ENGINEERING EVALUATION
AUTHORITY TO CONSTRUCT

Facility Name:	SDG&E Palomar Energy Center
Equipment Type:	20F – Combined Cycle Gas Turbine Power Plant
Application #:	APCD2015-APP-003970 (PTO-000623)
	APCD2015-APP-003971 (PTO-000625)
ID#:	APCD2001-SITE-04276
Equipment/Facility Address:	2300 Haverson Place
	Escondido, CA 92029
Facility Contact:	Jason Bowman, (760)432-2547
Permit Engineer:	4/14/2016 X Nicholas Horres Air Pollution Control Engineer Signed by: Nicholas Horres
Senior Engineer Signature:	4/14/2016 X John Annicchiarico John Annicchiarico Senior Air Pollution Control Engineer Signed by: John Annicchiarico

1.0 Background

1.1 Type of application.

These applications are to modify existing gas turbine engines as part of an engine overhaul. Improved engine components will allow a small increase in gas turbine heat input, energy output and efficiency.

1.2 Permit History.

This equipment was originally applied for in 2006. The initial permits were issued in 2011. The equipment was modified in 2014 by APCD2013-APP-003153 to replace the control software.

1.3 Facility Description.

This is a combined cycle gas turbine power plant used to produce power for the grid. The only other permitted equipment at this facility other than the two gas turbines includes 2011-PTO-000873 which is a 1945 hp emergency natural gas fired engine.

1.4 Other background info.

This is a title V site.

2.0 Process Description

2.1 Equipment Description.

PTO-000623: Power Station Unit No.1 (West or Unit No.1) consisting of: one 176 MW rated natural-gas fired combined-cycle General Electric Power Systems Frame 7FA gas turbine generator (combustion turbine), max heat input 1765 MMBtu/hr, S/N 298258, with dry low-NOx combustors, a heat recovery steam generator, a 195 MMbtu/hr (HHV) auxiliary duct burner, a Peerless Selective Catalytic Reduction unit (SCR) [with a Cormetech catalyst block, a Peerless Ammonia Vaporizer Skid], an Engelhart oxidation catalyst, a steam turbine generator shared with Power Station Unit No. 2, and an Emerson Ovation control system with low-load emissions and startup fuel gas heating capability.

Centralized chiller plant of 9800 ton refrigeration capacity or less, potentially including a thermal energy storage tank (3 to 5 million gallons), fixed and variable speed pumps and four (4) York chillers, Model YKZ1Z3J7-DHF, S/N's SATM-7832-20, SATM-7834-20, SATM-7920-40 and SATM-9722-70.

PTO-000625: Power Station Unit No.2 (East or Unit No.2) consisting of: one 176 MW rated natural-gas fired combined-cycle General Electric Power Systems Frame 7FA gas turbine generator (combustion turbine), max heat input 1765 MMBtu/hr, S/N 298257, with dry low-NOx combustors, a heat recovery steam generator, a 195 MMbtu/hr (HHV) auxiliary duct burner, a Peerless Selective Catalytic Reduction unit (SCR) [with a Cormetech catalyst block, a Peerless Ammonia Vaporizer Skid], an Engelhart oxidation catalyst, a steam turbine generator shared with Power Station Unit No. 1, and an Emerson Ovation control system with low-load emissions and startup fuel gas heating capability.

Centralized chiller plant of 9800 ton refrigeration capacity or less, potentially including a thermal energy storage tank (3 to 5 million gallons), fixed and variable speed pumps and four (4) York chillers, Model YKZ1Z3J7-DHF, S/N's SATM-7832-20, SATM-7834-20, SATM-7920-40 and SATM-9722-70.

A shared 130,000 gallons per minute (GPM) wet cooling tower system and high efficiency drift eliminators.

2.2 Process Description.

Combined cycle gas turbine power plant with two combustion turbines and one steam turbine. The purpose of this application is to modify the gas turbines using a hot gas path modification during the next planned overhaul. This modification allows the gas turbines to fire slightly more fuel while using slightly less cooling air resulting in increased power output and increased efficiency.

2.3 Emissions Controls.

These turbines are equipped with DLN combustors to control emissions at the point of generation. Additionally emissions are further lowered by in-stack controls including an oxidation catalyst for CO and VOC control and an SCR catalyst with ammonia injection for NOx control. This application does not affect the emission controls since the small

increase in fuel input will not affect the ability of the controls to meet emission requirements.

2.4 Attachments.

None.

3.0 Emissions

3.1 Emissions estimate summary.

Estimated emissions from the process are shown below.

Table 1: Estimated PTE for criteria pollutants (Post-project)

	lb/hr	lb/day	ton/yr
NOx	400	796.0	99
CO	2000	4108	99
VOC	14.6	392	49
PM-10	28	672.0	99
SOx	8.1	221.1	33.9

Table 2: Pre-Project Emissions

	Combined PTE			Pre-Project Actual Emissions*
	lb/hr	lb/day	ton/yr	ton/yr
NOx	400	796.0	104.3	59.8
CO	2000	4108	313.7	7.1
VOC	14.6	392	50	28.8
PM-10	28	672	104.8	8.1
SOx	8.0	190.9	33.1	23.6

Table 3: Emission Increase

	Emission Increase			actual->potential
	lb/hr	lb/day	ton/yr	ton/yr
NOx	0	0.0	-5.3	-5.3
CO	0	0.0	-214.7	91.9
VOC	0	0.0	-1	20.2
PM-10	0	0.0	-5.8	90.9
SOx	0.19	30.2	0.78	10.3
NH3	0.57	13.8	2.51	36.9

3.2 Estimated Emissions Assumptions.

Post-Project PTE

-Calculated based on combination of permit limits and calculations. NOx, CO, VOC and PM-10 lb/hr emissions are limited by pre-project permit conditions which will not change as part of this modification.
-Post-Project Emissions of NOx, CO, VOC and PM-10 are further limited on an annual basis (ton/yr) by permit limits.
-Daily emissions of PM-10, NOx, CO and SOx are effectively limited by hourly permit conditions.
-Daily post-project emissions of SOx assumed to increase proportionally according to the increase in maximum hourly fuel use (1938.29MMBtu/hr / 1893.58MMBtu/hr)=1.0236 → 2.36% increase.

