


**STATEMENT OF BASIS
Title V Permit Renewal**

Facility Name: San Diego Gas & Electric (SDG&E), Miramar
Title V App. Number: APCD2018-APP-005446
Title V Permit Number: APCD2006-TVP-984123
Facility ID: APCD1995-SITE-09138
Equipment Address: 6875 Consolidated Way, San Diego, CA 92121
Facility Contact: Carl LaPeter
Contact Phone: (760) 432-2503
Permit Engineer: Camqui Nguyen
Date:

 Recoverable Signature

 Nicholas Horres

Nicholas Horres
Senior Engineer
Signed by: Nicholas Horres

Senior Engineer:

1.0 Type of Action and Summary of Changes

This application was submitted to renew Title V Permit APCD2006-PTO-984123

2.0 History of Title V Applications and Modifications/Applications since previous Renewal:

The renewal application was received on 6/26/2018. This renewal application was submitted at least 12 months but not more than 18 months prior to permit expiration, in accordance with Rule 1410. Therefore, the renewal application is timely.

The following table summarizes all previous applications at this facility affecting the Title V permit.

Title V Application History Since Initial Title V Permit				
Application Number	Title V Permit Number	Application Description	Equipment	Approved
APCD2004-APP-984123	APCD2006-TVP-984123	Initial Title V permit application	Combustion turbine	Approved
APCD2009-APP-987530	APCD2006-TVP-984123	Adding a turbine and an emergency black start engine.	Combustion turbines and emergency engine	Approved
APCD2012-APP-002231	APCD2006-TVP-984123	Title V permit renewal	Combustion turbines and emergency engine	Approved
APCD2013-APP-002574	APCD2006-TVP-984123	Change contact name	Combustion turbines and emergency engine	Approved

Since the previous renewal, the District has received applications from this facility as shown in the following table. These applications are submitted under the District's local permitting program and typically are associated with a corresponding Title V application to implement the same change to the Title V permit once the modified local permit is issued (see appendix A of the permit).

Application History for facility since most recent renewal				
Application Number	Affected Permit to Operate(s)	Description	Affected Emission Units	Outcome
APCD2013-APP-002557	APCD2012-PTO-000397	Oxidation catalyst replacement	Combustion turbine	Approved
APCD2018-APP-005621	APCD2009-PTO-981360	Oxidation catalyst replacement	Combustion turbine	Approved

3.0 Facility Description

This facility operates equipment for electric power generation and associated services.

Permit Number	Equipment Description
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APCD2009-PTO-981360	Simple cycle natural gas fueled combustion turbine (Unit #1) Mfr: General Electric, Model: LM6000PC, S/N 191506, Rated Heat Input: 462.5 MMBtu/hour, 49.9 megawatt maximum rated power output, with water injection, SCR with ammonia injection and oxidation catalyst, system equipped with Cisco Cedar data acquisition and handling system (DAHS), remote data collection node (RDCN) and continuous emission monitoring systems.
APCD2012-PTO-000397	Simple cycle natural gas fueled combustion turbine (Unit #2-East)Mfr: General Electric, Model: LM6000PC, S/N: 7218022, Rated Heat Input: 462.5 MMBtu/hour, 49.9 megawatt maximum rated power output, with water injection, SCR with ammonia injection and oxidation catalyst, system equipped with Cisco Cedar data acquisition and handling system (DAHS), remote data collection node (RDCN) and continuous emission monitoring systems
APCD2009-PTO-000395	Emergency black start engine: Mfr: Waukesha, Model: L36GLD, S/N: C-95181/1, rated at 924 bhp, fueled with natural gas, lean burn, driving a 689 KW generator (Mfr: Kohler, Model: 600RZW, S/N: 2176636)

4.0 Title V Applicability & Acid Rain

The Title V regulation applies to any stationary source that is a major stationary source as defined in Rule 1401(c)(26) or is subject to the acid rain provisions of Title IV of the federal Clean Air Act (CAA). SDG&E Miramar Energy Center is not a major source. The facility is subject to the acid rain program under Title IV of the federal Clean Air Act (CAA) which requires Title V permitting pursuant to 40 CFR § 70.3.

5.0 Potential to Emit and Actual Emissions

The following table shows the actual and potential emissions for the facility that are used to establish the major source status for Title V. For all pollutants, emissions are below major source thresholds.

