

South Coast Air Quality Management District

Statement of Basis

Proposed Title V Permit Renewal

Facility Name:	Rhodia, Inc.
Facility ID:	114801
SIC Code:	2819
Equipment Location:	20720 South Wilmington Avenue Carson, CA 90810
Application #(s):	497699
Application Submittal Date(s):	04/09/2009
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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.

Pursuant to Title V of the Federal Clean Air Act and AQMD Rule 3004(f), a Title V permit shall expire five years from the date of issuance unless such permit has been renewed. Accordingly, each facility is required to submit a Title V renewal application and requested the AQMD to renew their Title V permit. The proposed permit incorporates updates to the facility information provided in the facility's Title V renewal application and all rules and regulations that are currently applicable to the facility.

The AQMD implements Title V through Regulation XXX – Title V Permits, adopted by the AQMD 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 lead are in attainment with federal standards. The status for PM-10 is serious nonattainment. The status for ozone is currently extreme nonattainment.

A Title V permit is proposed to be issued to cover the operations of Rhodia Inc., 20720 South Wilmington Avenue, Carson, CA 90810. This facility is subject to Title V requirements because it is a major source.

2. Facility Description

Rhodia Inc., Carson facility is a Title V facility that regenerates sulfuric acid for the refinery alkylation process and manufactures alum to be used as a flocculating agent in the drinking water purification and wastewater treatment plants. This facility operates one sulfuric acid plant and one alum (aluminum sulfate) manufacturing system. The PM10 emissions (acid vapor) from the reactor of the alum manufacturing system are being controlled by a caustic scrubber. The PM 10 emissions from alumina trihydrate powder pneumatic conveying operation are being controlled by a bin vent filter. The PM10 (acid vapor) and VOC emissions associated with storage and handling of spent sulfuric acid are being controlled mainly by the furnace of the sulfuric acid plant. When the furnace is down, they are being controlled by a back-up air pollution control system consisting of caustic scrubbers followed by a flare.

3. Construction and Permitting History

The facility has been in constant operation at this location since 1928 and numerous permits to construct and or permits to operate have been issued to the facility. This facility was formerly identified as Dominguez Chemical Co. Stauffer Chemical in 1928 and Rhone-Poulenc Chemicals in 1987. Rhodia Inc. was formed from Rhone-Poulenc Chemicals in 1998. Since the issuance of the initial Title V permit, a permit revision was subsequently issued to the facility on September 20, 2005.

4. Regulatory Applicability Determinations

Applicable legal requirements for which this facility is required to comply are required to be identified in the Title V permit (for example, Section D, E, and H of the proposed Title V 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 not subject to any NESHAP requirements. However, the facility is subject to the requirements of 40CFR60 Subpart H – Standards of Performance for Sulfuric Acid Plants and 40CFR60 Subpart Cd – Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units. These NSPS requirements are reflected in 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, F, and J and Appendix B of the

proposed Title V permit). Discussion of any applicable operational requirements can be found in the Engineering Evaluations. All periodic monitoring requirements were developed using strict adherence to the following applicable guidance documents: SCAQMD Periodic Monitoring Guidelines for Title V Facilities (November 1997); CAPCOA/CARB/EPA Region IX Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP (June 1999); and CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources (July 2001).

The furnace of the sulfuric acid plant is designated as NO_x and SO_x RECLAIM major source; thus, the NO_x and SO_x emissions are continuously regulated and monitored under Regulation XX – RECLAIM. Therefore, the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 are not applicable to the NO_x and SO_x emissions from the sulfuric acid plant.

The PM₁₀ emissions (acid vapor) from the reactor of the alum manufacturing system are being controlled by a caustic scrubber. The PM₁₀ emissions from alumina trihydrate powder pneumatic conveying operation are being controlled by a bin vent filter. The PM₁₀ (acid vapor) and VOC emissions associated with storage and handling of spent sulfuric acid are being controlled mainly by the furnace of the sulfuric acid plant and occasionally by a back-up air pollution control system consists of caustic scrubbers followed by a flare. Since the pre-control potential to emit of PM and VOC to each of the emission control equipment is less than the major source thresholds, the CAM requirements of 40 CFR Part 64 are not applicable to two scrubber systems, one bin vent and the furnace.

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 compliance 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 2009**

Pollutant	Emissions (tons/year)
NO _x	26.743
CO	13.985
VOC	0.045
PM	5.507
SO _x	253.192

**Toxic Air Contaminants Emissions (TAC)
Annual Reported Emissions for Reporting Period 2009**

The Following TACs Were Reported	Emissions (lbs/yr)
1,3-Butadiene	0.004
Ammonia	259.078
Arsenic	< 0.001
Benzene	0.088
Cadmium	< 0.001
Chromium (VI)	< 0.001
Formaldehyde	0.213
Lead (inorganic)	< 0.001
Naphthalene	0.004
Nickel	< 0.001
PAHs, total, with components not reported	0.002

Health Risk from Toxic Air Contaminants

The facility is subject to review by the Air Toxics Information and Assessment Act (AB2588). The Final Facility Health Risk was approved in 2006 with the following risk factors.

Cancer Risk	0.11 in one million
Acute Hazard Index	0.02
Chronic Hazard Index	0.05

8. **Compliance History**

As noted, the facility has been in constant operation since 1928. The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had no citizen complaints filed and no Notices of Violation issued in the last two calendar years. However, in the recent two years, the applicant was issued one Notice to Comply, which is indicated as follows:

- Notice to Comply (NC D14327) issued on 11/20/2009 requiring the operator to demonstrate compliance with Rule 2012 Appendix A Chapter 2 (B) and the Compliance Advisory for all CEMS operated at Rhodia facility.

Compliance Status: The facility updated software calculation methodology; and thus, it achieved compliance with the notice on 12/28/2009.

The facility is currently operating in compliance with all applicable rules and regulations.

9. Compliance Certification

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