

SACRAMENTO METROPOLITAN



**SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT**

Department of Human Resources  
777 12th Street, 3rd Floor  
Sacramento, CA 95814

<http://www.airquality.org/About-Us/Employment>

**INVITES APPLICATIONS FOR THE POSITION OF:  
Air Quality Engineer - Assistant / Associate**

*An Equal Opportunity Employer*

**SALARY**

\$40.26 - \$56.83 Hourly

**OPENING DATE:** 04/27/22

**CLOSING DATE:** 05/20/22 04:00 PM

**DESCRIPTION:**

The Sacramento Metro Air Quality Management District is seeking an Air Quality Engineer for the Transportation and Climate Change Division. Responsibilities will include, among others, field inspections, auditing, compliance, and contract modifications for the low emissions vehicle incentive projects. Incumbents must obtain a detailed understanding of funding guidelines and be able to perform cost-effective analysis, explain contract language in non-technical terms to grant participants, and work with management and the District's legal team on non-compliant contracts.

This position can be filled at either the assistant or associate level, depending on the qualifications of the candidate. Associate level candidates are expected to have significant experience, education, and/or training in one or more air quality areas related to this position.

The Air Quality Engineer performs a variety of professional engineering work in connection with evaluation, control, monitoring, and assessment of air quality standards, conditions, plans and strategies to ensure public and private compliance with applicable laws, rules and regulations; and performs other related duties as required.

**DISTINGUISHING CHARACTERISTICS**

Assistant Air Quality Engineer – The entry level class in the professional air quality engineering series. Incumbents are responsible for office and/or field projects of average difficulty and complexity and are required to direct them to completion. Assistant Air Quality Engineers have no supervisory responsibility but do provide technical direction to others. Incumbents are expected to demonstrate increased proficiency and knowledge and work under less supervision during the training period. Incumbents are gradually given more difficult and responsible assignments and may assist experienced staff on more difficult projects.

Associate Air Quality Engineer – The fully experienced, journey level professional engineering class in the series who performs difficult and complex engineering work under general supervision. Incumbents provide technical guidance or training to other staff or may act as a project leader.

Positions in this class are flexibly staffed and are normally filled by advancement from the lower grade of Engineer Specialist, or when filled from the outside, require prior engineering experience.

**TYPICAL DUTIES**

The duties listed below are examples of the work typically performed by employees in this class. An employee may not be assigned all duties and may be assigned duties which are not listed below. Marginal duties (shown in italics) are those which are least likely to be essential functions for any single position in this class.

1. Reviews and evaluates engineering plans and permit applications for equipment which emits or controls air pollution to determine if equipment meets all applicable rules and regulations; researches and determines best control technology; performs economic analysis on technology determination; drafts permit conditions; determines fees, issues permits.
2. Calculates and analyzes pollution emissions; determines appropriate emission standards for proposed rules; performs air dispersion modeling and health risk assessments.
3. Performs initial inspection of equipment to determine that conditions are in compliance and equipment is constructed and operated as required; conducts periodic inspections of vehicle fleets to maintain continuing compliance; performs engineering evaluations related to engine efficiency and mechanical/electrical/structural aspects of vehicles.
4. Reviews source test protocols; observes source tests; reviews and analyzes test results.
5. Consults with management and technical staff of industrial and commercial establishments on solutions to engineering problems arising from stationary source, mobile source or toxic air contamination and proposed rules; makes recommendations on how to comply with federal, state, and local legislation, ordinances, regulations, and policies.
6. Researches local air quality; performs necessary studies and analysis of technological feasibility, economic and other impacts of proposed practices and rule changes.
7. Reviews, evaluates, writes, analyzes and justifies new/revised rules and advisories; reviews and comments on legislation and regulations; writes justification and background for rule changes.
8. Represents the District on committees and at public activities, meetings, and before official bodies.
9. Develops, maintains, reviews, and analyzes emissions inventories; develops, plans and implements emissions inventory procedures and program.
10. Drafts programs to introduce clean fuels and low emission vehicles; directs and manages demonstration projects of light, medium and heavy-duty vehicles and off-road vehicles.