Title V Major Source Determination Tons per Year:				
Pollutant	Thresholds	Facility Actual Emissions	Facility Potential to Emit	Major Source
Highest Federal HAP	10			
Sum of Federal HAPs	25			
NO _x	100	5.4	18.01	No
VOC	100	5.8	5.14	No
PM ₁₀	100	13.9	11.99	No
SO _x	100	0.3	2.22	No
CO	100	2.6	29.21	No

For the combustion turbines, NO_x, CO and VOC emissions are based on permit emission limits, PM emission is based on turbine manufacturer emission data, SO_x emission is based on sulfur content of 0.75 gr Sulfur per 100 scft natural gas.

For the emergency black start engine NO_x, CO, VOC emissions are based on engine manufacturer guaranteed emission data, PM emission is based on AP-42 emission factor, SO_x emission is based on sulfur content of 0.75 gr Sulfur per 100 scft natural gas.

6.0 40 CFR Part 64 CAM (Compliance Assurance Monitoring)

Pursuant to New Source Review (NSR) the turbines are required to operate and maintain the CEMS to measure NO_x, CO, and NH₃, which is also required by District Rules 69.3, 69.3.1, and 40 CFR 60 Subpart KKKK. Monitoring and testing are required in the existing District permits. For the related Title V permit, additional recordkeeping and reporting are required pursuant to District Rule 1421. Compliance Assurance Monitoring (CAM) under 40 CFR Part 64 was considered for this review. None of the emission units fulfill the criteria for applicability under Part 64. Additionally, the turbines are equipped with continuous emissions monitoring systems (CEMS), which also excludes them from being subject to CAM under § 64.2 (b)(vi).

7.0 Applicable Requirements

This section summarizes the major types of requirements for this facility. These types of requirements include facility-wide, and permit specific applicable requirements. Additionally, for each emission unit, the rule that results in the primary emission limitation is listed.

General Permit Program Applicable Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	10	Authority to Construct Required
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	20, 20.1, 20.2, 20.3	New Source Review (NSR)
SDCAPCD Reg. II	21	Permit Conditions
SDCAPCD Reg. II	24	Temporary Permit to Operate
SDCAPCD Reg. II	25	Appeals
SDCAPCD Reg. IV	60	Circumvention
SDCAPCD Reg. IV	71	Abrasive Blasting
SDCAPCD Reg. V	98	Breakdown Conditions: Emergency Variance
SDCAPCD Reg. VI	101	Burning Control
SDCAPCD Reg. VIII	131	Stationary Source Curtailment Plan
40 CFR Part 68	Part 68	Risk Management Plan (Ammonia Storage)
40 CFR Part 82	Subpart B	Servicing of Motor Vehicle Air Conditioners

40 CFR Part 82	Subpart F	Recycling and Emission Reducing
40 CFR Part 89	Part 89	VOC Standards for Consumer Products

Facility-wide/Other Prohibitory & Misc. Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	19.2	Continuous Emission Monitoring Systems
SDCAPCD Reg. IV	50	Visible Emissions
SDCAPCD Reg. IV	51	Nuisance
SDCAPCD Reg. IV	52	Particulate Matter
SDCAPCD Reg. IV	53	Specific Contaminants
SDCAPCD Reg. IV	62	Sulfur Content of Fuels
SDCAPCD Reg. IV	67.0.1	Architectural Coatings
SDCAPCD Reg. IV	67.17	Storage of Organic Materials Containing VOC
SDCAPCD Reg. XII	1200	Toxic Air Contaminants – New Source Review
SDCAPCD Reg. XII	1206*	Asbestos Removal, Renovation, and Demolition
40 CFR Part 60	Subpart A	NSPS General Provisions
40 CFR Part 63	Subpart A	NESHAP General Provisions
40 CFR Part 61	Subpart M*	NESHAP - Asbestos
40 CFR Part 73	Part 73	Sulfur Dioxide Allowance System
40 CFR Part 74	Part 74	Acid Rain

* The District issued its own Asbestos Rule 1206 intended to be as stringent as Subpart M. The facility is subject to the most stringent requirements of either rule, which at the time of this report is ensured by compliance with Rule 1206.

Permit Specific Applicable Requirements:

SDAPCD Permit No.	Title V Permit No.	Permit Description	Applicable Rules
APCD2009-PTO-981360	APCD2006-TVP-984123	Simple cycle natural gas fueled combustion turbine (Unit #1) Mfr: General Electric, Model: LM6000PC, S/N 191506, Rated Heat Input: 462.5 MMBtu/hour, 49.9 megawatt maximum rated power output, with water injection, SCR with ammonia injection and oxidation catalyst, system equipped with Cisco Cedar data acquisition and handling system (DAHS), remote data collection node (RDCN) and continuous emission monitoring systems.	50 51 53 68 69.3 69.3.1 20.2 1200 40 CFR-Part 60_Subpart KKK
APCD2012-PTO-000397	APCD2006-TVP-984123	Simple cycle natural gas fueled combustion turbine (Unit #2-East)Mfr:	50 51

