

STATEMENT OF BASIS

Title V Permit Renewal

Facility Name: Point Loma Wastewater Treatment Plant

Title V App. Number: APCD2020-APP-006484

Title V Permit Number: APCD2002-PTO-961008

Facility ID: APCD1976-SITE-02083

Equipment Address: 1902 Gatchell Road, San Diego, CA 92106

Facility Contact: David Marlow

Contact Phone: 619-221-8728

Permit Engineer: John Lee

Date: 04/01/2025

X

Allison Weller
Senior Engineer

Senior Engineer:

1.0 Type of Action and Summary of Changes

This application is for the renewal of the Title V operating permit (APCD2002-TVP-961008) for the Point Loma Wastewater Treatment Plant including. This facility is subject to Title V permitting because it is a major source of NO_x and VOC emissions per Title V major source thresholds of 25 tons/year, CO emissions per Title V major source thresholds of 100 tons/year, and single HAP per Title V major source threshold of 10 tons/year.

This action also includes the processing of multiple administrative amendments, and 501(b)(10) modifications related to number of allowable outages per year for odor reduction systems (ORS) and flares. These actions did affect District permit conditions but did not affect emissions or Title V permit conditions.

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

The renewal application was received on October 15, 2020. 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 APCD2002-TVP-961008.

Title V Application History Since Initial Title V Permit			
Application Number	Application Description	Equipment	Outcome
APCD1997-APP-961008	Initial TVP application	NA	Approved
APCD2004-APP-980918	Minor Modification – condition changes	Sludge Screening	Included in 2006 Renewal
APCD2004-APP-981193	Minor Modification – increase upper limit of H ₂ S in digester gas	Combustion Equipment	Included in 2006 Renewal
APCD2005-APP-982377	Minor Modification – condition changes	Sludge Screening	Included in 2006 Renewal
APCD2005-APP-982532	Admin Amendment – responsible official change	NA	Included in 2006 Renewal
APCD2006-APP-984923	Renewal	NA	NA
APCD2009-APP-987787	Minor Modification – condition changes	ORS and Flares	Included in 2015 Renewal
APCD2013-APP-002677	Admin Amendment – responsible official change	NA	Included in 2015 Renewal
APCD2014-APP-003592	Admin Amendment – responsible official change	NA	Included in 2015 Renewal
APCD2014-APP-003707	Minor Modification – portable equipment	Water Treatment Plant	Included in 2015 Renewal
APCD2015-APP-004016	Renewal	NA	Approved
APCD2016-APP-004510	Admin Amendment – responsible official change	NA	Included in 2021 Renewal
APCD2016-APP-004709	502(b)(10) – condition changes	ORS	Included in 2021 Renewal
APCD2017-APP-005225	502(b)(10) – condition changes	Flares	Included in 2021 Renewal

APCD2018-APP-005411	Admin Amendment – responsible official change	NA	Included in 2021 Renewal
APCD2019-APP-006051	Admin Amendment – responsible official change	NA	Included in 2021 Renewal
APCD2020-APP-006323	502(b)(10) – condition changes on “outage” definition	Flares	Included in 2021 Renewal
APCD2020-APP-006484	Renewal	NA	Open

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/Emission Unit	Related TV App	Outcome
APCD2016-APP-004468	APCD1993-PTO-930297 APCD1994-PTO-940189	Modification – increase in ORS outage hours associated with primary water treatment plant and sludge screening operations	APCD2016-APP-004709	Approved
APCD2017-APP-005223	APCD1995-PTO-950315	Modification – increase in flare outage hours associated with sludge digestion operations	APCD2017-APP-005225	Approved
APCD2018-APP-005428	APCD1993-PTO-930297	Modification – condition change to allow for new carbon type		Approved
APCD2020-APP-006322	APCD1995-PTO-950315	Modification – condition change on definition of “outage” for flares associated with sludge digestion operations	APCD2020-APP-006323	Approved
APCD2022-APP-007382	APCD1995-PTO-950315	Modification – condition change for pressure relief valve to include specification on methane leak rate and concentration	APCD2022-APP-007832	Open
APCD2024-APP-008105	APCD2016-PTO-002647	Relocation of diesel engine from APCD1990-SITE-07804 to this site, APCD1976-SITE-02083	APCD2024-APP-008155	Open

3.0 Facility Description

PLWWTP is a municipal wastewater treatment facility comprising treatment equipment for liquid processes, sludge processing equipment, boilers and engines. Air emissions are limited to gaseous pollutants resulting from wastewater treatment and related combustion equipment. These are largely comprised of volatile organic compounds (VOC) and hazardous air pollutants (HAP).

