability requirement for CEMs and 75.10(g) contains the minimum recordkeeping and reporting requirements. The facility is expected to continue to meet 75.10(f) and (g).

75.11 contains specific provisions for SO₂ monitoring. 75.11(d)(2) allows the use of Appendix D to monitor SO₂ emissions from gas fired units. The facility monitors sulfur content of the natural gas to meet Part 75 SO₂ monitoring requirements.

Statement of Basis for Title V Permit Renewal: Site #B2095, Delta Energy Center, LLC, 1200 Arcy Lane, Pittsburg CA, 94565

75.12 contains specific provisions for NO_x emission rates. The facility uses a NO_x CEM and an O₂ monitor to meet this requirement.

75.13 contains CO₂ monitoring requirements. The facility monitors CO₂ in accordance with this section using the procedures in part 75 Appendix G.

75.14 contains opacity monitoring requirements. The facility is exempt from opacity monitoring under part 75 per 75.14(c).

Part 75 Subpart C contains operation and maintenance requirements including certification and recertification of the CEMs, quality assurance/quality control requirements, reference test methods, and out-of-control periods and adjustment for system bias. The facility is expected to continue to meet these requirements.

Part 75, Subpart D (75.30 through 75.36) contains Missing Data Substitution Procedures for SO₂, NO_x, flowrate, CO₂, and heat input procedures. The facility is expected to continue to meet these requirements.

Part 75, Subpart F contains the recordkeeping requirements including the contents of a part 75 monitoring plan. This subpart requires the facility to record the operating time, heat input rate, and load for each emissions unit. Additionally, the facility must record emissions data for SO₂, NO_x, CO₂, and O₂ along with quality assurance/quality control information.

Part 75, Subpart G contains the reporting requirements for affected facilities subject to part 75. The facility is expected to continue to meet these requirements.

40 CFR Part 98, Mandatory Green House Gas Reporting

The facility is expected to meet the federal green house gas reporting requirements.

Title 17 California Code of Regulations, Subchapter 10, Article 2

The facility is expected to meet the state green house gas reporting requirements.

S-9, Cooling Tower

Table IV-G for the Cooling Tower is now Table IV-B after consolidating the gas turbine and heat recovery steam generator tables.

The following changes were made to Table IV-B for the cooling tower:

| Action | Title/Description |
|---|--|
| Added BAAQMD Regulation 6, Rule 1 citations | Particulate Matter, General Requirements |
| Added SIP Regulation 6 citations. | Particulate Matter |

S-10, Fire Pump Diesel Engine

Table IV-H for the Fire Pump Diesel Engine is now Table IV-C after consolidating the gas turbine and heat recovery steam generator tables.

The following changes were made to Table IV-C for the fire pump diesel engine:

| Action | Title/Description |
|--|---|
| Added BAAQMD Regulation 6, Rule 1 citations | Particulate Matter, General Requirements |
| Added SIP Regulation 6 citations | Particulate Matter |
| Added BAAQMD Regulation 9, Rule 8 citations | Nitrogen Oxides And Carbon Monoxide from Stationary Internal Combustion Engines |
| Added 17 CCR 93115 | ATCM for Stationary Compression Ignition Engines |
| Deleted BAAQMD Condition 17999, replaced with BAAQMD Condition 22851 | Obsolete condition replaced with new condition derived from the current ATCM for Stationary Compression Ignition Engines (17 CCR 93115) |

Note on District’s Best Available Control Technology (BACT) Requirements:

District Regulation 2-2-301 requires an applicant for an Authority to Construct to apply BACT to any new source which results in an emission from the new source and which has the potential to emit 10.0 pounds or more per highest day of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), PM₁₀ or carbon monoxide (CO). BACT shall be applied for any of the above pollutants which meets both criteria. The District’s Authority to Construct evaluation report corresponding to Application No. 2625 stated that BACT did not apply to S-10, the Fire Pump Diesel Engine, since the maximum daily emissions will not exceed 10 pounds for any pollutant. This determination was based upon routine maintenance and reliability operation of the engine, which will not exceed 1-hour per day. However, a BACT determination should be based upon worst-case 24-hour per day operation under emergency conditions. Under these conditions, emissions from S-10 would exceed the District’s 10 lb/day BACT threshold under BAAQMD Regulation 2-2-301 for NO_x and CO. However, S-10, the Fire Pump Diesel Engine, met the current District “Achieved in Practice” BACT limitations specified in the District BACT Guidelines at the time it became subject to permitting and thus satisfies BACT.

S-11, Emergency Generator

The facility installed a natural gas fired emergency generator to provide electricity for a black start (no grid power, no turbine on) pursuant to an Authority to Construct that the District issued on Application No. 9700. S-11 is subject to Condition No. 21609, which is based on BAAQMD

Regulation 6 (limiting particulate matter emissions) and Regulation 9 (limiting inorganic gaseous pollutants emissions such as SO₂, NO_x and CO) requirements. These source specific applicable requirements have been added to a newly added Table IV-D.

V. Schedule of Compliance

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10, which provides that a major facility review permit shall contain the following information and provisions:

“409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

VI. Permit Conditions

All of the permit conditions that apply to the DEC facility are reproduced in Section VI of the Title V permit.

Since the facility’s last significant permit revision in 2004, the District has made the following permit condition changes pursuant to applications submitted by the facility. These changes are reflected in the renewal permit in ~~strikeout~~/underline format.

Application No. 9700:

Application No. 9700 requested to install a Natural Gas Emergency Generator to act as a black start engine (no grid power, no Gas Turbine/HRSGs in operation). Condition No. 21609 applies to S-11, the natural gas fired emergency generator, and has been added to the Title V permit.

