

Bay Area Air Quality Management District Senior Air Quality Engineer

SALARY \$63.45 - \$77.12 Hourly LOCATION San Francisco, CA

\$5,075.75 - \$6,169.60 Biweekly \$10,997.45 - \$13,367.47 Monthly \$131,969.41 - \$160,409.65 Annually

JOB TYPE Full Time JOB NUMBER LL1023-ENG

DEPARTMENT Engineering **OPENING DATE** 10/23/2024

CLOSING DATE 11/13/2024 5:00 PM Pacific

Description



The Bay Area Air Quality Management District (Air District) is a regional government agency, committed to achieving clean air to protect the public's health and the environment. The District accomplishes this goal through regulation of industrial facilities and various outreach and incentive programs designed to encourage clean air choices.

The Air District's jurisdiction encompasses all of seven counties - Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Napa, and portions of two others - southwestern Solano and southern Sonoma.

The Air District is currently accepting applications for the position of **Senior Air Quality Engineer in the Engineering Division.** This is an open recruitment for **four (4) full-time,** represented positions.

Staff may be assigned to sections that are focused on specific industries, such as petroleum refineries, organics recovery facilities (e.g., landfills, wastewater treatment) or inorganic material handling facilities (e.g., asphalt plants, concrete batch plants, quarries) OR lead specific programs such as Title V permitting for the division.

DEFINITION

Under direction, provides lead direction to engineering staff and performs the more difficult and complex professional engineering work in a variety of areas such as permit application evaluation, toxic risk screening and assessment evaluations, compliance audits and source testing; modeling and source inventory; performs related work as assigned.

DISTINGUISHING CHARACTERISTICS

This is the specialist level class in this series. In addition to performing the more difficult and complex engineering work, responsibilities include functioning as the project leader for a variety of engineering projects, providing training to other District staff and coordinating technical data gathering and compilation and the preparation of special and technical reports. This class is distinguished from Supervising Air Quality Engineer in that the latter supervises the staff and participates in the activities of assigned air quality engineering responsibilities.

This is the advanced lead level in the professional engineering series. Incumbents provide lead direction to air quality engineers and performs highly specialized and difficult engineering projects. Incumbents are assigned to design and implement programs that require considerable professional knowledge and the use of independent judgement. This class is distinguished from the Principal Air Quality Engineer in that the latter has the responsibility for developing new programs and handling the most difficult, sensitive, or critical projects.

Examples of Duties for this Position

EXAMPLES OF DUTIES (Illustrative Only)

Performs the more difficult and complex air quality engineering work such as, but not limited to, permit processing for petroleum refineries, power plants and semiconductor manufacturing facilities, air pollution dispersion modeling, providing detailed source inventories and providing project leadership.

Upon assignment, provides lead direction training and work review to Air Quality Engineers on routine, continuing or well-defined tasks, priorities and follows up on work to ensure timely completion. Coordinates and reviews the work of engineering and support staff involved in complex, sensitive and controversial engineering projects, studies and audits.

Provide engineering expertise in preparing and updating the emission inventory and other aspects of State and Federal air quality plans, including developing required programs, structuring data and preparing long-range emission forecasts for major industrial classifications.

Represent the District as technical expert in meetings with outside agencies, environmental groups and industry personnel regarding air quality control regulations, and source inventory procedures and results; act as an expert witness before the Hearing Board.

Upon request, provides input into selection decisions and performances. Coordinates technical data gathering and compilation, including coordination with other District sections and divisions.

Reviews permit and enforcement files to prepare materials and responses for variance requests, violation notices and case summaries and hearing board referrals; recommends appropriate actions; may testify of behalf of the District.

Coordinates on-site compliance inspections of sources and abatement devices; evaluates compliance and recommends enforcement actions.

Responds to industry, public and District inquiries regarding regulation interpretation, permit preparation, various

compliance measures and emission calculation methods in person, by telephone and in writing.

Reviews and evaluates new developments in motor vehicle technology, fuels, and test procedures, as they affect air pollutant emissions.

Develops and recommends revisions to District procedures and regulations.

Uses a computer terminal and a variety of software and programs to make engineering calculations, enter and retrieve data and to monitor and correct data entry; writes and revises computer programs; investigates and corrects errors in the data bank.

Acquires, evaluates, and applies computer models to simulate motor vehicle use and calculate vehicle emissions.

Coordinates toxic risk screening and risk assessment analysis; calculates toxic emissions, determines and applies appropriate air dispersion models, calculates maximum concentrations and calculates risk; recommends approval or denial of permit applications.