Permit Number	Equipment Description
APCD2002-PTO-960190	Boiler Digester Gas Fired With Natural Gas Backup
APCD2002-PTO-960191	Boiler Digester Gas Fired With Natural Gas Backup
APCD2002-PTO-960192	Boiler Digester Gas Fired With Natural Gas Backup (Inactive)
APCD2002-PTO-960193	Boiler Digester Gas Fired With Natural Gas Backup
APCD2004-PTO-961168	Gas Engine Generator Digester Gas Fired With Natural Gas Backup
APCD2004-PTO-961169	Gas Engine Generator Digester Gas Fired With Natural Gas Backup
APCD2006-PTO-930297	A 240 Million Gallon Per Day (Mgd) Advanced Primary Treatment Plant
APCD2006-PTO-940189	Sludge Screening Facility with ORS
APCD2008-PTO-961215	Emergency Engine Generator
APCD2009-PTO-950315	Sludge Digesters and Flares
APCD2015-PTO-002381	Flexible use permit ATCM portable prime-use diesel <200 hp
APCD2016-PTO-002649	Prime Diesel Engine (Low-Use, ATCM Portable)
APCD2016-PTO-002650	Prime Diesel Engine (Low-Use, ATCM Portable)

4.0 Compliance History

Below is a summary of compliance actions that have occurred at the site since the most recent Title V renewal. There are no open or ongoing violations at the facility at the time of this review.

5.0 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).

Based on District emissions inventory and related emissions determinations, PLWTP is a major source under Title V for carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOC), and hazard air pollutants (HAP). Specifically, formaldehyde is a federal HAP which is emitted by each of two digester gas fired engines.

6.0 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. Emission calculations and assumptions are attached.

<p style="text-align: center;">Title V Major Source Determination Tons per Year:</p>
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Pollutant	Thresholds	Facility Actual Emissions*	Facility Potential to Emit**	Major Source
Highest Federal HAP	10	10.9	14.2	Yes
Sum of Federal HAPs	25	<25	15.2	No
NOx	25	18.7	53.7	Yes
VOC	25	33.0	49.6	Yes
PM10	100	8.54	20.5	No
SOx	100	0.771	5.24	No
CO	100	78.4	178	Yes

*The actual emissions are from the District's 2020 emission inventory.

**Determined by permit application PTEs (NOx and CO see APP-979972) and actual emissions

7.0 40 CFR Part 64 CAM (Compliance Assurance Monitoring)

A review of emission units (EUs) at PLWTP was conducted at the last renewal to determine CAM applicability under 40 CFR Part 64. No EUs were determined to be subject to CAM.

Since the last Title V renewal, no changes have triggered CAM applicability. All four (4) TV applications were submitted for operational flexibility changes (apps 4468, 5223, 5428, 6322). None of these affect emissions and therefore do not necessitate CAM review.

8.0 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 Facility-wide Applicable Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	10(a) 10(b)	Permits Required – (a) Authority to Construct Permits Required – (b) Permit to Operate
SDCAPCD Reg. II	11	Exemptions
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	20.1	New Source Review
SDCAPCD Reg. II	20.3	New Source Review
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. V	98*	Breakdown Conditions: Emergency Variance
SDCAPCD Reg. VI	101	Burning Control

* Breakdowns/variances are not recognized by EPA and cannot grant relief from federal enforcement of requirements