Application No. 17657:

Application No. 17657 requested to alter vanes and clearances between gas turbine sections. No combustion related components were altered. The goal of the project was to evaluate whether or not these changes to the gas turbine could increase gas turbine efficiency.

Application No. 16773 (Title V renewal application):

The District made the following changes to Condition No. 17154:

- Conditions 14 through 25 and 36 through 38 rewritten in owner/operator format.
- Condition 39 rewritten in owner/operator format.
- Condition 43 removed reference to 22(g) which was deleted by Application No. 8341.
- Condition 49 and 58 rewritten in owner/operator format.
- All references throughout Condition No. 17154 to the District’s Toxics Risk Management Policy or TRMP were changed to refer instead to Regulation 2, Rule 5.
- Part 61 of Condition No. 17154 was deleted. Part 57 of the same condition requires monthly sampling of the fuel gas for sulfur content and Part 61 required a less stringent monitoring frequency.
- Condition No. 17999, which applies to S-10, Diesel Fire Pump, has been replaced with Condition No. 22851 (based on current ATCM).

VII. Applicable Limits and Compliance Monitoring Requirements

This section of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring. The applicable requirements for monitoring are completely contained in Sections IV, Source-Specific Applicable Requirements, and VI, Permit Conditions, of the permit.

As was the case with the tables in section IV of the permit, the Tables VII-B through -F have been combined with Table VII-A for the gas turbines and heat recovery steam generators since all of the sources of each type are identical with similar applicable requirements and exhaust through a common stack.

Table VII-A, Applicable Limits and Monitoring Requirements for the gas turbines (S-1, S-3, S-5) and heat recovery steam generators (S-2, S-4, S-6), was revised as shown below:

| Action | Title/Description |
|---|--|
| Added BAAQMD Regulation 9-3-303 | Nitrogen Oxides from Heat Transfer Operations |
| Added BAAQMD Regulation 9-9-301.2 as future effective requirement (1/1/10). | Nitrogen Oxides from Stationary Gas Turbines, Emission Limits, General |
| Added SIP Version of Regulation 9-9-301.3 | Nitrogen Oxides from Stationary Gas Turbines, Emission Limits, General |
| Removed reference to NSPS 40 CFR 60.42a(b) (now 40 CFR 60.42Da(b)) since it does not apply to heat recovery steam | NSPS, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After |

| | |
|---|---|
| generators | September 18, 1978, Standard for Particulate Matter |
| Updated reference to NSPS Subpart Db NOx limit to NSPS 40 CFR 60.44b(a)(4) | NSPS, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units |
| Updated numerical limit for NSPS 40 CFR 60.332(a)(1) from 100 ppm to 75 ppm | NSPS, Standards of Performance for Stationary Gas Turbines, Standard for Nitrogen Oxides |
| Updated references to Subpart GG SO ₂ limit to 40 CFR 60.333 and monitoring requirement to 40 CFR 60.334(h)(3) | NSPS, Standards of Performance for Stationary Gas Turbines |
| Added Regulation 6, Rule 1 requirements | Particulate Matter, General Requirements |
| Updated SIP reference for Regulation 6 requirements | Particulate Matter |
| Added Monitoring Reference for Heat Input for the gas turbines related to 40 CFR Part 75 monitoring. | 40 CFR Part 72 and 75 |

Table VII-B, Applicable Limits and Monitoring Requirements for the cooling tower (S-9), was revised as shown below:

| Action | Title/Description |
|---|--|
| Added Regulation 6 Rule 1 requirements | Particulate Matter, General Requirements |
| Updated SIP reference for Regulation 6 requirements | Particulate Matter |

Table VII-C, Applicable Limits and Monitoring Requirements for the fire pump diesel engine (S-10), was revised as shown below:

| Action | Title/Description |
|---|---|
| Added Regulation 6, Rule 1 requirements | Particulate Matter, General Requirements |
| Updated SIP reference for Regulation 6 requirements. | Particulate Matter |
| Added Regulation 9, Rule 1 requirements | Inorganic Gaseous Pollutants, Sulfur Dioxide |
| Added Regulation 9, Rule 8 requirements | Nitrogen Oxides And Carbon Monoxide from Stationary Internal Combustion Engines |
| Removed reference to Condition No. 17999 | SO ₂ Fuel Gas Monitoring |
| Removed reference to fuel sulfur monitoring contained in Condition No. 17999. Engine will | SO ₂ Fuel Gas Monitoring |

| | |
|--|---------------------|
| burn ARB diesel with a maximum sulfur content of 15 ppm. | |
| Added reference to Condition No. 22851 | Reliability Testing |

Table VII-D, Applicable Limits and Monitoring Requirements for the natural gas fired engine generator (S-11), was added to the permit as shown below:

| Action | Title/Description |
|---|---|
| Added Regulation 6 Rule 1 requirements | Particulate Matter, General Requirements |
| Updated SIP reference for Regulation 6 requirements | Particulate Matter |
| Added Regulation 9 Rule 1 requirements | Inorganic Gaseous Pollutants, Sulfur Dioxide |
| Added Regulation 9 Rule 8 requirements | Nitrogen Oxides And Carbon Monoxide from Stationary Internal Combustion Engines |
| Added reference to Condition No. 21609 | Reliability Testing |

Additional Monitoring Determinations

The tables below contain only the limits for which there is no monitoring in the applicable requirements. Other than these limits, the District has not identified any other limits for which the existing monitoring requirements are potentially inadequate. Rather, the District has examined the monitoring for all of the other limits in the permit and has determined that monitoring is adequate to provide a reasonable assurance of compliance with those limits.

