

South Coast Air Quality Management District

Statement of Basis

Initial Title V Facility Permit

Facility Name: Irvine Ranch Water District (IRWD)
Facility ID: 003513
SIC Code: 4952
Equipment Location: 3512 Michelson Drive,
Irvine, CA 92612

Application #(s): 563444
Application Submittal Date(s): 4/03/2014

Permit Renewal: N/A
Permit Revision No.: 0
Permit Section(s) Affected: All

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1. Introduction and Scope of Permit

Title V is a national operating permit program for air pollution sources. Facilities subject to Title V must obtain a Title V permit and comply with specific Title V procedures to modify the permit. This permit replaces the facility's other existing permits. Title V does not necessarily include any new requirements for reducing emissions. It does, however, include new permitting, noticing, recordkeeping, and reporting requirements.

The SCAQMD implements Title V through Regulation XXX – Title V Permits, adopted by the SCAQMD Governing Board in order to comply with EPA's requirement that local air permitting authorities develop a Title V program. Regulation XXX was developed with the participation of the public and affected facilities through a series of public workshops, working group meetings, public hearings and other meetings.

The Title V major source threshold for a particular pollutant depends on the attainment status of the pollutant. NO₂, SO₂, CO, and PM₁₀ (South Coast Air Basin) are in attainment with federal standards. Lead (LA Co), PM-2.5, and ozone are in nonattainment.

An Initial Title V permit is proposed to be issued to cover the operations of the sewage treatment plant, biosolids drying project, and associated equipment. This facility is subject to Title V requirements because it will be a major source.

2. Facility Description

This facility operates a sewage treatment plant and associated equipment. The facility is applying for an Initial Title V permit and a proposed biosolids project and is currently permitted to expand operations to include anaerobic digestion to produce digester gas, which will be used in the proposed boilers, dryer, and microturbines of the proposed biosolids drying project. The proposed project will produce marketable Class A biosolids pellets and produce electricity with five microturbines. The facility currently operates five emergency internal combustion engines for electrical generation, two non-emergency internal combustion engines driving electrical generators, two non-emergency internal combustion engines driving water pumps, an anaerobic sewage treatment plant, an odor control unit, a gasoline service storage and dispensing facility, a plasma arc cutter with control equipment, and a methanol storage tank at this facility.

3. Construction and Permitting History

An Initial Title V permit is being proposed that will include existing equipment and equipment proposed for construction.

4. Regulatory Applicability Determinations

Applicable legal requirements for which this facility is required are identified in the Title V permit (for example, Section D, E, and K, of the proposed Title V renewed permit). Applicability determinations (i.e., determinations made by the District with respect to what legal requirements apply to a specific piece of equipment, process, or operation) can be found in the Engineering Evaluations. This facility is subject to NSPS and NESHAP requirements applicable to operators of stationary internal combustion engines and reciprocating internal combustion engines (RICE), 40 CFR 60, Subpart IIII and Subpart JJJJ, and 40 CFR Part 63, Subpart ZZZZ, respectively. The permit terms and conditions may be found in Sections D of the Title V permit.

5. Monitoring and Operational Requirements

Applicable monitoring and operational requirements for which the facility is required to comply are identified in the Title V permit (for example, Section D and Appendix B of the proposed Title V permit). Discussion of any applicable monitoring and operational requirements can be found in the Engineering Evaluations. Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 apply to the regenerative thermal oxidizer at this facility.

6. Permit Features

Permit Shield

A permit shield is an optional part of a Title V permit that gives the facility an explicit protection from requirements that do not apply to the facility. A permit shield is a provision in a permit that states that compliance with the conditions of the permit shall be deemed compliance with all identified regulatory requirements. To incorporate a permit shield into the Title V permit involves submission of applications for change of conditions for each equipment affected by the

permit shield. Permit shields are addressed in Rule 3004 (c). This facility has not applied for a permit shield.

Streamlining Requirements

Some emission units may be subject to multiple requirements which are closely related or redundant. The conditions may be streamlined to simplify the permit conditions and compliance. Emission limits, work practice standards, and monitoring, recordkeeping, and reporting requirements may be streamlined. Compliance with a streamlined condition will be deemed compliant with the underlying requirements whether or not the emission unit is actually in compliance with the specific underlying requirement. This facility has not applied for any streamlined conditions.

7. Summary of Emissions and Health Risks

**Criteria Pollutant Emissions (tons/year)
Annual Reported Emissions for Reporting Period 2013**

Pollutant	Emissions (tons/year)
CO	1.02
NOx	1.602
ROG	2.184
SOx	0.004
TSP	0.162

**Toxic Air Contaminants Emissions (TAC)
Annual Reported Emissions for Reporting Period 2013**

The Following TACs Were Reported	Emissions (lbs/yr)
Ammonia	243.479
Formaldehyde	99.347
Benzene	22.318
1,3-Butadiene	4.202
Naphthalene	0.541
PAHs, total	0.222
Methylene chloride	0.178
Ethylene dibromide	0.092
Carbon tetrachloride	0.076
Lead (inorganic)	0.050
Ethylene dichloride	0.048
Vinyl chloride	0.031
Nickel	0.023
Arsenic	0.009
Cadmium	0.009
Chromium (VI)	0.000

Health Risk from Toxic Air Contaminants

The facility has been determined to be subject to Air Toxics Information and Assessment Act (AB2588) requirements. SCAQMD is tracking the status of the facility under AB2588.

8. Compliance History

The facility has been subject to SCAQMD inspections. Facility inspection report for November 13, 2014 was satisfactory operating in compliance at the time of inspection. The facility had 0 citizen complaints filed, 0 Notice to Comply issued, 0 Notice of Violation issued for the period of (August 2011 through August 2013). The facility is in compliance.

9. Compliance Certification

By virtue of the Initial Title V permit application and issuance of the Initial Title V facility permit in coming months, the reporting frequency for compliance certification for the facility shall be annual.