Performs, reviews, and directs the preparation of air quality impact analyses for permits, risk assessments and environmental impact documents.

Uses emissions models, geographic information systems, and relational data base to prepare and modify large data files on inventory input to air quality models.

May manage contracts with vendors and consultants.

Develops procedures to calculate and forecast pollutant emissions from natural and man-made sources of air pollution.

Conducts environmental audits, compliance inspections and source tests; evaluates results and recommends appropriate actions, including violation notices.

Participate in calculating, reviewing, correcting and documenting the emissions inventory; evaluates accuracy of source emission calculations and methodologies.

Conduct special studies and write technical reports related to research and planning functions, and coordinate activities with District Staff, outside agencies and organizations.

Prepare new regulations and evaluated revisions to existing District procedures and regulations based upon changes in State and Federal programs.

Minimum Qualifications

A typical way to obtain the knowledge and skills is:

Equivalent to graduation from a four-year college or university with major coursework in environmental, chemical, mechanical or petroleum engineering or a closely related field and two years of air quality environmental engineering experience at a level equivalent to the Air District's class of Air Quality Engineer II.

A directly related graduate degree may be desirable for some assignments and may be substituted for one year of experience.

Skill in:

Applying sound engineering principles and techniques in difficult and complex air quality engineering matters.

Computing complex engineering calculations quickly and accurately.

Performing detailed analyses of designs, specifications and plans.

Coordinating a variety of air quality engineering studies.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Preparing clear and concise reports, correspondence and other written materials.

Exercising sound independent judgement.

Other Requirements:

Must possess a valid California driver's license. Some positions may require the physical strength and agility to climb ladders and towers and work in the presence of potentially hazardous or toxic materials.

How to Apply & Selection Criteria

Interested individuals must submit a completed Air District application, chronological resume, and responses to the supplemental questionnaire by **5:00 p.m. on Wednesday, November 13, 2024.** Applications are accepted online; please visit our website at www.baaqmd.gov/jobs to apply.

Resumes must be attached to the application and will not be accepted in lieu of the required application materials. Postmarks, faxes, and e-mailed applications will not be accepted.

Except as requested in this announcement, do not include any additional documents, such as letters of recommendation, performance evaluations, work samples, etc. They will not be considered or returned.

Supplemental Questions Instructions

Individuals who apply for this position must respond to each of the required supplemental questions. Applications must be received by the Human Resources Office no later than the time and date specified in this vacancy announcement. The responses to the supplemental application questions will be used in accordance with the procedures indicated under the Selection Criteria section.

Please limit your responses to no more than one page (500 words) per question. Do not combine your responses or reference your application, resume, or any other requested documentation that you have included with your application packet to answer a question. This information will be evaluated as is and may be used to determine those applicants with the most directly related experience, education, and training to continue in the selection process. It is very important to provide a concise, clear, legible, complete response to each question.

Selection Criteria

Selection may be based upon a competitive examination consisting of a written exercise, interview, or combination of the two. Depending on the number of qualified applicants, an application screening and/or panel interview may be used to determine the most qualified applicants.

The District may hire from this recruitment process to fill future vacancies occurring within the next 18 months.

Persons with disabilities who may require reasonable accommodations during the application and/or selection process should notify the Human Resources Office at (415) 749-4980.

The District is an Equal Opportunity Employer.



Agency Address

Bay Area Air Quality Management District 375 Beale Street Suite 600

San Francisco, California, 94105

Phone Website

415-749-4980 <u>http://www.baaqmd.gov</u>

Senior Air Quality Engineer Supplemental Questionnaire

*QUESTION 1

Describe your education and training that have prepared you for this position

*QUESTION 2

Describe in detail your professional experience that qualifies you for this position. Include a description of your air quality engineering experience and the type of air pollution sources or industries for which you have specific experience

in permit evaluation. Include any specific experience described in the Definition section of the 'About this Position' above.

*QUESTION 3

Describe in detail a complex, collaborative, or controversial project in which you played a major role. Describe the goal of the project, your role and contributions to the project, the duration of the project, the outcome of the project, and any insights gained or lessons learned during your participation in this project.

*QUESTION 4

Describe your experience communicating environmental projects or programs to technical and non-technical audiences. Provide any experience when mixed audiences were present at the same time. For each example, include the subject matter, the purpose, the types of audience, methods used and examples of issues/questions you had to address.

* Required Question