Monitoring decisions are typically the result of a balancing of several different factors including: (1) the likelihood of a violation given the characteristics of normal operation, (2) degree of variability in the operation and in the control device, if there is one, (3) the potential severity of impact of an undetected violation, (4) the technical feasibility and probative value of indicator monitoring, (5) the economic feasibility of indicator monitoring, and (6) whether there is some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

For each of the limits discussed in this section (for which no monitoring is currently required), the District has confirmed that no monitoring is needed to provide a reasonable assurance of compliance with the limit. Where the District has based its determination on the small size of a source, the District provides in this section its calculations of the source’s potential to emit upon which that determination is grounded.

SO₂ Sources:

The following SO₂ limits for the following sources have no associated monitoring requirements:

SO₂ Sources

| S# & Description | Emission Limit Citation | Federally Enforceable Emission Limit | Monitoring |
|---|--------------------------------|--|-------------------|
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs | BAAQMD 9-1-301 | Ground level concentrations of SO ₂ shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours | None |
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs | BAAQMD 9-1-302 | 300 ppm (dry) | None |

BAAQMD Regulation 9-1-301 & 9-1-302, Sulfur Dioxide, Limits on Ground Level Concentrations and General Emission Limitation

All facility combustion sources are subject to the SO₂ emission limitations in District Regulation 9, Rule 1 (ground-level concentration [9-1-301] and emission point concentration [9-1-302]). In ‘EPA’s June 24, 1999 agreement with CAPCOA and ARB, entitled “Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP”, EPA agreed that natural-gas-fired combustion sources do not need additional monitoring to verify compliance with Regulation 9, Rule 1, since violations of the regulation are unlikely. Therefore, no monitoring is necessary for this requirement.

Nevertheless, the APCO may, at the APCO’s discretion, require area monitoring to demonstrate compliance with section 9-1-301 (per BAAQMD Regulation 9-1-501). However, because this facility does not have equipment that emits large amounts of SO₂, the APCO has determined that ground level monitoring is not required for this facility.

Sources of Particulate Matter:

The following PM limits for the following sources have no associated monitoring requirements:

PM Sources

| S# & Description | Emission Limit Citation | Federally Enforceable Emission Limit | Monitoring |
|--|--------------------------------|---|-------------------|
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs, S-9 Cooling Tower, S-10 Fire Pump Diesel Engine | BAAQMD Regulation 6-1-301 | Ringelmann 1.0 | None |

PM Sources

| # & Description | Emission Limit Citation | Federally Enforceable Emission Limit | Monitoring |
|--|--------------------------------|---|-------------------|
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs, S-9 Cooling Tower, S-10 Fire Pump Diesel Engine | SIP Regulation 6-301 | Ringelmann 1.0 | None |
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs, S-9 Cooling Tower, S-10 Fire Pump Diesel Engine | BAAQMD Regulation 6-1-310 | 0.15 gr/dscf | None |
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs, S-9 Cooling Tower, S-10 Fire Pump Diesel Engine | SIP Regulation 6-310 | 0.15 gr/dscf | None |
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs, S-9 Cooling Tower, S-10 Fire Pump Diesel Engine | BAAQMD Regulation 6-1-310.3 | 0.15 gr/dscf @ 6%O ₂ | None |
| S-1, S-3, S-5 Gas Turbines, S-2, S-4, S-6 HRSGs, S-9 Cooling Tower, S-10 Fire Pump Diesel Engine | SIP Regulation 6-310.3 | 0.15 gr/dscf @ 6%O ₂ | None |

BAAQMD Regulation 6, Rule 1, Particulate Matter

Visible Emissions

BAAQMD Regulation 6-1-301 (6-301 SIP) limits visible emissions to no darker than 1.0 on the Ringelmann Chart (except for periods or aggregate periods less than 3 minutes in any hour). Visible emissions are normally not associated with combustion of gaseous fuels, such as natural gas. The Gas Turbines S-1, S-3 and S-5 and HRSGs S-2, S-4 and S-6 burn natural gas exclusively; therefore, per the EPA’s June 24, 1999 agreement with CAPCOA and ARB, entitled “Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP”, no monitoring is required to ensure compliance with this limit for these sources. S-11, the natural gas fired Emergency

Standby Generator, is also fired exclusively on natural gas and thus no monitoring is required to demonstrate compliance with the BAAQMD Regulation 6-1-301 limits.

With a maximum vendor-guaranteed drift rate of 0.0005% and corresponding maximum grain loading of 0.0023 gr/dscf (see calculations below in the Particulate Weight Limitation discussion), S-9, the Cooling Tower, is not expected to emit visible particulate emissions. Therefore, no monitoring is required to demonstrate compliance with this limit for this source.

EPA's June 24, 1999 agreement with CAPCOA and ARB, entitled "Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", states that no monitoring will be required to demonstrate compliance with visible emissions limits for diesel standby and emergency reciprocating engines if California diesel or other low-sulfur fuels are used. The reason is that the use of low-sulfur fuels reduces particulates. Also, these engines are used infrequently and therefore are not large sources of particulate emissions. Because S-10, the Fire Pump Diesel Engine, will utilize California diesel fuel, no monitoring is required to ensure compliance with the visible emissions limit of Regulation 6-1-301.

Particulate Weight Limitation

BAAQMD Regulation 6-1-310 (6-310 SIP) limits filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. This is a "grain loading" standard.

