



South Coast Air Quality Management District

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NOTICE OF INTENT TO ISSUE PERMITS PURSUANT TO AQMD RULES 212, 1710 AND 3006

This notice is to inform you that the South Coast Air Quality Management District (AQMD) has received permit applications from the Los Angeles Department of Water and Power (LADWP) for the proposed replacement of two existing older, less efficient and dirtier large electric generating utility boilers with six smaller new, state of the art, cleaner and more efficient electric generating gas turbines (Repower Project) at the Haynes Generation Station in Long Beach. AQMD has reviewed these applications and after a careful review and a detailed evaluation of the Repower Project has determined that the Repower Project complies with all applicable federal, state and local air quality rules and regulations and, therefore, AQMD intends to issue Permits to Construct for the Repower Project and to revise the Title V permit for this facility. However, prior to issuance of the final Title V permit, AQMD is providing an opportunity for public comments on the AQMD's proposed decision.

The AQMD is the air pollution control agency for the four-county region including all of Orange County and non-desert parts of Los Angeles, Riverside and San Bernardino Counties. Anyone wishing to install or modify equipment that could control or be a source of air pollution within this region must first obtain a permit from the AQMD. Under certain circumstances, before a permit is granted, a public notice, such as this, is prepared by the AQMD. For this project, public notification is required in accordance with AQMD Rule 212(c)(2), Rule 212(g) and Rule 1710(b) because the emissions from the new gas turbines exceeds the public notice thresholds for these rules. Public notification is also required by AQMD Rule 3006(a) because there will be a significant revision to the facility's existing air quality Title V permit.

The AQMD has evaluated the permit applications listed below for the following facility and determined that it meets or will meet all applicable federal, state and AQMD air quality rules and regulations as described below:

FACILITY: LADWP Haynes Generating Station Facility ID No. 800074 6801 2 nd Street Long Beach, CA 92803	CONTACT: Bruce Moore LA Dept. of Water and Power 111 North Hope Street, Room 1050 Los Angeles, CA 90012
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AQMD APPLICATION NUMBERS

Application Number	Equipment Description
495664 thru 495669	GE LMS100 Simple Cycle Gas turbine Generator, Unit 11 thru 16
495670 and 495671	Standby Diesel IC Engine Generator #1 and #2
495672	Diesel Storage Tank
495673 thru 49675	Waste Oil/Water Separator #1 thru #3
495978, 495980 and 495988 thru 495991	Air Pollution Control Equipment, SCR and CO Catalyst for Unit 11 thru 16
495663	Facility Title V permit Significant Revision

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PROJECT DESCRIPTION

The proposed Repower Project is to replace the existing less efficient, higher emitting electric utility boiler generators Units 5 and 6 that have been in operation since mid 1960 with a more efficient, lower emitting simple cycle generating system (SCGS). The SCGS will consist of six natural gas fired General Electric (GE) LMS100 combustion turbines and six electric generators. The current combined generating capacity of the existing electric utility boiler generators Units 5 and 6 is 604 Mega Watts (MWs). The combined generating capacity of the SCGS will be at 616.2 MWs, which is 12.2 MWs more than the existing capacity of Units 5 and 6. The SCGS will be equipped with the state of the art Best Available Control Technology (BACT) air pollution control equipment, which consists of catalysts (selective catalytic reduction and oxidation catalyst). Other auxiliary equipment for the SCGS include two standby generators, three waste oil/water separators, and one diesel oil storage tank.

PROJECTED EMISSIONS

During the normal operation, the total potential maximum monthly emissions from the operation of the SCGS and auxiliary equipment are not expected to exceed the emission levels listed in the table below. The emissions listed below are strictly from the new SCGS equipment and do not include any emission reductions associated with the removal from service of the existing electric utility boiler generator Units 5 and 6.