Pre-Project PTE

Based on current permit limits when available and for other pollutants and time-periods copied from the original FDOC prepared for these turbines with the exception of SOx emissions. Assumptions are the same as those used in the FDOC and account for permit limitations.

Emission Increase

-SOx emissions assume pre-modification fuel use of 1893.58 MMBtu/hr (HHV) and post-modification fuel use of 1938.29 MMBtu/hr (HHV) both including duct burner heat input.
-For all criteria pollutants, hourly and daily emission increases are assessed on a potential to potential basis.
-As will be discussed in section 4.2, the emission increase for this project is calculated by comparing pre-project potential to post project potential emissions. These calculations are contained in the emission increase column. Calculations of emission increase on an "actual->potential" (actual to potential) basis were also calculated and shown for reference. However, as will be explained in section 4.2, this calculation methodology was found not to be necessary for permit evaluation.
-The emission increase for toxic emissions was calculated based on the estimated increase in hourly and annual maximum fuel use. Default emission factors for turbines and an assumed control efficiency of 50% were used to calculate toxic emissions.

General

-Fuel is assumed to contain 0.75 grains total sulfur per 100 dscf natural gas.
-Natural gas heat content (HHV) of 1020 btu/scf. Ratio of HHV/LHV=1.1.
-Default F-factor of 8710 dscf/MMBtu natural gas.
-Maximum heat input for each turbine-duct burner combo of 1893.6 MMBtu/hr before project and 1938.3 MMBtu/hr after project (Both on an HHV basis)
-Other assumptions and procedures may be contained in the individual calculation sheets.

3.3 Emissions Calculations.

See original FDOC and attached spreadsheets. The emission increase shown in the tables above was calculated according to the methods described by District rules 20.1-20.3. Generally, potential emissions are calculated by multiplying maximum fuel use for an hour, day and annually by the emission rate (lb/MMBtu) calculated from converting the emission concentration using EPA method 19 equations. Elevated emissions during startup and shutdown are added to these emission rates. Finally if permit conditions further limit the emissions of any pollutant, potential to emit is lowered to match to corresponding emission limit.

3.4 Attachments.
None.

4.0 Applicable Rules

4.1 District Prohibitory Rules

District prohibitory rules that apply to this equipment have not changed since the issuance of the permit. The only requirement affected by the modification is the NOx emission concentration limit of Rule 69.3.1 which depends on efficiency; however, since this modification will result in an increase in efficiency, the allowable emission concentration under the rule will increase. The emission limit on the applicable permit condition is not proposed to be changed as part of this modification, and therefore the equipment is expected to comply with all applicable prohibitory rules if current permit conditions are complied with.

4.2 New Source Review (NSR) Rule 20.1-20.4

1. Applicability. *20.3(a)*: This rule applies to any new or modified major stationary source, to any new or modified emission unit and to any relocated emission unit being moved from a stationary source if, after completion of the project, the stationary source will be a major stationary source or a Prevention of Significant Deterioration (PSD) Stationary Source.
This equipment is located a major source, and therefore rule 20.3 applies to the equipment. After completion of the project the stationary source is expected to be a major source of NOx and will not be a PSD stationary source. This will be ensured through permit conditions limiting emissions of NOx, CO and PM-10 to 99 ton/yr for both turbines and 49 ton/yr VOC for both turbines combined.

2. Best Available Control Technology (BACT). 20.3(d)(1)(i): Except as provided in Subsection (d)(1)(v), any new or modified emission unit which has any increase in its potential to emit particulate matter (PM10), oxides of nitrogen (NOx), volatile organic compounds (VOC), or oxides of sulfur (SOx) and which unit has a post-project potential to emit 10 pounds per day or more of PM10, NOx, VOC or SOx shall be equipped with BACT for each such air contaminant.
Emissions from each unit exceed 10 lb/day for PM-10, NOx, VOC and SOx. However, BACT requirements are triggered for a modification only if there is an emission increase for that pollutant. To determine the correct procedure for calculating the emission increase for the project, the following considerations applied:
a. This equipment was installed under the terms of an A/C that was evaluated according to the District's NSR rules including the requirement to install BACT for NOx, VOC, PM-10 and SOx.

b. Emissions of NOx were previously offset during the initial application phase and annual emissions have not subsequently been increased beyond this level

c. Annual emissions of NOx, VOC and PM-10 will be limited by enforceable permit conditions

d. The emission calculation procedures described in rule 20.1 apply on an "air-contaminant specific" basis, so the procedures for calculating emissions described in rule 20.1 for major sources apply only to NOx emissions.

These considerations result in the District finding that there is no emission increase for NOx, VOC or PM-10 as shown in the emission calculation section. There is a minor increase in SOx emissions, so BACT requirements are triggered for SOx.

SOx: Emissions of SOx increase for this application based on the estimated increase in fuel use. Therefore BACT requirements are triggered and apply only to the potential to emit increase. The increase in fuel use results in an increase in SOx of less than 1 ton per year and therefore no add on controls are cost-effective. As determined in the previous analysis, BACT for SOx is the use of PUC quality natural gas with no more than 0.75 gr S/scf.

<u>3. Lowest Achievable Emission Rate (LAER).</u> *20.3(d)(1)(v).* …LAER shall be required for each new, modified, relocated or replacement emission unit which results in an emissions increase which constitutes a new major source or major modification. LAER shall be required only for those air contaminants and their precursors for which the stationary source is major and for which the District is classified as non-attainment of a national ambient air quality standard.
The District is classified as non-attainment of ozone (both NOx and VOC are ozone precursors), and therefore the project must be analyzed to determine whether it results in a major modification. Since this source is only major for NOx, only the emission increase of NOx must be reviewed.