Exceedances of the grain loading standards are normally not associated with combustion of gaseous fuels, such as natural gas. The Gas Turbines S-1, S-3 and S-5 and HRSGs S-2, S-4 and S-6 burn natural gas exclusively as does S-11, the Emergency Standby Generator; therefore, per the EPA's July 2001 agreement with CAPCOA and ARB, entitled "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources: Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", no monitoring is required to ensure compliance with this limit for these sources.

As shown in the following calculation, the worst-case grain loading from S-9, the Cooling Tower, is much less than 0.15 grains per dscf. Therefore, no monitoring is required to ensure compliance with this limit for this source.

Maximum PM₁₀ emission rate: 2.172 lb/hr
Exhaust gas flow rate: 112,222 dscfm

$$\begin{aligned}\text{Grain loading} &= (2.172 \text{ lb/hr})(\text{hr}/60 \text{ min})(7000 \text{ gr/lb})/(112,222 \text{ dscfm}) \\ &= 0.0023 \text{ gr/dscf}\end{aligned}$$

EPA's July 2001 agreement with CAPCOA and ARB, entitled "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources: Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", proposes the following monitoring to demonstrate compliance with the grain loading standard for non-utility distillate-oil-fueled emergency piston-type IC Engines: Maintain records of all engine usage (such as time or fuel meter readings) and maintenance. S-10, the Fire Pump Diesel Engine, is subject to such monitoring.

VIII. Test Methods

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

Changes to permit:

References to 40 CFR Part 60, Subpart Da were removed. This subpart is not an applicable requirement.

References to Regulation 9, Rule 8 requirements were added for S-10, the Fire Pump Diesel Engine, and S-11, the natural gas fired Emergency Standby Generator.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

IX. Acid Rain Permit

The applicant submitted a complete Acid Rain Permit Application dated September 17, 2007. The application is attached to the Title V permit. The District is issuing a renewed Acid Rain Permit with the Title V permit. The facility is required to hold sufficient SO₂ allowances for each operating year on March 1st (or February 29th in a leap year) of the following year.

Changes to permit:

The facility representatives were updated. The permit term was revised and the tables containing SO₂ allocation information under Table 2 of 40 CFR Part 73 were also updated.

X. Permit Shield

The District rules allow two types of permit shields in District-issued permits. The permit shield types are defined as follows: (1) a provision in a major facility review permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) a provision in a major facility review permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are

subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA’s White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. Accordingly, the District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in Title V permits. The District’s program does not allow other types of streamlining in Title V permits.

Changes to permit:

The following table lists the permit shields that were contained in the existing Title V permit for the facility. In the renewal permit, the permit shields have been removed. This facility’s Title V permit now has no streamlining, for the reasons explained below.

Table X B – 1
Permit Shield for Subsumed Requirements
S-1, S-3, S-5 TURBINES
S-2, S-4, S-6 HEAT RECOVERY STEAM GENERATORS

| Subsumed Requirement Citation | Title or Description | Streamlined Requirements | Title or Description |
|-------------------------------|---|--|---|
| 40 CFR 60.334(b)(2) | Fuel Nitrogen Content monitoring (natural gas) | BAAQMD Condition 17154, part 39 | Continuous emission monitoring for 2.5 ppmv limit @ 15% oxygen |
| 40 CFR 60.334(e)(1) | Periods of excess emissions, NO_x | BAAQMD Condition 17154, Part 39 | Requirement for continuous emission monitor for NO_x |

In the Initial Title V Permit for DEC, this section contained subsumed requirements related to NO_x and SO_x monitoring under 40 CFR Part 60, Subpart GG. These subsumed requirements have been removed from this section since this regulation has been revised since the initial Title V permit was issued. The monitoring requirements of Subpart GG are now listed in section VII of the permit. The facility is demonstrating compliance with the NO_x and SO_x limits as follows:

40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, allows the facility to monitor parametric parameters to indicate compliance with NO_x limits, or to use Continuous Emission Monitors to demonstrate compliance with NO_x limits. The DEC facility demonstrates compliance with NO_x limits using a NO_x CEM installed on all three gas turbine/HRSG stacks.

40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, allow the facility to monitor sulfur content of the fuel on a regular basis to indicate compliance with SO_x limits. The facility may also use natural gas specification information or representative fuel sampling data to demonstrate that the sulfur content is less than 20 grains/100 scf. The DEC facility currently collects sulfur data on a monthly basis to determine the sulfur content of the fuel and meet the requirements of 40 CFR Part 60, Subpart GG.

In addition, under Application No. 16773 the applicant requested that the District add permit shields from the following requirements:

- BAAQMD Condition No. 17154 Part 57 for S-1, S-2, S-3, S-4, S-5, S-6
- 40 CFR 60.334(a) for S-1, S-2, and S-3
- 40 CFR 60 Subpart Db Emission Limit of 0.2 lb/MMBtu, 30 day-average for S-2, S-4 and S-6.

The District could not approve any of the requested permit shields. A permit shield is not meant to shield a facility from a District permit condition. 40 CFR 60.334(a) does not apply to the facility since it does not use water or steam injection to control NO_x emissions. The permit shield may be used for monitoring, reporting, and recordkeeping requirements and may not be used to shield the facility from an emissions standard such as the 40 CFR Part 60, Subpart Db NO_x limit.

XI. Revision History

This section details the revision history of the facility's Title V permit.

