

South Coast Air Quality Management District

Statement of Basis

Proposed Renewal of Title V Permit

Facility Name: AES Redondo Beach, LLC
Facility ID: 115536
NAICS Code: 221112
Equipment Location: 1100 N. Harbor Drive, Redondo Beach, CA 90277

Application #(s): 556151
Application Submittal Date(s): 9/13/13

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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 request 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. CO, NO₂, SO₂, 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 renewal permit is proposed to be issued to cover the operations of AES Redondo Beach, LLC at 1100 N. Harbor Dr., Redondo Beach, CA 90277. This facility is subject to Title V requirements because it is a major source.

2. Facility Description

AES Redondo Beach, LLC operates the Redondo Beach Generating Station (RBGS), an existing Title V facility that produces electrical power. The facility currently has four operating utility boilers with a combined gross generating capacity of 1310 MW (Units 5, 6, 7, and 8), four retired utility boilers (Units 1, 2, 3, and 4), a steam boiler (No. 17) that is not being operated, two aqueous ammonia tanks (29 wt %), a pressure washer, and Rule 219 exempt equipment. Each operating utility boiler is equipped with a selective catalytic reduction system to control NOx emissions. These boilers are permitted to burn a combination of natural gas and refinery fuel gas; however refinery fuel gas is not longer used as a fuel.

3. Construction and Permitting History

This facility was issued its initial Title V facility permit on August 19, 1999, which expired on August 18, 2004. Since the application was timely submitted at least 180 days before the expiration of the Title V permit, the facility operated under a Title V application shield until the first Title V renewal permit was issued. The first Title V renewal permit was issued on February 27, 2009 and will expire on February 26, 2014.

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 NSPS requirements of 40 CFR 60 and NESHAPS requirements of 40 CFR 63.

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 monitoring and 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 SIP: Combustion Sources (July 2010).

For each operating utility boiler (Units 5, 6, 7, and 8), the uncontrolled NO_x and CO emissions are greater than the major source thresholds of 10 tpy NO_x and 50 tpy CO. The utility boilers are subject to an emission limit for NO_x and equipped with a selective catalytic reduction system to achieve compliance. The utility boilers are not equipped with control equipment for CO. As a result, each boiler is subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 for NO_x only. The utility boilers, however, are installed with a Continuous Emission Monitoring System (CEMS) for NO_x pursuant to Rule 2012. The use of a continuous monitor to show compliance with an emission limit exempts the utility boilers from CAM under 64.2(b)(vi). The steam boiler (Unit 17) is not controlled, and thus not subject to CAM.

Therefore, CAM requirements of 40 CFR Part 64 do not apply to any of the permitted emission sources 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 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 2012**

Pollutant	Emissions (tons/year)
NO _x	29.687
CO	41.838
VOC	15.784
PM	5.433
SO _x	1.703

**Toxic Air Contaminants Emissions (TAC)
Annual Reported Emissions for Reporting Period 2012**

The Following TACs Were Reported	Emissions (lbs/yr)
1,3-Butadiene	0.007
Ammonia	12813.344
Asbestos	0.015
Benzene	11.491
Formaldehyde	24.299
Naphthalene	2.023
PAHS, total, with components not reported	0.674
Trichloroethylene	62.500

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 assessment (HRA) was approved in 1998. The cancer risk is 0.40 in a million, the acute hazard index is 0.01, and the chronic hazard index is 0.04.

8. Compliance History

The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had seven citizen complaints filed in the last two calendar years. One Notice to Comply (NC) and one Notice of Violation (NOV) have been issued in the last two calendar years. The facility is currently in compliance with all applicable rules and regulations.

Public Complaints

Complaint No.	Received	Summary
233817	6/6/13	Complaint: Blowing smoke. Inspector report: Facility indicated safety issue with Unit 8 where flames came out of the burner but there was no equipment malfunction. Unit removed from service.
231170	2/8/13	Complaint: Plume over Redondo Union High School. Inspector report: Facility was shut down, equipment not in operation.
225649	8/11/12	Complaint: Steam coming from power plant. Inspector report: Encouraged complainant to contact the complaint line when he sees smoke from the AES power plant stacks.
223551	5/4/12	Complaint: Toxic Fumes Inspector report: Chronic complainer.
223368	4/24/12	Complaint: Smoke coming from stack Inspector Report: Facility checked logs, everything was operating normally.
223264	4/17/12	Complaint: Black smoke coming from stack. Inspector report: Observed steam. Facility indicated there had been some problems the past few days with the ammonia injection into an SCR and had called in a breakdown.

Complaint No.	Received	Summary
223195	4/12/12	Complaint: Dark grey smoke Inspector report: Explained to complainant that there is a possibility that it could be a heavy plume of steam and depending on the weather conditions and shadowing effect the steam plume can look grey. Reminded complainant to contact the complaint line anytime of the day to report his complaint. Facility indicated the data were stable.

Notice to Comply and Notice of Violation

Notice No.	Issued Date	Violation Date	Summary	Final Action
Notice to Comply No. E09958	4/25/12	2/10/12	Compliance required: Calculate & report NO _x emissions for under Rule 219, apply bias adjustment factor based on RATA results, report process unit quarterly mass emissions of NO _x to the District Central Station, process units shall report NO _x emissions on QCER required by Rule 2004.	5/11/12 follow-up— Facility in compliance.
Notice of Violation No. P52192	6/21/13	5/25/12	1) Submitted late electronic report for 5/25/12 and failed to maintain a reporting device to electronically report daily mass emissions of NO _x for 5/26/12. 2) Failed to report accurate emissions in their submitted QCERs.	Pending.

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.