Facility-wide Prohibitory Requirements

Regulation	Rule Citation	Title
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(g)	Architectural Coatings
SDCAPCD Reg. IV	67.17(e)	Storage of Materials Containing VOC
SDCAPCD Reg. IV	69.2	Industrial and Commercial Boilers, Process Heaters and Steam Generators
SDCAPCD Reg. IV	69.4.1	Stationary Reciprocating Internal Combustion Engines-Best Available Retrofit Control Technology
SDCAPCD Reg. IV	71	Abrasive Blasting
SDCAPCD Reg. X	*	NSPS General Provisions
SDCAPCD Reg. XI	*	NESHAP
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 61	Subpart M*** § 61.145	Standard for Demolition and Renovation
40 CFR Part 61	Subpart M*** § 61.150	Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations
40 CFR Part 63	Subpart A*	NESHAP General Provisions
40 CFR Part 63	Subpart ZZZZ	Reciprocating Internal Combustion Engines
40 CFR Part 63	Subpart DDDDD	Industrial, Commercial, and Institutional Boilers and Process Heaters
40 CFR Part 82	Subpart F	Servicing of Other Air Conditioners
California Code of Regulations (CCR) Title 17	93115	ATCM for Stationary Compression Ignition Engines
California Code of Regulations (CCR) Title 17	93116	ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 HP and Greater

* The District has adopted these rules by reference; however, any changes made to these regulations at the federal level are not immediately adopted. In the event this creates a conflict between the District adopted and federal rules, the more stringent requirements will apply.

** Not Federally Enforceable

*** 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.	Permit Description	Applicable Rules
APCD2002-PTO-960190	Boiler Digester Gas Fired With Natural Gas Backup	SDCAPCD Reg. IV, Rule 19, 53, 62, 69.2 SDCAPCD Reg. XIV, Rule 1421 40 CFR Part 63, Subpart DDDDD
APCD2002-PTO-960191	Boiler Digester Gas Fired With Natural Gas Backup	SDCAPCD Reg. IV, Rule 19, 53, 62, 69.2 SDCAPCD Reg. XIV, Rule 1421 40 CFR Part 63, Subpart DDDDD
APCD2002-PTO-960192	Boiler Digester Gas Fired With Natural Gas Backup	SDCAPCD Reg. IV, Rule 19, 53, 62, 69.2 SDCAPCD Reg. XIV, Rule 1421 40 CFR Part 63, Subpart DDDDD
APCD2002-PTO-960193	Boiler Digester Gas Fired With Natural Gas Backup	SDCAPCD Reg. IV, Rule 19, 53, 62, 69.2 SDCAPCD Reg. XIV, Rule 1421 40 CFR Part 63, Subpart DDDDD
APCD2004-PTO-961168	Gas Engine Generator Digester Gas Fired With Natural Gas Backup	SDCAPCD Reg. IV, Rule 19, 20.3, 53, 62, 69.4 SDCAPCD Reg. XIV, Rule 1421
APCD2004-PTO-961169	Gas Engine Generator Digester Gas Fired With Natural Gas Backup	SDCAPCD Reg. IV, Rule 19, 20.3, 53, 62, 69.4 SDCAPCD Reg. XIV, Rule 1421
APCD2006-PTO-930297	A 240 Million Gallon Per Day (Mgd) Advanced Primary Treatment Plant	SDCAPCD Reg. IV, Rule 19, 51
APCD2006-PTO-940189	Sludge Screening Facility with ORS	SDCAPCD Reg. IV, Rule 19, 51
APCD2008-PTO-961215	Emergency Engine Generator	SDCAPCD Reg. IV, Rule 12, 50, 51, 69.4.1 SDAPCD Reg. XII, Rule 1200 40 CFR Part 63, Subpart ZZZZ CCR Title 17, 93115
APCD2009-PTO-950315	Sludge Digesters and Flares	SDCAPCD Reg. IV, Rule 19, 20.3, 51, 53 SDCAPCD Reg. XIV, Rule 1421
APCD2015-PTO-002381	Flexible use permit ATCM portable prime-use diesel <200 hp	SDCAPCD Reg. IV, Rule 19, 20.3, 50, 69.4.1 SDAPCD Reg. XII, Rule 1200 CCR Title 17 93116
APCD2016-PTO-002649	Prime Diesel Engine (Low-Use, ATCM Portable)	SDCAPCD Reg. IV, Rule 12, 19, 50, 69.4.1 SDCAPCD Reg. XIV, Rule 1421 CCR Title 17 93116
APCD2016-PTO-002650	Prime Diesel Engine (Low-Use, ATCM Portable)	SDCAPCD Reg. IV, Rule 12, 19, 50, 69.4.1 SDCAPCD Reg. XIV, Rule 1421 CCR Title 17, 93116