Changes to permit:

The renewal permit contains the following updated information regarding the application for renewal:

- | | |
|---|---------------|
| Permit Renewal/Significant Revision (Application #16773): | January, 2011 |
|---|---------------|
- Purpose: update Title V permit to agree with District Permit.
- Added Standard Condition Text for I.B.1 and I.B.12.
 - Added S-11 Natural Gas Fired Emergency Generator to Title V Permit.
 - Modified description of S-1 after installation of modified vanes and changes to clearances between gas turbine sections. S-1 model changed from 501FD2 to 501FD3.
 - Updated regulatory requirements in Table III applicable requirements.
 - Combined Table IV-B through F with Table IV-A for the gas turbines and heat recovery steam generators.
 - Combined Table VII-B through F with Table VII-A for the gas turbines and heat recovery steam generators.
 - Updated regulatory requirements in Table IV and VII for the gas turbines and HRSGs.
 - Change Permit Condition for S-10 Diesel Fire Pump from Condition No. 17999 to Condition No. 22851.
 - Delete Part 61 in Condition No. 17154 due to conflict with Part 57.
 - Changed references in Condition No. 17154 to Toxics Risk Management Plan to Regulation 2, Rule 5.

XII. Glossary

Changes to permit:

- Removed Toxics Risk Management Plan (TRMP) from glossary. Prior references in the permit to the District's TRMP have been replaced with references to BAAQMD Regulation 2-5.

XIII. Applicable State Implementation Plan

Changes to permit:

- Removed this Section and included information in Section III and IV of the permit.

D. Alternate Operating Scenarios

No alternate operating scenario has been requested for this facility.

E. Compliance Status

An office memorandum dated February 3, 2010 from the BAAQMD Director of Compliance and Enforcement, to the BAAQMD Director of Engineering, presents a review of the compliance record of this facility. As set forth in the memorandum, the District has determined that no violations of air quality rules and regulations have occurred since January of 2004. There is no evidence of on-going non-compliance and no recurring pattern of violations that would warrant consideration of a Title V permit compliance schedule. The memorandum is attached as an Appendix. The District has reviewed the history of compliance since February 3, 2010 for this facility and found no reason to change its conclusion.

F. Differences between the Application and the Proposed Permit

There are no substantial differences between the contents of the renewal application and the proposed Title V permit.

APPENDIX A PERMIT EVALUATION 9700

**Delta Energy Center; Plant #12095
Arcy Lane, Pittsburg CA 94565**

BACKGROUND

The Delta Energy Center (DEC) is applying for a permit to operate for the following equipment:

- S-11 Natural-Gas Fired Emergency Generator, Caterpillar Model G3516 LE, Turbocharged, Aftercooled, Lean-Burn, Internal Combustion Engine, 4210 cubic inch displacement, 1462 bhp, 12.5 MM BTU/hr

The engine will be used to generate electricity for the DEC when all of the gas turbines are down for maintenance and electricity is not available from PG&E. Because the engine arrived on site prior to September 1, 2001, it is not subject to New Source Review. However, it is subject to the District TRMP since it was brought on site after May 17, 2000. According to documentation submitted by the applicant, the engine was set in place on June 21, 2001.

CRITERIA-POLLUTANT EMISSION SUMMARY

Annual Average Project Emissions Increase:

| Pollutant | lb/day | ton/yr |
|------------------|--------|--------|
| POC | 0 | 0 |
| NO _x | 0 | 0 |
| SO ₂ | 0 | 0 |
| CO | 0 | 0 |
| PM ₁₀ | 0 | 0 |
| NPOC | 0 | 0 |

EMISSION CALCULATIONS

S-11 Natural Gas Fired IC Engine

Because the engine was on site prior to September 1, 2001 but after May 17, 2000, the criteria-pollutant emissions are not calculated. However, the maximum TAC emissions are estimated for the purposes of the TRMP.

See attached spreadsheet from applicant for TAC emission calculations.

FACILITY CUMULATIVE INCREASE

(since April 5, 1991)

Not applicable

TOXIC RISK SCREENING ANALYSIS

See attached spreadsheet for TAC emission rates. Because none of the estimated emission rates for the TACs listed exceeded their respective risk screening trigger levels, a health risk assessment is not required.

BACT/OFFSET ANALYSIS

Not applicable

FEE SUMMARY

| Source | Fee Schedule | Filing Fee | Initial Fee | Late Fee | Permit to Operate Fee | Source Sub-Total |
|-----------------------------------|--------------|------------|-------------|----------|-----------------------|------------------|
| S-11 Natural Gas IC Engine | B | \$0.00 | \$0.00 | \$0.00 | \$384.00 | \$384.00 |
| Grand Total | | | | | | \$384.00 |
| Amount Paid | | | | | | \$384.00 |
| Log Number | | | | | | |

STATEMENT OF COMPLIANCE

S-11 Natural Gas Fired, Lean-Burn IC Engine is expected to comply with Regulation 9, Rule 8 section 301.1 with NO_x emissions of less than 56 ppmv @ 15% O₂, dry and section 301.3 with CO emissions of less than 2000 ppmv @ 15% O₂, dry.

S-11 Natural Gas Fired, Lean-Burn IC Engine is subject to the SO₂ limitations of 9-1-301 (ground-level concentration) and 9-1-302 (General Emission Limitation). Compliance with both of these requirements is considered very likely since they will be fired exclusively with utility-grade natural gas with a maximum sulfur content of 1 gr/100 scf.

This project is considered to be **ministerial** under the District's CEQA Regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors as outlined in the District Permit Handbook (**chapter 2.3, Internal Combustion Engines**) and therefore is not considered discretionary as defined by CEQA.