To determine if the increase of NOx emissions results in a major modification, the "contemporaneous emission increase" of NOx must be determined. The contemporaneous emission increase includes all emission increase expected to occur within the 4 years preceding the modification and the year following. These applications are the only modifications occurring within this time frame. The contemporaneous emission increase of NOx emissions is determined to be 0. This is because the annual potential to emit is decreasing, and since more than the 99 ton/yr NOx PTE was previously offset Rule 20.1(d)(1)(i) defines the emission increase as post-project minus pre-project PTE (the decrease in permitted emissions is not considered part of the contemporaneous increase because it is not an actual emission reduction).

This project does not result in a new major source or major modification and therefore LAER is not required.

<u>4. Air Quality Impact Analysis (AQIA)</u>. *20.3(d)(2)(i)*: This rule requires new/modified sources that exceed the emissions limits in the table below to perform an AQIA.

Table 3: AQIA Emission Limits

	Emission Rate		
Air Contaminant	(lb/hr)	(lb/day)	(tons/yr)
Particulate Matter (PM10)	---	100	15
Oxides of Nitrogen (NOx)	25	250	40
Oxides of Sulfur (SOx)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Cmpds.	---	3.2	0.6

-As shown in the emission calculation section and described under the BACT section above, the project does not result in an increase in potential to emit above these levels, and therefore an AQIA is not required.

5. Prevention of Significant Deterioration (PSD). *20.3(d)(3)*: The Air Pollution Control Officer shall not issue an Authority to Construct or modified Permit to Operate for any project which is expected to have a significant impact on any Class I area, as determined by an AQIA required pursuant to Subsection (d)(2), unless the following requirements are satisfied...
Previously this source was considered to be a PSD source based on the assumptions used to calculate emissions and the annual NOx emission limit that resulted in Potential to emit of NOx, CO and PM-10 in excess of 100 ton/yr. However, based on review of the actual operating history of the facility the applicant and the District have determined that the facility can be operated with a PTE of less than 99 ton/yr of each of these pollutants. To ensure enforceability, permit conditions will ensure that emissions from this source do not exceed 99 ton/yr and include appropriate monitoring and recordkeeping conditions. Therefore, this source is not considered a PSD source under District rules.

6. Public Notice and Comment. *20.3(d)(4)*: The Air Pollution Control Officer shall not issue an Authority to Construct or modified Permit to Operate for any project subject to the AQIA or notification requirements of Subsection (d)(2) or (d)(3), nor for any project which results in an emissions increase of VOCs equal to or greater than 250 pounds per day or 40 tons per year, unless the following requirements are satisfied...
This modification did not require an AQIA, did not result in an emission increase of VOC in excess of this level and did not result in a PSD modification. Therefore, no public notice is required under this section. However, as discussed in the title V section below, this application will be processed under the "enhanced A/C" procedure which will include the same public notice requirement that would have been required under this section.

7. LAER and Federal Offset Requirements. 20.3(d)(8). The determination that a project at an existing major stationary source is a major modification and is subject to the LAER and federal emission offsets provisions of this Subsection (d)(8) shall be based on the stationary source's contemporaneous emission increases.
As described under the discussion of LAER above, this project is a major source of NOx, but is not considered a major modification because the contemporaneous emission

increase of NOx is 0 which does not result in a major modification. Therefore, LAER and federal offsets are not required.

4.3 Toxic New Source Review – Rule 1200

1. Applicability. *1200(a)*: Except as provided in Section (b) of this rule, this rule applies to any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminant(s) and for which an Authority to Construct or Permit to Operate is required pursuant to Rule 10…
-*This application may result in an increase in emissions of toxic air contaminants, and therefore a health risk assessment was required to evaluate compliance with Rule 1200.*

<u>Standards</u>

<u>2. Cancer Risk</u>. *1200(d)(1)*:
Cancer Risk
(i) T-BACT Not Applied. The increase in maximum incremental cancer risk at every receptor location is equal to or less than one in one million for any project for which new, relocated, or modified emission units that increases maximum incremental cancer risk are not equipped with T-BACT; and
(ii) T-BACT Applied. Except as provided in (d)(1)(iii), the increase in maximum incremental cancer risk at every receptor location is equal to or less than 10 in one million for any project for which all new, relocated, or modified emission units that increases maximum incremental cancer risk are equipped with T-BACT.
-*The increase in maximum incremental cancer risk from this project is below one in one million based on results of the HRA, and therefore this requirement is satisfied.*

<u>3. Total Acute Non-Cancer Risk</u>. *1200(d)(2)*. The increase in the total acute noncancer health hazard index at every receptor location as a result of the project is equal to or less than one unless the Air Pollution Control Officer, after consulting with the state OEHHA, determines that an alternate total acute noncancer health hazard index is sufficiently health protective…
-The increase in total acute non cancer health effects (HHI) determined by the results of the HRA is below one which satisfies this requirement.

<u>4. Total Chronic Non-Cancer Risk</u>. *1200(d)(3)*. The increase in the total chronic noncancer health hazard index at every receptor location as a result of the project is equal to or less than one unless the Air Pollution Control Officer, after consulting with the state OEHHA, determines that an alternate total chronic noncancer health hazard index is sufficiently health protective…
-The increase in total chronic non cancer health effects (HHI) determined by the results of the HRA is below one which satisfies this requirement.

4.4 AB3205

This application does not result in an emission increase within 1000 feet of a school, and therefore no public notice is required under this section.

4.5 State and Federal Regulations.

This equipment is subject to NSPS GG and if the turbines were considered "modified", would be subject to NSPS KKKK. This application is not expected to affect requirements of these rule. This is for two reasons:

1. The applications do not constitute a "modification" as defined in the NSPS general provisions and do not result in the turbines being subject to NSPS subpart KKKK instead of GG. A modification would occur if the emission rate of a pollutant for which the rule has a standard (NOx and SO_2) may increase in terms of kg/hr. This application only results in an increase in hourly SOx emissions, however when converted to units of kg/hr, based on emissions of 3.98 lb/hr compared to 4.07 lb/hr and a conversion factor of 2.205 lb/kg, the kg/hr emission rate would not change from 1.8 kg/hr (the standard is assumed to have two significant figures).