Emission Limitations

Digester Gas Combustion (Boilers, Engines, Flares)	
Pollutant	Primary Limiting Regulations
NOx	Rule 20.3 (NSR), Rule 69.2, Rule 69.4
SO2	Rule 20.3 (NSR), Rule 51, Rule 53, Rule 62
VOC	Rule 20.3 (NSR)
CO	Rule 20.3 (AQIA Only), Rule 69.2, Rule 69.4
PM10	Rule 20.3 (NSR), Rule 53
Toxic Pollutants	Rule 51, Rule 53
Federal HAPS	40 CFR 63 Subpart DDDDD

Diesel Engines	
Pollutant	Primary Limiting Regulations
NOx	Rule 20.3 (NSR), Rule 69.4.1
SO2	Rule 20.3 (NSR), Rule 69.4.1, CCR 17 93116
VOC	Rule 20.3 (NSR)
CO	Rule 20.3 (AQIA Only), Rule 69.4.1
PM10	Rule 20.3 (NSR), CCR 17 93115, CCR 17 93116
Toxic Pollutants	Rule 1200, CCR 17 93115, CCR 17 93116
Federal HAPs	40 CFR 63 Subpart ZZZZ

Treatment Plant & Sludge Operations	
Pollutant	Primary Limiting Regulations
NOx	Rule 20.3 (NSR)
SO2	Rule 20.3 (NSR), Rule 51
VOC	Rule 20.3 (NSR)
CO	Rule 20.3 (AQIA Only)
PM10	Rule 20.3 (NSR)
Toxic Pollutants	Rule 51
Federal HAPs	

9.0 Permit Shields

The City of San Diego (City), Public Utilities Department is requesting a permit shield from the above regulation for the internal combustion (IC) engines powering the facility's five (5) prime, portable diesel engines, covered under Flex Permit 002381, and two Dewatering Pump Prime Diesel Engines, operating under Permits 002649 and 002650. These portable engines, which move from location to location within the facility, meet the definition of nonroad. Therefore, they are not subject to 40 CFR Part 63 Subpart ZZZZ, and 40 CFR Part 60 Subpart IIII.

10.0 Streamlining

The facility does not request Multiple Applicable Requirements Streamlining.

11.0 Updates to the Title V Permit Incorporated into this Action

The following changes are being made to the emission unit specific permits as indicated below.

APCD1993-PTO-930297 had an application submitted for odor reduction system (ORS) condition language clarity and outage changes under TVP 501(b)(10) application APCD2016-APP-004468. The project was completed and approved during the renewal evaluation and so those changes have been included to TVP Appendix A as part of this renewal.

APCD1994-PTO-940189 had an application submitted for odor reduction system (ORS) condition language clarity and outage changes under TVP 501(b)(10) application APCD2016-APP-004468. The project was completed and approved during the renewal evaluation and so those changes have been included to TVP Appendix A as part of this renewal.

APCD1995-PTO-950315 had applications submitted for flare condition language clarity and outage changes under TVP 501(b)(10) applications APCD2017-APP-005223 and APCD2020-APP-006322. The projects were completed and approved during the renewal evaluation and so those changes have been included to TVP Appendix A as part of this renewal.

APCD1993-PTO-930297 had an application submitted for odor reduction system (ORS) condition changes allowing an additional type of granulated activated carbon (GAC) under TVP 501(b)(10) application APCD2018-APP-005428. The project was completed and approved during the renewal evaluation and so those changes have been included to TVP Appendix A as part of this renewal.

Additionally, the facility is now a Federal Major Source of HAP and will have new conditions applied to the boilers at this site (permits 960190-960193) per 40 CFR 63 Subpart DDDDD. The new requirements will include one-time fuel specification analyses documentation demonstrating their fuel is “other gas 1 fuel”, work practice standards for boilers > 10 mmbtu/hour, annual compliance reports, and recordkeeping.

12.0 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 public notice contains information on how to petition EPA for review of a proposed action.

If no comments or objections are received, the District intends to promptly issue the Title V permit after conclusion of the review period. If comments are received the District will review and respond to the comments as necessary. If comments identify issues which require modification to the permit, revisions will be made and the permit either issued if the changes do not require re-review by EPA or the public, or will be re-noticed if changes are made which do require review.

13.0 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.

14.0 Attachments

The following are attached:

- Application Package
- Draft Permit
- Public Notice
- Emission Calculations