The DEC facility is not located within 1000 feet of the outer boundary of a K-12 school and is therefore not subject to the public notification requirements of Regulation 2-1-412.

As discussed above, a Toxics Risk Screening Analysis was not required due to the emission of the toxic air contaminants listed above. TBACT does not apply.

Offsets, BACT, PSD, NSPS, and NESHAPS do not apply to this project.

PERMIT CONDITIONS

Conditions for S-11

- 1) **Hours of Operation:** The owner/operator shall operate the emergency standby engine(s) only to mitigate emergency conditions or for reliability-related activities. Operation of the engine for the purpose of mitigating emergency conditions is unlimited. Operation of the engine for the purpose of reliability-related activities is limited to 100 hours per calendar year. [Basis: Regulation 9-8-330]

"Emergency Conditions" are defined as any of the following:

- a. **Loss of regular natural gas supply**
 - b. **Failure of regular electric power supply**
 - c. **Flood mitigation**
 - d. **Sewage overflow mitigation**
 - e. **Fire**
 - f. **Failure of a primary motor, but only for such time as needed to repair or replace the primary motor**
- [Basis: Regulation 9-8-231]

"Reliability-related activities" are defined as any of the following:

- a. **Operation of an emergency standby engine to test its ability to perform for an emergency use, or**
 - b. **Operation of an emergency standby engine during maintenance of a primary motor.**
- [Basis: Regulation 9-8-232]

- 2) **The owner/operator shall equip the emergency standby engine with either:**

- a. **a non-resettable totalizing meter that measures the hours of operation for the engine; or**
 - b. **a non-resettable fuel usage meter, the maximum hourly fuel rate shall be used to convert fuel usage to hours of operation.**
- [Basis: Regulation 9-8-530]

- 3) **Records:** The owner/operator shall maintain the following monthly records in a District-approved log for at least 2 years and shall make the log available for District inspection upon request:

- a. **Hours of operation (total)**
 - b. **Hours of operation (emergency)**
 - c. **For each emergency, the nature of the emergency condition**
 - d. **Fuel usage for engine(s) if a non-resettable fuel usage meter is utilized**
- [Basis: Regulations 9-8-530 and 1-441]

RECOMMENDATION

Issue a **conditional Permit to Operate** for the following source:

S-11 Natural-Gas Fired Emergency Generator, Caterpillar Model G3516 LE, Turbocharged, Aftercooled, Lean-Burn, Internal Combustion Engine, 4210 cubic inch displacement, 1462 bhp, 12.5 MM BTU/hr

EXEMPT SOURCES

None

By: _____
Air Quality Engineer II

Date

APPENDIX B PERMIT EVALUATION 17657

**Engineering Evaluation
Delta Energy Center
1200 Arcy Lane
Pittsburgh, CA 94565
Plant No. 12095
Application No. 17657**

BACKGROUND

Delta Energy Center has applied for an Authority to Construct for an alteration of Combustion Turbine S-1. The alteration is a thermal improvement project to decrease the heat rate per MW of electricity produced. The alterations are currently available on new Siemens W501FD3 turbines. The modifications consist of decreasing clearances in the compressor section of the turbine, adjusting the inlet guide vanes, and optimizing control system components.

Specific modifications:

- 1) Inlet guide vanes opened up to increase mass through the turbine.
- 2) Existing compressor row 7-15 diaphragm inter-stage labyrinth seal holders will be replaced with honeycomb seals.
- 3) Compressor row 16 blades will be replaced with a new design.
- 4) Turbine row 1 blades will be replaced with a new design.
- 5) Turbine row 1 ring segments and isolation rings will be replaced with a new design.
- 6) Replace turbine row 2 seal housing with a new rope seal.
- 7) Enhance the turbine row 2 vane sealing.
- 8) Enhance the turbine row 3 vane sealing.
- 9) Turbine row 4 blade ring assembly, consisting of blade rings, vanes, ring segments and inter-stage seal housing will be replaced with a new design.
- 10) Turbine row 4 blades will be replaced with a new design.
- 11) Replace existing exhaust cylinder.

The work is scheduled to be completed some time in April or May of 2008.

EMISSIONS SUMMARY

There is no increase in emissions (fugitive or from a defined emission point) associated with this application.

Plant Cumulative Increase: (tons/year)

| Pollutant | Existing | New | Total |
|------------------|-----------------|------------|--------------|
| POC | 0.000 | 0.000 | 0.000 |

Toxic Risk Screening:

There is no increase in toxic air contaminant emissions associated with this application. This application does not require a Risk Screening Analysis under Regulation 2 Rule 5.

STATEMENT OF COMPLIANCE

The owner/operator of S-1 combustion turbine shall continue to comply with all applicable Permit Conditions.

The project is considered to be ministerial under the District's CEQA regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emissions factors and therefore is not discretionary as defined by CEQA. (Permit Handbook Chapter 2.3)

The project is also categorically exempt from CEQA per 2-1-312.6 and 2-1-312.7.

2-1-312 Other Categories of Exempt Projects: In addition to ministerial projects, the following categories of projects subject to permit review by the District will be exempt from the CEQA review, either because the category is exempted by the express terms of CEQA (subsections 2-1-312.1 through 312.9) or because the project has no potential for causing a significant adverse environmental impact (subsections 2-1-312.10 and 312.11). Any permit applicant wishing to qualify under any of the specific exemptions set forth in this Section 2-1-312 must include in its permit application CEQA-related information in accordance with subsection 2-1-426.1. In addition, the CEQA-related information submitted by any permit applicant wishing to qualify under subsection 2-1-312.11 must demonstrate to the satisfaction of the APCO that the proposed project has no potential for resulting in a significant environmental effect in connection with any of the environmental media or resources listed in Section II of Appendix I of the State CEQA Guidelines.