Pollutant	Maximum Potential Monthly Emissions (pounds per month)
Nitrogen Oxides (NO _x)	46,332
Carbon Monoxide (CO)	70,575
Volatile Organic Compounds (VOC)	13,650
Particulate Matter (diameter less than 10 microns, PM ₁₀ and diameter less than 2.5 microns, PM _{2.5})	20,046
Sulfur Dioxide (SO ₂)	540

Since the total electrical generating capacity of the new SCGS is slightly greater than the electrical generating capacity of the existing electric utility boiler generating units, as required by AQMD rules and regulations, the emissions associated with the increase in the electrical generating capacity from the new equipment will be offset through providing emission reduction credits (ERCs) from shut down of other facilities within the air basin that LADWP has acquired. The amounts of ERCs required that is associated with the increase in the electrical generating capacity are 12 pounds per day (or 360 pounds per month) of VOCs and 15 pounds per day (or 450 pounds per month) of PM₁₀. There are no emission offsets in the form of ERCs required for SO_x and CO, since the SO_x increase in emissions is less than 0.5 pound per day and the air basin is considered attainment with CO. Also all of the NO_x emissions from this facility has to be offset with emission credits that LADWP either holds or purchases in the form of NO_x Trading Credits available in the Regional Clean Air Incentive's Market (RTCs). Finally, the total facility's emissions of PM_{2.5} will be limited to less than 100 tons per year, unless LADWP also provides ERCs for PM_{2.5} in the amount of 292 pounds per day, unless a different amount associated with the Repower Project modification at this facility as determined to be required according to the federal New Source Review (NSR) requirements, as approved by both AQMD and EPA. The VOCs and PM₁₀ ERCs are required to be provided by LADWP prior to issuance of the final Title V Permits to Construct. The NO_x RTCs and PM_{2.5} ERCs (if necessary), are required to be provided by LADWP prior to the Repower

Project commencing its operation in accordance with RECLAIM rules (AQMD Rule 2005) and federal NSR rule (Appendix S), respectively.

As a result of the burning of natural gas in the gas turbines, emissions from the proposed project also contains small quantities of pollutants that are considered toxic under AQMD Rule 1401-New Source Review of Toxic Air Contaminants. Therefore, a health risk assessment has been performed for the Repower Project. The health risk assessment uses health protective assumptions in estimating actual risk to an individual person. Even assuming this health protective condition, the evaluation shows that the maximum individual cancer risk (MICR) increase from the individual gas turbines and the total project, as a whole, even without considering the emission reductions from old equipment being replaced, is less than the AQMD's risk threshold of one-in-one-million. Also, acute and chronic indices, which measure non-cancer health impacts, are less than one. According to the state health experts, a hazard index of one or less means that the surrounding community including the most sensitive individuals such as very young children and the elderly will not experience any adverse health impacts due to these emissions. These levels of estimated risk are below the threshold limits of AQMD Rule 1401 (d) established for new or modified sources. The health risk assessment (HRA) results are shown in the table below:

Equipment	MICR, Resident	MICR, Worker	Chronic Hazard Index	Acute Hazard Index
Gas Turbine No. 11	0.03 in a million	0.005 in a million	1.59E-03	5.08E-03
Gas Turbine No. 12	0.03 in a million	0.005 in a million	1.59E-03	5.09E-03
Gas Turbine No. 13	0.03 in a million	0.005 in a million	1.56E-03	5.06E-03
Gas Turbine No. 14	0.03 in a million	0.005 in a million	1.56E-03	5.05E-03
Gas Turbine No. 15	0.03 in a million	0.005 in a million	1.56E-03	5.05E-03
Gas Turbine No. 16	0.03 in a million	0.005 in a million	1.56E-03	5.05E-03

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) EVALUATION

The South Coast Air Basin is in attainment with the national ambient air quality standards for Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂) and Carbon Monoxide (CO); therefore, the NO₂, SO₂ and CO emissions from the project are subject to the AQMD's Prevention of Significant Deterioration (PSD) regulation (Regulation XVII).