2. Even if the increase was sufficient to be considered a modification, the modified turbines would only be subject to the sulfur standards under NSPS KKKK. The current natural gas sulfur limit of 0.75 gr S/ 100 scf ensures compliance with the KKKK sulfur standard as well.

4.6 Title V.

The District determined that the proposed changes to the equipment and permit conditions will constitute a significant modification to the Title V permit as defined in District Rule 1401(c)(44)(iv) since the revised permit will contain additional and lowered annual emission limits that have been voluntarily accepted to qualify as exempt from District PSD and other potentially applicable requirements of District NSR rules. To streamline the procedure to modify the Title V permit once the modifications have been completed, the District processed the application under procedures to issue an "enhanced A/C". An enhanced A/C allows for public notice to be conducted as would be required for a significant modification at the time the A/C is issued allowing the Title V permit to be modified using an administrative amendment at the proper time. District Rule 1410(q) contains the requirements and procedures for enhanced authorities to construct as follows:

<u>1. Application Requirements</u>. *Rule 1410(q)(1).*This section requires the submittal of a compliance plan for the modified unit, the submittal of a description of the methods the applicant proposes to use to determine compliance, a schedule for the submission of initial compliance certifications and any other information.
In accordance with District policy for enhanced authorities to construct, the compliance plan is outlined within the application submittal documents and subsequent correspondence with the permittee. This information is further discussed in this evaluation demonstrating that all applicable requirements are satisfied. The methods that will be used to demonstrate compliance are specified in permit. Permit conditions specify the schedule for submittal of compliance certifications.

2. Authority to Construct Requirements. *Rule 1410(q)(2).* This section specifies that the authority to construct must include a compliance schedule if the source is not already in compliance and require the submission of an initial compliance certification no later than one year following the completion of the modification.
This source is expected to be in compliance and does not require a compliance schedule. Permit conditions specify the submittal of an initial compliance certification.

3. Noticing Requirements (Prior to A/C Issuance). *Rule 1410(q)(3)-(6).* This section essentially requires the fulfillment of the same noticing requirements that would apply to a significant Title V modification:

Part (i) requires that a public notice be conducted
A notice (attached) will be published in the San Diego Union Tribune and all relevant documents posted on the District's website allowing for a 30 day public comment period. The notice will also be distributed through the District's applicable listserv's.

Part(ii) requires that a public hearing be conducted if requested by petitioning the APCO.
This is specified in the public notice to be distributed and a hearing will be conducted if so petitioned.

Part (iii) requires the submittal of a draft of the proposed A/C to affected states and EPA region IX for a 45 day period.
A copy of the draft A/C, this evaluation and its attachments will be distributed to interested parties including the EPA and affected states including tribal agencies (SCAQMD, ICAPCD, Pechanga and Pala) and ARB.
If any comments are received, this section may be updated prior to the issuance of the ATC to reflect the comment response.

5.0 Recommendations

This modified equipment is expected to comply with all rules and regulations. Therefore, I recommend that an authority to construct be issued with the following

6.0 Recommended Conditions

See attached proposed draft conditions (attachment 2) and draft A/C.

ENGINEERING EVALUATION
ATTACHMENTS

Attachment 1: Relevant Emission Calculation Tables

Table A-1: Annual NOx and Fuel/Heat Input Data from EPA Acid Rain Database and calculation of pre-project NOx emissions

	Data from EPA Acid Rain Database					
	NOx (ton/yr)			Heat input (MMBtu)		
	Unit 1	Unit 2	Total	Unit 1	Unit 2	Total
2010	35.0	31.0	66.0	11080341	11384149	22464489
2011	20.4	24.9	45.2	7087249	8396559	15483808
2012	25.9	27.4	53.3	9767287	9922832	19690118
2013	34.1	35.6	69.6	13353188	13166659	26519847
2014	25.7	24.2	49.9	9560522	8796482	18357005
13-'14 AVG[1]			59.8			22438426
5-yr AVG[2]			56.8			20503053

Table A-2: Annual CO and PM-10 Emissions calculated from actual heat input reported to EPA

	Calculated from Acid Rain HI and ST Results					
	CO (ton/yr)			PM-10 (ton/yr)		
	Unit 1	Unit 2	Total	Unit 1	Unit 2	Total
2010	9.61	5.58	15.20	17.66	17.19	34.85
2011	0.98	4.08	5.06	2.43	7.67	10.10
2012	2.67	0.73	3.39	3.06	1.33	4.39
2013	4.51	3.78	8.29	1.54	3.68	5.22
2014	4.70	1.13	5.83	5.00	6.06	11.06
13-'14 AVG[1]			7.1			8.1
5-yr AVG[2]			7.6			13.1

Table A-3: Max calendar day NOx emissions reported to EPA

	Max NOx (lb/day)			
	Unit 1	Unit 2	Total	Combined (time-specific)[3]
2010	328	350	678	658
2011	388	398	786	572
2012	270	302	572	502
2013	318	270	588	480
2014	392	338	730	620

Table A-4: Max calendar day heat input reported to EPA

	Max Fuel (MMBtu/day)			
	Unit 1	Unit 2	Total	Combined (time-specific)[3]
2010	44368.4	44597.6	88966	88966
2011	43345	43393.8	86738.8	86738.8

2012	45051.5	45218	90269.5	90269.5
2013	44210.2	44259	88469.2	88469.2
2014	46386.6	46111.9	92498.5	92134.4

Table A-5: CO and PM-10 source test results for each unit during the pre-project calculation period

	CO (lb/MMBtu)		PM-10 (lb/MMBtu)	
	Unit 1	Unit 2	Unit 1	Unit 2
2010	1.73E-03	9.81E-04	3.19E-03	3.02E-03
2011	2.77E-04	9.71E-04	6.85E-04	1.83E-03
2012	5.46E-04	1.46E-04	6.27E-04	2.68E-04
2013	6.76E-04	5.75E-04	2.31E-04	5.59E-04
2014	9.83E-04	2.58E-04	1.05E-03	1.38E-03

Calculation Notes:

1. The average for 2013-2014 for NOx and Fuel Input is shown since this was the basis for pre-project actual emission calculations.
2. The 5-year rolling average is shown for comparison purposes
3. "Combined (time-specific)" refers to the maximum value for the two units combined in a specific day, whereas "total" indicates the sum of the maximum daily values for each individual unit that may occur on different calendar days.