		General Electric, Model: LM6000PC, S/N: 7218022, Rated Heat Input: 462.5 MMBtu/hour, 49.9 megawatt maximum rated power output, with water injection, SCR with ammonia injection and oxidation catalyst, system equipped with Cisco Cedar data acquisition and handling system (DAHS), remote data collection node (RDCN) and continuous emission monitoring systems	53 68 69.3 69.3.1 20.2 1200 40 CFR-Part 60_Subpart KKK
APCD2009-PTO-000395	APCD2006-TVP-984123	Emergency black start engine: Mfr: Waukesha, Model: L36GLD, S/N: C-95181/1, rated at 924 bhp, fueled with natural gas, lean burn, driving a 689 KW generator (Mfr: Kohler, Model: 600RZW, S/N: 2176636)	50 51 53 62 69.4.1 20.2 40 CFR- Part60- Subpart JJJJ 40 CFR-Part 63-Subpart ZZZZ

Emission Limitations

Combustion Turbines	
Pollutant	Primary Limiting Regulations*
NOx	20.2
SO2	53, 62
VOC	20.2
CO	20.2
PM10	20.2
Toxic Pollutants	1200

The permit emission limits for NOx, CO, VOC, PPM10 for the combustion turbines reflect BACT requirements that the combustion turbines must meet to comply with Rule 20.2 of New Source Review.

The limit on annual operating hours for testing and maintenance for the emergency black start engine reflect requirements from Rule 69.4.1.

Emergency Engines	
Pollutant	Primary Limiting Regulations
NOx	69.4.1
SO2	53, 62
VOC	69.4.1
CO	69.4.1
PM10	20.2
Toxic Pollutants	1200
Federal HAPs	40 CFR Part 63 Subpart ZZZZZ

8.0 **Updates to the Title V Permit Incorporated into this Action**

Black start natural gas fired engine:

District Rule 69.4.1 Stationary Reciprocating Internal Combustion Engines-Best Available Retrofit Control Technology was modified in 2020, the updated requirements are already incorporated into the District permit.

The natural gas lean burn engine is subject to NESHAP ZZZZ and NSPS JJJJ. The relevant conditions to ensure compliance with these rules were included on the and permit to operate.

9.0 **Multiple Applicable Requirement Streamlining**

The applicant requested multiple applicable requirement streamlining. The District reviewed the request, and notes that while we don't disagree with the majority of requests, we believe that all eligible requirements have already been streamlined and are contained in the equipment specific permit conditions for the turbines in Appendix A.

10. **Permit Shield**

In accordance with District Rule 1410(p) and 40 CFR Part 70.6(f), a permit can include a provision precluding the permittee from enforcement action for certain requirements that either do not apply or that are superseded by another requirement to which the permittee is subject, as stated in the permit. A permit shield, if granted, is limited as given by the aforementioned regulations.

A permit shield was requested by the applicant and is provided at Section II.C of the permit. The requirements listed in the permit shield, were evaluated against the provisions of the aforementioned regulations. Each listed requirement in the permit shield was determined to be acceptable because it is superseded in stringency by another requirement given in the permit.

Requirement & Reference	Basis of Shield
SDCAPCD Rule 52	Rule does not apply

SDCAPCD Rule 53(d)(1)	Subsumed by natural gas sulfur requirement
SDCAPCD Rule 54	Rule does not apply
SDCAPCD Rule 62	Subsumed by natural gas sulfur requirement
SDCAPCD Rule 68	Subsumed by standard of Rule 69.3
SDCAPCD Rule 69.3	Subsumed by NOx limit established under NSR
40 CFR 60 Subpart GG (NSPS, Stationary Gas Turbines)	Subsumed by more stringent District Rule Requirements

11. Permit Process-Public Notification and Notice to EPA and Affected States

Before issuing the final permit, The District will provide the opportunity for review by EPA and affected states and a public notice period. Notice will be provided to the EPA electronically through the EPS and will be sent electronically to affected states and tribes. The public notice and associated documents will be provided on our website and the public notice will be published in a newspaper. The District will incorporate any suggested changes made by EPA.

12. Recommendations

The facility is expected to comply with all applicable requirements including those cited in the current District permit as well as those under District Rule 1401 and 40 CFR Part 70. Therefore, the recommendation of this report is for the subject renewal Title V permit to be issued following public notice, EPA review, and response to any comments.

13. Attachments

The following are attached:

- Application Package
- Draft Permit
- Public Notice