The SCGS is classified as a major stationary source, and the projected maximum potential emission increases from the SCGS are 305.8 tons/year for NO₂, 9.5 tons/year for SO₂, and 413.4 tons/year for CO. The emission increases for NO₂ and CO are above the PSD significance thresholds. The Repower Project is not subject to a PSD NO₂ incremental analysis because the predicted 1-hour NO₂ impact of 7.2 micrograms per cubic meter (µg/m³) is below the federal PSD significance threshold of 7.5 µg/m³, and the annual NO₂ impact of 0.56 µg/m³ is below the federal PSD significance threshold of 1.0 µg/m³. In addition, based on the air quality modeling analysis, the predicted CO and NO₂ impacts from the Repower Project will not cause or contribute to a violation of the state or federal ambient air quality standards for these air contaminants.

Also based on the result of a modeling analysis of the potential impacts to Class I wilderness areas, the results show no adverse visibility impacts on the nearest Class I areas (i.e., San Gabriel Wilderness area and Cucamonga Wilderness area) that may be impacted by the Repower Project. The U.S. Department of Agriculture - Forest Service has reviewed this PSD modeling analysis. Based on all of these analysis and evaluations, the AQMD has determined that the proposed Repower Project is expected to comply with all PSD requirements.

Based on the result of our detailed analysis and evaluation, the AQMD has determined that the Repower Project complies with all applicable federal, state and AQMD air quality rules and regulations and, therefore, AQMD intends to issue the Permits to Construct for the equipment described above. However, prior to issuance of a final permit, AQMD is providing an opportunity for a 30-day public comment period and an Environmental Protection Agency (EPA) review period. AQMD will consider issuance of the final permit only after all pertinent public and EPA comments, if any, have been received and considered and upon LADWP complying with the requirement described below:

- In accordance with AQMD Rule 1303(a)(2), the applicant must provide emission offsets for the emission increases associated with the increased generating capacity. The applicant will provide Emission Reduction Credits (ERCs) to offset the increases in VOC and PM10 and possibly PM_{2.5} emissions.

This facility is classified as a federal Title IV (Acid Rain) and Title V facility. Pursuant to AQMD Rule 3006 – Public Participation, any person may request a proposed permit hearing on an application for an initial or significant revision to a Title V permit by filing with the Executive Officer a complete Hearing Request Form (Form 500G) for a proposed hearing within 15 days of the date of publication of this notice. This form is available on the AQMD website at <http://www.aqmd.gov/permit/Formspdf/TitleV/AQMDForm500-G.pdf>, or alternatively, the form can be made available by contacting Mr. Li Chen at the e-mail and telephone number listed below. In order for a request for a public hearing to be valid, the request shall comply with the requirements of AQMD Rule 3006 (a)(1)(F). On or before the date the request is filed, the person requesting a proposed permit hearing must also send by first class mail a copy of the request to the facility address and contact person listed above.

The proposed permits and other information are available for public review at the AQMD's headquarters in Diamond Bar, and at the Long Beach Public Library, 101 Pacific Avenue, Long Beach, CA 90822. Additional information including the facility owner's compliance history submitted to the AQMD pursuant to Section 42336, or otherwise known to the AQMD, based on credible information, is available at the AQMD for public review by contacting Mr. Li Chen (lchen@aqmd.gov), Engineering and Compliance, South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91865-4182, (909) 396-2426. A copy of the draft Permits to Construct can also be viewed at <http://www.aqmd.gov/webappl/PublicNotices/Search.aspx>. Anyone wishing to comment on the air quality elements of the permits must submit comments in writing to the AQMD at the above address, attention Mr. Brian Yeh. **Comments must be received within 30 days of the publication date of this notice.** If you are concerned primarily about zoning decisions and the process by which the facility has been sited in this location, contact your local city or county planning department. For your general information, anyone experiencing air quality problems such as dust or odor can telephone in a complaint to the AQMD 24 hours a day by calling the toll free 1-800-CUT-SMOG (1-800-288-7664).