Table A-6: Table of emission limits and maximum PTE.

	Based on Current Permit										
		PTE (unadjusted)			Special limits				Combined		
	Conc. (ppmvd @ 15% O2)	lb/hr	lb/day	ton/yr	lb/hr[b]	lb/hr[c]	lb/hr[d]	ton/yr[e]	lb/hr	lb/day	ton/yr
NOx	2	13.96	335.1	61.2	13.4	14.9	400	104.3	400	796.0	104.3
CO	4	17.0	407.9	74.4	16.3	18.1	2000	NA	2000	4108	313.7
VOC	2	4.9	116.5	21.3	4	7.3	NA	50	14.6	392	50
PM-10	NA	14	336.0	61.3	NA	NA	NA	NA	28	672	104.8
SOx	NA	3.98	95.5	17.4	NA	NA	NA	NA	8.0	190.9	33.1
NH3	5	12.1	291.4	53.2	NA	NA	NA	NA	24.3	582.7	106.3
	Proposed Permit										
		PTE (unadjusted)			Special limits				Combined		
	Conc. (ppmvd @ 15% O2)	lb/hr	lb/day	ton/yr	lb/hr[a]	lb/hr[b]	lb/hr[c]	ton/yr[d]	lb/hr	lb/day	ton/yr
NOx	2	14.29	343.0	62.6	13.4	14.9	400	99	400	814.8	99
CO	4	17.4	417.5	76.2	16.3	18.1	2000	99	2000	4205	99
VOC	2	5.0	119.3	21.8	4	7.3	NA	49	14.6	401	49
PM-10	NA	14	336.0	61.3	NA	NA	NA	99	28	672	99
SOx	NA	4.07	97.7	17.8	NA	NA	NA	NA	8.1	221	33.9
NH3	5	12.4	298.2	54.4	NA	NA	NA	NA	24.9	596	108.9

Notes:
a. Shaded cells are values defined by permit conditions. Unshaded values are values calculated by converting emission concentrations to emission factors using EPA method 19 equations and multiplying by the maximum heat input over the appropriate time period (values within the 'PTE (unadjusted)' columns) or as otherwise described in emission calculations section (lb/day combined emissions).
b. Limit based on 3-hour average with Duct Burner < 19.5 MMBtu/hr (startup, shutdown, low-load exempt)
c. Limit based on 3-hour average with Duct Burner > 19.5 MMBtu/hr (startup, shutdown, low-load exempt)
d. Combined limit for both turbines during startups, shutdowns, low-load and tuning operations
e. Combined annual limits for both turbines including all emissions

Attachment 2: Draft Conditions for Palomar Energy Center

The following are the draft permit conditions for the Palomar Energy Center enhanced A/C.

1. This equipment shall be properly maintained and kept in good operating condition at all times. [C584]

2. The unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request. [C25580]

3. The permittee shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances. [C29512]

4. For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein. [C40181]

5. When the unit is combusting fuel (operating), the concentration of oxides of Nitrogen (NOx), calculated as nitrogen dioxide (NO2) and measured in the exhaust stack, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen, except during periods of startup, shutdown, low load operation, or tuning. The following averaging periods shall apply to CEMS data:
   A. During any clock hour when duct firing above 19.5 MMBTU/hr heat input is occurring (a "duct-fired hour"): 3-clock hour average, calculated as the average of the duct fired hour, the clock hour immediately prior to and the clock hour immediately following the duct-fired hour.
   B. For any clock hour during which the change in gross electrical output produced by the combustion turbine exceeds 50 MW per minute for one minute or longer (transient hour): 3-clock hour average, calculated as the average of the transient hour, the clock hour immediately prior to and the clock hour immediately following the transient hour.
   C. All other hours: 1-clock-hour average. (NSR) [C40182]

6. When the unit is operating, the concentration of CO measured in the exhaust stack shall not exceed 4.0 ppmvd corrected to 15% oxygen, except during periods of startup, shutdown, low load operation, or tuning. A 3-clock hour averaging period shall apply to CEMS data. (NSR) [C40183]

7. When the unit is operating, the VOC concentration, calculated as methane and measured in the exhaust stack, shall not exceed 2.0 ppmvd corrected to 15% oxygen, except during periods of startup, shutdown, low load operation, or tuning. For purposes of determining compliance based on

the CEMS, the District approved VOC/CO surrogate relationship, the CO CEMS data, and a 3-clock hour average shall be used in accordance with the CEMS protocol. The VOC/CO surrogate relationship shall be verified and/or modified, if necessary, based on source testing. (NSR) [C40184]

8. When the unit is operating, the Ammonia concentration (Ammonia slip) measured in the exhaust stack, shall not exceed 5.0 ppmvd corrected to 15% oxygen, except during periods of startup, low load, or tuning. [C40185]

9. When the unit is operating, the concentration of Oxides of Nitrogen (NOx), calculated as nitrogen dioxide (NO2) and measured in the exhaust stack, shall not exceed 11.8 ppmvd corrected to 15% oxygen, averaged over each clock hour period, except for exempt periods of operation during startup, combined-cycle gas turbine extended startup, shutdowns, and low load operation, as defined in Rule 69.3.1. All CEMS calculations and averages shall be performed in accordance with the CEMS protocol approved by the District. [Rule 69.3.1(d)(1)] [C40186]