312.1 Applications to modify permit conditions for existing or permitted sources or facilities that do not involve any increases in emissions or physical modifications.

312.2 Permit applications to install air pollution control or abatement equipment.

312.3 Permit applications for projects undertaken for the sole purpose of bringing an existing facility into compliance with newly adopted regulatory requirements of the District or of any other local, state or federal agency.

312.4 Permit applications submitted by existing sources or facilities pursuant to a loss of a previously valid exemption from the District's permitting requirements.

312.5 Permit applications submitted pursuant to the requirements of an order for abatement issued by the District's Hearing Board or of a judicial enforcement order.

312.6 Permit applications relating exclusively to the repair, maintenance or minor alteration of existing facilities, equipment or sources involving negligible or no expansion of use beyond that previously existing.

312.7 Permit applications for the replacement or reconstruction of existing sources or facilities where the new source or facility will be located on the same site as the source or facility replaced and will have substantially the same purpose and capacity as the source or facility replaced.

The project is not located within 1000 feet from a School and is not subject to the public notification requirements of Reg. 2-1-412.

Best Available Control Technology:

This application does not trigger BACT.

Offsets: Offsets must be provided for any new or modified source at a facility that emits more than 10 tons/yr of POC or NO_x. Based on the emission calculations above, offsets are not required for this application.

PSD, NSPS, and NESHAPS do not apply.

Statement of Basis for Title V Permit Renewal: Site #B2095, Delta Energy Center, LLC, 1200 Arcy Lane, Pittsburg CA, 94565

PERMIT CONDITIONS

This application does not require modifying permit conditions.

RECOMMENDATION

Approve the alteration of the following equipment:

S1 Combustion Turbine, Siemens W501FD3, 2003 MMBtu/hour

EXEMPTIONS

None.

By: _____ Date: _____
Brian Lusher
Air Quality Engineer II

APPENDIX C GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

Basis

The underlying authority that allows the District to impose requirements.

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CAPCOA

California Air Pollution Control Officers Association

CEQA

California Environmental Quality Act

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CO

Carbon Monoxide

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Cumulative increase is used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

dscf

Dry Standard Cubic Feet

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District regulations.

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

Major Facility

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

NMHC

Non-methane Hydrocarbons (Same as NMOC)

NMOC

Non-methane Organic Compounds (Same as NMHC)

NO_x

Oxides of nitrogen.

NSPS

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO_x, PM₁₀, and SO₂.

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

POC

Precursor Organic Compounds

PM

Particulate Matter

PM₁₀

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO₂

Sulfur dioxide

THC

Total Hydrocarbons (NMHC + Methane)

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TOC

Total Organic Compounds (NMOC + Methane, Same as THC)

TPH

Total Petroleum Hydrocarbons

TSP

Total Suspended Particulate

VOC

Volatile Organic Compounds

Units of Measure:

| | | |
|----------------|---|----------------------------------|
| bhp | = | brake-horsepower |
| btu | = | British Thermal Unit |
| cfm | = | cubic feet per minute |
| g | = | grams |
| gal | = | gallon |
| gpm | = | gallons per minute |
| hp | = | horsepower |
| hr | = | hour |
| lb | = | pound |
| in | = | inches |
| max | = | maximum |
| m ² | = | square meter |
| min | = | minute |
| mm | = | million |
| MMbtu | = | million btu |
| MMcf | = | million cubic feet |
| ppmv | = | parts per million, by volume |
| ppmw | = | parts per million, by weight |
| psia | = | pounds per square inch, absolute |
| psig | = | pounds per square inch, gauge |
| scfm | = | standard cubic feet per minute |
| yr | = | year |

APPENDIX D REVIEW OF COMPLIANCE RECORD

March 29, 2011

Memorandum to File

Brian Lusher

Application No. 16773 (B2095 Delta Energy Center Title V Renewal Application)

Subject: Compliance Review

The Compliance and Enforcement Division prepared Compliance Reviews for this facility dated February 3, 2010 and May 14, 2010. This documents were considered out of date at the time that the draft permit was going out for public comment (April 2011). Prior to the proposed comment period the permit engineer for the facility contacted the inspector for the facility to have the Compliance Review updated. The Compliance and Enforcement Division reviewed the original document and had no changes to add based on a review of the compliance record for this facility (See Attached Compliance & Enforcement Division, Title V, Draft Permit Review).

COMPLIANCE & ENFORCEMENT DIVISION

Inter-Office Memorandum

February 3, 2010

TO: BRIAN BATEMAN – DIRECTOR OF ENGINEERING ^{BB}

FROM: KELLY WEE – DIRECTOR OF ENFORCEMENT ^{N. K. Wee for}

SUBJECT: REVIEW OF COMPLIANCE RECORD OF:

CALPINE DELTA ENERGY CENTER, LLC – SITE #B2095

Background

This review was initiated as part of the District evaluation of an application by CALPINE DELTA ENERGY CENTER, LLC (DEC) for a Title V Permit Renewal. It is standard practice of the Compliance and Enforcement Division to undertake a compliance record review in advance of a renewal of a Title V Permit to Operate. The purpose of this review is to assure that any non-compliance problems identified during the prior five-year permit term have been adequately addressed, or, if non-compliance persists, that a schedule of compliance is properly incorporated into the Title V permit compliance schedule. In addition, the review checks for patterns of recurring violation that may be addressed by additional permit terms. Finally, the review is intended to recommend, if necessary, any additional permit conditions and limitations to improve compliance.

