

**DUTY STATEMENT**

Employee Name:	Position Number: <b>580-721-5604-007</b>
Classification: Research Scientist III (Physical/Engineering Sciences)	Tenure/Time Base: Permanent/Full Time
Working Title: Air Quality Scientist	Work Location: 850 Marina Bay Parkway, Richmond, CA, 94804
Collective Bargaining Unit: R10	Position Eligible for Telework (Yes/No): Yes
Center/Office/Division: Center for Laboratory Sciences/Division of Environmental Health Laboratories	Branch/Section/Unit: Environmental Health Laboratory Branch/Air Quality Section/Laboratory Unit

All employees shall possess the general qualifications, as described in California Code of Regulations Title 2, Section 172, which include, but are not limited to integrity, honesty, dependability, thoroughness, accuracy, good judgment, initiative, resourcefulness, and the ability to work cooperatively with others.

This position requires the incumbent to maintain consistent and regular attendance; communicate effectively (orally and in writing) in dealing with the public and/or other employees; develop and maintain knowledge and skill related to specific tasks, methodologies, materials, tools, and equipment; complete assignments in a timely and efficient manner; and, adhere to departmental policies and procedures.

All California Department of Public Health (CDPH) employees perform work that is of the utmost importance, where each employee is important in supporting and promoting an environment of equity, diversity, and inclusivity, essential to the delivery of the department's mission. All employees are valued and should understand that their contributions and the contributions of their team members derive from different cultures, backgrounds, and life experiences, supporting innovations in public health services and programs for California.

### **Competencies**

The competencies required for this position are found on the classification specification for the classification noted above. Classification specifications are located on the [California Department of Human Resource's Job Descriptions webpage](#).

### **Job Summary**

This position supports the California Department of Public Health's (CDPH) mission and strategic plan by strengthening the state environmental public health and laboratory testing program.

The incumbent works under the general direction of the Air Quality Section-Laboratory Unit Supervisor (Research Scientist Supervisor I- Chemical Sciences). The Research Scientist (RS) III directs, plans, and executes highly complex, multidisciplinary research studies on air contaminants and environmental health problems; coordinates with other agencies, gives presentations, and writes scientific publications; develops methods and conducts optical and electron microscopy,

Fourier Transform Infrared (FTIR) and Raman spectroscopy, and other chemical analyses such as Gas chromatography-mass spectrometry (GC-MS) and Liquid chromatography–mass spectrometry (LC-MS) to identify toxic particle and gas sources; conducts community air quality, product emissions, and wildfire smoke studies, and responds to other health related air pollution emergencies; and provides technical support and guidance on air quality issues, as mandated by State Health and Safety Code §425, §105400 et seq., and others.

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**Special Requirements**

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- Conflict of Interest (COI)
- Background Check and/or Fingerprinting Clearance
- Medical Clearance
- Travel: up to 10%
- License/Certification:
- Other:

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**Essential Functions (including percentage of time)**

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- 40% Directs, plans, and executes highly complex, multidisciplinary research studies on the causes, effects and prevention of air pollution; coordinates and develops collaboration with researchers and staff within the Department and other State agencies, as well as academic organizations, federal and international agencies; samples and analyzes environmental chemicals; and leads the writing of reports and articles for publication in professional journals.
- 25% Develops laboratory methods for analyses of trace chemicals in environmental samples using complex analytical instrumentation, such as SEM, TEM, FTIR, Raman, GC-MS, and LC-MS etc.; schedules and tracks laboratory tasks; reviews laboratory reports for accuracy and completeness; conducts instrument maintenance and repairs. Develops technology and testing methods related to environmental measurements for studies of air quality; designs and fabricates instrumentation, as necessary.
- 20% Makes independent, complex decisions in investigating air pollution chemistry; serves as scientific advisor to other scientists and provides specialized technical assistance to state, local, and non-governmental agencies on matters related to air quality, strategic planning, economic impacts, implementation of state policy options, and technical stakeholder groups; presents scientific research to public health experts and the community on air quality issues.
- 10% Maintains documentation, laboratory proficiency, and Quality Control functions associated with analytical techniques and laboratory accreditation; helps maintain lab supplies, calibrations, and health and safety; and investigates new instrumentation and testing methods related to air pollution measurement and control for future equipment budget requests. Maintains records of laboratory and field research in logbooks and in electronic format. Utilizes the laboratory information management system (LIMS) to create and modify new test assays to track laboratory sample analysis, and results reporting.

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**Marginal Functions (including percentage of time)**

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- 5% Performs other job-related duties as assigned or required.

I certify this duty statement represents an accurate description of the essential functions of this position. I have discussed the duties and have provided a copy of this duty statement to the employee named above.

I have read and understand the duties and requirements listed above and am able to perform these duties with or without reasonable accommodation. (If you believe reasonable accommodation may be necessary, or if unsure of a need for reasonable accommodation, inform the hiring supervisor.)

Supervisor’s Name:	Date	Employee’s Name:	Date
Supervisor’s Signature	Date	Employee’s Signature	Date

**HRD Use Only:**  
 Approved By: AC  
 Date: 3/11/2025