10. When the unit is operating, the concentration of Oxides of Nitrogen (NOx), calculated as Nitrogen Dioxide (NO2) and measured in the exhaust stack, shall not exceed 42 ppmvd corrected to 15% oxygen, calculated over each clock hour period except for periods of Startup or Shutdown, as defined in Rule 69.3. All CEMS calculations, averages shall be performed in accordance with the CEMS protocol approved by the District. [Rule 69.3.] [C40187]

11. The emissions of particulate matter less than 10 microns (PM-10) shall not exceed 14.0 lbs/hr for each unit with and without duct burner firing. [C40188]

12. The discharge of particulate matter from the exhaust stack of the unit shall not exceed 0.10 grains per dry standard cubic foot (0.23 grams/dscm). The District may require periodic testing to verify compliance with this standard. (Rule 53) [C40189]

13. Visible emissions from the lube oil vents and the exhaust stack of the unit shall not exceed 20% opacity for more than three (3) minutes in any period of 60 consecutive minutes. (Rule 50) [C40190]

14. When operating with the duct burner at or below 19.5 MMBTU/hr heat input, mass emissions from each unit shall not exceed the following limits, except during periods of startup, shutdown, low load operation, or tuning. A 3 clock-hour averaging period for these limits shall apply to CEMS data except for NOx emissions during non-transient hours when a 1 clock-hour averaging period shall apply.

Pollutant	Emission Limit, lbs/hr
A) Oxides of Nitrogen, NOx (calculated as NO2)	13.4
B) Carbon Monoxide, CO	16.3
C) Volatile Organic Compounds, VOC	4.0

[C40191]

15. When operating with the duct burner firing above 19.5 MMBTU/hr heat input, mass emissions from each unit shall not exceed the following emission limits, except during periods of startup, shutdown, low load operation, or tuning. A 3-clock-hour averaging period shall apply to CEMS data

Pollutant	Emission Limit, lbs/hr
A) Oxides of Nitrogen, NOx (calculated as NO2)	14.9
B) Carbon Monoxide, CO	18.1
C) Volatile Organic Compounds, VOC	7.3

[C40192]

16. Total combined NOx emissions from both units shall not exceed 400 pounds per hour, calculated as Nitrogen Dioxide and measured over each 1-clock-hour period. These emission limits shall apply during all times during which one or both units are operating, including, but not limited to, emissions during periods of startup, shutdown, low load operation and tuning. In addition, Unit No. 1 shall not begin operating while Unit No. 2 is already operating in a startup period nor shall Unit No. 2 begin operating while Unit No. 1 is already operating in a startup period unless the unit already operating in a startup period meets all of the following in the clock-minute immediately preceding the clock-minute that the other unit begins operating:
A) has been operating with a gross electrical output from the combustion turbine of 64 MW or more during the preceding 10 consecutive-clock-minute period;
B) the concentration of NOx, calculated as NO2 and measured in the exhaust stack, does not exceed 2.0 ppmvd corrected to 15% oxygen; and
C) the concentration of CO measured in the exhaust stack does not exceed 4.0 ppmvd corrected to 15% oxygen. (Rule 20.3(d)(2)(i)) [C40193]

17. Total combined CO emissions from both units shall not exceed 2,000 pounds per hour measured over each 1-clock-hour period. This emission limit shall apply during all times that one or both units are operating, including, but not limited to emissions during periods of startup, shutdown, low load operation and tuning. (Rule 20.3(d) (2)(i)) [C40194]

18. Total emissions from all stationary emission units at this stationary source, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d)(1) as it exists on the date the permit to operate for this equipment is approved, shall not exceed the following limits for each rolling 12-calendar-month period:

Pollutant	**Emission Limit, tons per year**
a. Oxides of Nitrogen, NOx (calculated as NO2)	**99**
b. Carbon Monoxide, CO	**99**
c. Volatile Organic Compounds, VOC	**49**
d. PM10	**99**

The aggregate emissions of each pollutant shall include emissions during all times that the equipment is operating. All calculations performed to show compliance with this limit shall be performed according to a protocol approved in advance by the District. [Rules 20.3(d)(1)-20.3(d)(5), 20.3(d)(8), and 21] [NEW1]

19. The owner or operator shall obtain written authorization from the District prior to making any changes to the annual emission calculation protocol. Any approved changes to the protocol shall take effect no earlier than 30 days after requesting approval of the modified protocol unless an alternative is stated in writing by the District. [NEW2]

20. For each calendar month and each rolling 12-calendar-month period, the Permittee shall maintain records, as applicable, on a calendar monthly basis, of mass emissions during each calendar month and rolling 12-calendar-month period of NOx (calculated as NO2), CO, VOC (calculated as methane), PM10, and SOx (calculated as SO2), in tons, from each emission unit located at this stationary source, except for emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d)(1) as it exists on the date the permit to operate for this equipment is approved. These records shall be made available for inspection within 30 calendar days after the end of each calendar month. [Rules 20.3(d)(5), 20.3(d)(8) and 21] [Modified C40197]

21. The emissions of any single Federal Hazardous Air Pollutant (HAP) shall not equal or exceed 10 tons, and the aggregate emissions of all Federal HAPs shall not equal or exceed 25 tons in any rolling 12-calendar month period. Compliance with these single and aggregate HAP limits shall be based on a methodology approved by the District for the purpose of calculating HAP emissions for this permit. If emissions exceed these limits, the permittee shall apply to amend permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR Part 63. [C40198]

22. The maximum total dissolved solids (TDS) concentration of the water used in the cooling towers shall not exceed 4,000 mg/l. This concentration shall be verified through quarterly testing of the water by a certified lab using EPA approved methods. [C40199]

23. When combusting fuel, Ammonia shall be injected at all times that the SCR outlet temperature is 510 degrees Fahrenheit or greater. [C40200]

24. The Ammonia injection flow rate shall be continuously measured, recorded and controlled. The Ammonia injection flow control equipment shall be installed, calibrated and maintained in accordance with a District approved protocol. [C40201]