Compliance Review

Staff reviewed DEC'S Annual Compliance Certifications for 9/1/2004 to 7/31/09 and found no ongoing non-compliance and no recurring pattern of violations.

Staff also reviewed the District compliance records for DEC for 1/1/2009 through 12/31/09. During this period, DEC activities known to the District include:

The District issued 0 Notices of Violation.

The District did not receive air pollution complaints alleging DEC as the source.

The District received 0 notifications for Reportable Compliance Activities (RCA) including inoperative monitors.

There were 0 reported deviations.

DEC is a power generation facility using gas turbines and Heat Recovery Steam Generators as well as an auxiliary boiler when needed. Continuous Emission Monitors are in place to measure applicable pollutants.

There are no enforcement agreements, open variances, or open abatement orders for DEC.

CONCLUSION


The Compliance and Enforcement Division has made a determination that for the five year period DEC was in intermittent compliance. There is no evidence of on-going non-compliance and no recurring pattern of violations that would warrant consideration of a Title V permit compliance schedule.

Msb 2/3/10

COMPLIANCE & ENFORCEMENT DIVISION

Inter-Office Memorandum

May 14, 2010

TO: BRIAN BATEMAN – DIRECTOR OF ENGINEERING 

FROM: KELLY WEE – DIRECTOR OF ENFORCEMENT 

SUBJECT: REVIEW OF COMPLIANCE RECORD OF:

CALPINE DELTA ENERGY CENTER, LLC – SITE #B2095

Background

This review was initiated as part of the District evaluation of an application by **CALPINE DELTA ENERGY CENTER, LLC (DEC)** for a Title V Permit Renewal. It is standard practice of the Compliance and Enforcement Division to undertake a compliance record review in advance of a renewal of a Title V Permit to Operate. The purpose of this review is to assure that any non-compliance problems identified during the prior five-year permit term have been adequately addressed, or, if non-compliance persists, that a schedule of compliance is properly incorporated into the Title V permit compliance schedule. In addition, the review checks for patterns of recurring violation that may be addressed by additional permit terms. Finally, the review is intended to recommend, if necessary, any additional permit conditions and limitations to improve compliance.

DEC is a power generation facility using gas turbines and Heat Recovery Steam Generators as well as an auxiliary boiler when needed. Continuous Emission Monitors are in place to measure applicable pollutants.

Compliance Review

1. Violation History

Staff reviewed DEC's Annual Compliance Certifications from its initial permit period between 4/3/03 – 3/31/08 and found no ongoing non-compliance and no recurring pattern of violations. All of the listed NOV's (Notices of Violations) were single day occurrences and compliance was achieved the same day. During this period DEC's activities known to the District were 7 Notices of Violations, including the following:

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| NOV# | Regulation | Date Occur | # of Days | Comments | Disposition |
|---------|------------|------------|-----------|------------------------------|-------------------|
| A45008 | HS-42402 | 5/20/03 | 1 | Excess CO | Cancelled |
| A45009 | HS-42402 | 5/20/03 | 1 | Excess NOx | Cancelled |
| A45010 | HS-42402 | 5/7/03 | 1 | Excess NOx | Cancelled |
| A45011 | HS-42402 | 5/7/03 | 1 | Excess CO | Cancelled |
| A45012A | 2-6-307 | 7/15/03 | 1 | Excess NOx | Resolved |
| A45012B | 1-522.7 | 7/15/03 | 1 | Failure to report | Resolved |
| A45014 | 2-6-307 | 6/17/03 | 1 | Sulfur content in fuel gas | No Further Action |
| A45020A | 1-522.6 | 11/24/03 | 1 | Failure to maintain accuracy | Resolved |
| A45020B | 2-6-307 | 11/24/03 | 1 | Excess NOx | Resolved |

Staff also reviewed the District compliance records for DEC during the period between **4/1/08 through 5/7/10**. During this period DEC was found not to have any ongoing non-compliance issues or any recurring pattern of violations. Activities known to the District were the following:

0 District-issued Notices of Violation:

2. Complaint History

The District did not receive any air pollution complaints alleging DEC as the source over the period of the initial permit period or thereafter..

3. Reportable Compliance Activity

Reportable Compliance Activity (RCA), also known as "Episode" reporting, is the reporting of compliance activities involving a facility as outlined in District Regulations and State Law. Reporting covers breakdown requests, indicated monitor excesses, pressure relief device releases, inoperative monitor reports and flare monitoring.

Within the initial permit period, **4/3/03-3/31/08**, the District received **30** notifications for RCA's. **5** NOV's were issued as a result of these RCA's.

Between **4/1/08 and 5/7/10**, the District received **3** more notifications for RCA's, resulting in **0** NOV's being issued.

4. Enforcement Agreements, Variances, or Abatement Orders

There were no enforcement agreements, variances, or abatement orders for DEC over the period of the initial permit period or thereafter.

Conclusion

Following its review of all available facility and District compliance records from the date of issuance of DEC's initial Title V permit until the present (4/3/03 to 5/14/10), the District's Compliance and Enforcement Division has determined that, DEC was in intermittent compliance from the initial permit period through the present. However, DEC has demonstrated no evidence of ongoing non-compliance and no recurring pattern of violations that would warrant consideration of a Title V permit compliance schedule for this facility.

Based on this review and analysis of all the violations for the 5 -year period, and the period thereafter, the District has concluded that no schedule of compliance or change in permit terms is necessary beyond what is already contained in the facility's current Title V permit.

MSB 5/14/10