## **MINIMUM QUALIFICATIONS**

### EDUCATION & EXPERIENCE

Assistant Air Quality Engineer – Completion of a Bachelor's Degree from an accredited college or university in civil, chemical, environmental, automotive, or mechanical engineering or a closely related field or any combination of training and experience that provides the desired knowledge and abilities.

Associate Air Quality Engineer -- Completion of a Bachelor's Degree from an accredited college or university in civil, chemical, environmental, automotive, or mechanical engineering or a closely related field and two years of experience as an Assistant Air Quality Engineer or two years of full-time experience performing responsible engineering work in air quality management or any combination of training and experience that provides the desired knowledge and abilities.

### KNOWLEDGE OF:

Both Classes – Principles of mathematics necessary to evaluate, monitor, and control air quality; basic computer principles and applications; statistical techniques; engineering principles used in the various types of industrial processes; major Federal, State, and local laws, rules, and regulations related to air quality and vehicle emission standards; internal combustion engine cycles; thermodynamic and heat transfer principles; the effects of vehicle emissions on air quality and human health.

Associate Air Quality Engineer -- Engineering principles, methods, practices, and equipment used in determining, evaluating, monitoring, and controlling air quality; various types of industrial processes and control equipment; current Federal, State, and local laws, rules, and regulations related to air quality management; methods of collecting and analyzing air and stack gas samples; design and use of atmosphere pollution control devices; relationship of Federal and State air quality programs to local government programs; air quality plan components and methods of calculating impacts of air pollution control measures; light, medium, heavy-duty, and off-road powertrain and emission control systems; environmental and safety aspects of conventional and alternative fuels; State vehicle emission standards; Federal, State, and local laws, rules and regulations related to vehicle air quality management.

**ABILITY TO:**

Both Classes – Review, interpret, and evaluate air pollution control engineering plans and test data; conduct research and special studies of air quality; analyze engineering problems and propose solutions; prepare technical reports; interpret, apply and explain Federal, State and local policies, procedures, and laws; deal with a variety of different personalities and situations; evaluate and review permit applications, plans, assessments, tests, rules and proposals; speak and write clearly and concisely; communicate in public and private meetings with people of varying technical skills, including representatives of government, industry and the public.

**OTHER REQUIREMENTS:**

Possession of a valid Class C California driver's license is required for positions performing inspections or air monitoring activities.

**WORKING CONDITIONS & PHYSICAL DEMANDS**

Generally clean work environment with occasional exposure to chemicals, dust, fumes, odors, and noise. Computer monitor used in a daily basis. Travel throughout the District may be required.

Positions within these classes that perform inspections or air monitoring activities will require the ability to bend, stoop, climb ladders and stairs, crouch, and lift weights up to approximately 25 pounds (weights include briefcase, manuals, testing equipment, etc.)

APPLICATIONS MAY BE OBTAINED AND FILED ONLINE AT:

<http://www.airquality.org/About-Us/Employment>

OR

777 12th Street, 3rd Floor  
Sacramento, CA 95814

Job #1862-O

AIR QUALITY ENGINEER - ASSISTANT / ASSOCIATE  
DB

**Air Quality Engineer - Assistant / Associate Supplemental Questionnaire**

- \* 1. Do you have a bachelor's degree from an accredited college or university in civil, chemical, environmental, automotive, or mechanical engineering or a closely related field or any combination of training and experience that provides the desired knowledge and abilities?

Yes     No

- \* 2. This position requires knowledge of various subjects to successfully evaluate, monitor, and control air quality including mathematics, computers, statistical techniques, engineering principles, laws, rules, and regulations, internal combustion engine cycles, and more. Tell us a little about your education and work history, if applicable, that demonstrates this knowledge.
  
- \* 3. Describe how you would communicate complex policy issues and mandates to diverse stakeholder groups.
  
- \* 4. What does community engagement mean to you? Describe your experience working with diverse groups.
  
- \* 5. The District has programs that are subject to many guidelines and mandates. How would you show that a program meets all these requirements?
  
- \* 6. Do you have a valid Class C California driver's license?  
 Yes    No

\* Required Question