25. Except during periods when the Ammonia injection system is being tuned or one or more Ammonia injection systems is in manual control (for compliance with applicable permits), the automatic Ammonia injection system serving the SCR shall be in operation in accordance with manufacturer's specifications at all times when Ammonia is being injected into the SCR. Manufacturer specifications shall be maintained on site and made available to District personnel upon request. [C40202]

26. The concentration of Ammonia solution used in the Ammonia injection system shall be less than 20% ammonia by weight. Records of Ammonia solution concentration shall be maintained on site and made available to District personnel upon request. [C40203]

27. For purposes of determining compliance with the emission limits of this permit, a shutdown period is the period of time that begins with the lowering of the gross electrical output of the combustion turbine below 64 MW and that ends five minutes after fuel flow to the combustion turbine ceases, not to exceed 65 consecutive minutes. [C40204]

28. A startup period is the period of time that begins when fuel flows to the combustion turbine following a non-operational period. For purposes of determining compliance with the emission limits of this permit, the duration of a startup period shall not exceed 120 consecutive minutes if the steam turbine reheat bowl temperature is above 500° F when the startup period begins and shall not exceed 360 consecutive minutes if the steam turbine reheat bowl temperature is less than or equal to 500° F when the startup period begins. [C40205]

29. Low load operation is a period of time that begins when the gross electrical output (load) of the combustion turbine is reduced below 64 MW from a higher load and that ends 10 consecutive minutes after the combustion turbine load next exceeds 64 MW provided that fuel is continuously combusted during the entire period and one or more clock hour concentration emission limits specified in this permit are exceeded as a result of the low-load operation. Periods of operation at low load shall not exceed 130 minutes in any calendar day nor an aggregate of 780 minutes in any calendar year, and no period of operation at low load shall begin during a startup period. [C40206]

30. Tuning is defined as adjustments to the combustion system that involves operating the unit in a manner such that the emissions control equipment may not be fully effective or operational. Only one combustion turbine will be tuned at any given time. Tuning events shall not exceed 480 minutes in a calendar day nor exceed 40 hours in a calendar year. The District compliance division shall be notified at least 24 hours in advance of any tuning event. [C40207]

31. A CEMS Protocol is a document approved in writing by the APCD M&TS division that describes the Quality Assurance and Quality Control procedures for monitoring, calculating and recording stack emissions from the unit. [C40208]

32. This unit shall be source tested to demonstrate compliance with the NOx, CO, VOC, PM-10, and Ammonia emission standards of this permit, using District approved methods. The source test and the NOx and CO Relative Accuracy Test Audit (RATA) tests shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR75, appendix B, sections 2.3.1 and 2.3.3. [C40209]

33. A Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the permittee shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present. [C40210]

34. If source testing will be performed by an independent contractor and witnessed by the District, a source test protocol shall be submitted to the District for written approval at least 30 days prior to source testing. The source test protocol shall comply with the following requirements:
A. Measurements of NOX, CO, and O2 emissions shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and District Source Test, method 100, or alternative methods approved by the District and EPA.
B. Measurement of VOC emissions shall be conducted in accordance with EPA Methods 25A and/or 18, or alternative methods approved by the District and EPA.
C. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management District ST-1B or an alternative method approved by the District and EPA.
D. Measurements of PM-10 emissions shall be conducted in accordance with EPA Methods 201A and 202 or alternative methods approved by the district and EPA.
E. Source testing shall be performed with both the combustion turbine and the duct burner in operation. Each duct burner shall operate with a minimum heat input of 97 MMBTU/hr.
F. Source testing shall be performed at the most frequently used load level, as specified in 40 CFR Part 75 Appendix A Section 6.5.2.1.d, provided it is not less than 80% of the unit's rated load unless it is demonstrated to the satisfaction of the district that the unit cannot operate under these conditions . If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous level power level.
G. Measurements of particulate matter emissions shall be conducted in accordance with SDAPCD Method 5 or an alternative method approved by the District and EPA.
H. Measurements of opacity shall be conducted in accordance with EPA Method 9 or an alternative method approved by the District and EPA.
I. Measurement of fuel flow shall be conducted in accordance with an approved test protocol. [C40211]

35. Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval. [C40212]

36. The Oxides of Nitrogen (NOx) and Oxygen (O2) CEMs shall be certified and maintained in accordance with applicable federal regulations including the requirements of Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMs protocol approved by the District. The Carbon Monoxide (CO) CEMs shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit. [C26608]

37. Continuous emission monitoring system (CEMS) shall be installed and properly maintained and calibrated to measure, calculate and record the following, in accordance with the District approved CEMS protocol:
A. Hourly average concentration of Oxides of Nitrogen (NOX) corrected to 15% oxygen, in parts per million (ppmvd);
B. Concentration of Carbon Monoxide (CO) corrected to 15% oxygen, in parts per million (ppmvd);
C. Percent oxygen (O2) in the exhaust gas (%) for each clock hour period;
D. Average concentration of Oxides of Nitrogen (NOX) for each rolling 3-hour period, in parts per million (ppmv) corrected to 15% oxygen;
E. Hourly and Monthly mass emissions of Oxides of Nitrogen (NOX), in pounds;
F. Rolling 12 month mass emissions of Oxides of Nitrogen (NOX), in tons;
G. Hourly and monthly mass emissions of Carbon Monoxide (CO), in pounds;
H. Annual mass emissions of Carbon Monoxide (CO), in tons.
I. Natural gas flow rate to combustion turbine in scf/hr.
J. Natural gas flow rate to duct burner in scf/hr.
K. Concentration of Volatile Organic Compounds (VOC) corrected to 15% oxygen, in parts per million (pmvd) for each rolling 3-hour period, based upon the approved VOC/CO surrogate relationship.
M. Hourly and monthly mass emissions of VOC in pounds
N. Rolling 12-month mass emissions of VOC in tons.
The CEMS shall be in operation in accordance with the District approved CEMS monitoring protocol at all times when the combustion turbine is in operation. A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request. [C40214]

38. When the CEMs is not recording data and the unit is operating, hourly NOx emissions annual calculations shall be determined in accordance with 40 CFR 75 Appendix C. Additionally, hourly CO emissions for the annual emission calculations shall be determined using the hourly emission rate recorded by the CEMs during the most recent hours in which the unit operated 3 continuous hours at no less than 80% of full power rating. Alternate CO emission factors shall be determined from compliance source test emissions data. The alternate hourly CO emission rate shall be reviewed and approved by the District, in writing. [C29524]

39. Any violation of any emission standard as indicated by the CEMs shall be reported to the District's Compliance Division within 96 hours after such occurrence. [C28009]

40. The CEMs shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 sections (d), (e), (f)(2),(f)(3), (f)(4) and (f)(5) and CEMs protocol approved by the District. [C24368]

41. The District shall be notified at least two weeks prior to any changes made in CEMS software that affect the measurement, calculation or correction of data displayed and/or recorded by the CEMS. [C26609]

42. Fuel flowmeters with an accuracy of +/- 2% shall be maintained to measure the volumetric flow rate corrected for temperature and pressure. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, and Section 2.1.6. [C40215]

43. The unit shall be equipped with continuous monitors to measure, calculate and record the following operational characteristics:
A. Ammonia injection rate in lb/hr of solution.
B. Outlet temperature of SCR in degrees Fahrenheit.
C. Combustion turbine power output (MW).
D. Steam turbine reheat bowl temperature in degrees Fahrenheit.
The monitors shall be installed, calibrated, and maintained in accordance with a protocol approved by the District, which shall include any relevant calculation methodologies. The monitors shall be in full operation at all times when the combustion turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request. [C40216]

44. Operating logs or Data Acquisition System (DAS) records shall be maintained to record the beginning and end times and durations of all startups, shutdowns, low load operations, and tuning periods to the nearest minute; quantity of fuel used (in each clock hour, calendar month, and 12 calendar month period) in standard cubic feet; hours of daily operation; and total cumulative hours of operation during each calendar year. [C40217]

45. All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request. (Title V) [C40218]

46. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District. [CHW001]

47. The District may require one or more of the following compounds, or additional compounds to be quantified through source testing periodically to ensure compliance with rule 1200:
A) Acetaldehyde
B) Acrolein
C) Benzene
D) Formaldehyde
E) Toluene
F) Xylenes
If the District requires the permittee to perform this source testing, the District shall request the testing in writing a reasonable period of time prior to the testing date, and the permittee shall submit a source test protocol to the District for written approval at least 30 days prior to the testing date. [C40213]

48. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies. [CHW002]

49. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.) [CHW003]

Proposed A/C Only Conditions:

50. The conditions stated in this authorization shall take effect upon completion of construction of the modified equipment as described in applications APCD2015-APP-003970 and APCD2015-APP-003971. Any conditions referring to hour, day, month, year, clock hour, calendar day, calendar month or calendar year shall apply to the entire duration of that period if the equipment is operated for any portion of the corresponding period under this authorization. This condition does not relieve the owner or operator from complying with any other applicable conditions of other permits or authorizations.

51. Prior to operating the modified emission unit, the permittee shall submit an initial certification of compliance, To the District and EPA, for the modified emission unit, in accordance with Rule 1414(f)(3)(ix), and 40 CFR 70.5(c)(9), that includes the identification of each applicable term or condition of the final permit for which the compliance status is being certified, the current compliance status and whether the modified equipment was in continuous or intermittent compliance during the certification period, identification of the applicable permitted method used to determine compliance during the certification period, and any other information required by the District to determine the compliance status. This requirement may be fulfilled by submitting District form 1401-I along with the construction completion notice. The modified equipment shall not be operated until written

authorization is received from the District in accordance with Rule 1410(b)(2) or the permittee has submitted an application for an administrative amendment in accordance with Rule 1410(q)(6).

52. Not later than 60 calendar days after completion of construction for each combustion turbine, an Initial Emissions Source Test shall be conducted on that turbine to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit. The source test shall be conducted according to an approved protocol if testing is not performed by the District and the protocol shall comply with all applicable requirements dictated in this permit for routine source tests and/or RATAs. The protocol shall be submitted to the District for approval at least 60 days prior to the proposed test date.

53. After completion of construction, the NOx and O_2 CEMs described in this permit shall be recertified according to the timelines and applicable requirements of Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMs protocol approved by the District. The Carbon Monoxide (CO) CEMs shall be recertified in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit.

54. After completion of construction, a Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the permittee shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present.

55. At least 30 days prior to completion of construction of this equipment, the owner or operator shall submit a protocol to the District for approval to be used in calculating emissions to show compliance with all annual (ton/yr) emission limits of this permit. The protocol must contain the following information/meet the following requirements:

a. The protocol must provide procedures for calculating annual emissions of NOx, CO, VOC and PM10.
b. NOx and CO emissions from the combustion turbine shall be calculated using CEMS data during all periods CEMS data is valid. For all other times the protocol must specify data substitution procedures or other calculation methodology.
c. During all times except periods of startup, shutdown, low load operation and tuning, VOC and PM10 emissions from the combustion turbine shall be calculated using measured fuel flow and/or operating time and the results of the most recent District witnessed source tests. The protocol shall specify procedures for calculating emissions during all other times for these pollutants.
d. Total emissions from the combustion turbines shall include the sum of all emissions during all periods of operation.
e. The protocol shall also specify procedures for calculating annual emissions from emission units located at this source, other than the combustion turbines, if they are subject to the annual emission limit included in this permit. These emissions shall be added to the totals for the combustion turbines to determine emissions from the stationary source.
f. For any parameter used in calculating emissions that is measured in more than one location (e.g. fuel flow) or using more than one monitoring protocol or procedure, an indication of which monitoring location, protocol or procedure will be used for this calculation.
g. Averaging times or other aggregation procedures for CEMS data if different than those specified in the applicable CEMS protocol.
h. For any instance where the CEMS protocol provides for correcting raw CEMS data prior to reporting, an indication of whether corrected or uncorrected data will be used for the calculation.