

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

AIR MONITORING TECHNICIAN I/II/III

Department: Planning & Air Monitoring **Reports To:** Deputy APCO

FLSA Status: Non-Exempt

Employment Group: Employee Association – Represented

Approved/Revised: 12/2023

DEFINITION

Under immediate or general supervision, operates and maintains the District's air-monitoring network and data-acquisition system. Inspects ambient air monitoring stations and temporary sampling sites, including equipment checks and routine maintenance. Collects accurate air quality data, prepares reports, and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

The **Air Monitoring Technician I** receives immediate supervision from an assigned lead, supervisor, or manager and does not supervise staff.

The **Air Monitoring Technician II** receives general supervision from an assigned lead, supervisor, or manager. May provide functional and technical direction to employees in the Air Monitoring Technician I classification and to others assigned to air monitoring projects.

The **Air Monitoring Technician III** receives general supervision from an assigned lead person, supervisor, or manager. May provide technical direction to employees in the Air Monitoring Technician I and II classifications, as well as to others assigned to air monitoring projects.

CLASS CHARACTERISTICS

The **Air Monitoring Technician I** is the entry-level classification in the Air Monitoring Technician series. Incumbents perform routine, less complex assignments while developing the knowledge and skills needed to perform journey-level work. Under close supervision, employees learn air monitoring station operations, data collection and analysis techniques, and the installation, calibration, maintenance, and repair of monitoring equipment.

As experience is gained, incumbents are expected to handle increasingly complex assignments and may advance to the next level upon demonstrating the knowledge, skills, and abilities required for the higher classification. Positions at this level generally perform many of the same duties as the Air Monitoring Technician II but require closer supervision and exercise less independent judgment and discretion.

The **Air Monitoring Technician II** is the journey-level classification in the Air Monitoring Technician series. Incumbents independently perform the full range of assigned air monitoring duties, including operating, maintaining, troubleshooting, calibrating, repairing, and installing air monitoring equipment and instrumentation. Employees at this level exercise independent judgment, work with minimal supervision, and resolve routine operational issues. Supervision is generally limited to new, unusual, or complex assignments.

The **Air Monitoring Technician III** is the advanced level classification in the Air Monitoring Technician series. Incumbents independently perform the full range of air monitoring duties and serve as a technical resource for the division. In addition to the responsibilities performed at the I and II levels, employees at this level may assist with program development and implementation, draft or revise division policies, procedures, and standard operating procedures, participate in and respond to technical audits, support grant implementation, develop training materials, train staff to perform backup monitoring duties, and represent the District at professional meetings and technical workgroups.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS

Management reserves the right to add, modify, or rescind the work assignments for this position. Management will make reasonable accommodations so that qualified employees can perform the essential functions of the job in accordance with the Americans with Disabilities Act (ADA) and the Fair Employment and Housing Act (FEHA).

- Operate and maintain instruments that measure air contaminants and meteorological conditions; review and validate monitoring data; prepare monthly reports; upload data to the California Air Resources Board and the United States Environmental Protection Agency; and conduct data analysis and trend comparisons.
- Install, troubleshoot, maintain, calibrate, repair, and modify air monitoring equipment using specialized diagnostic and test equipment. Perform preventive maintenance, particulate filter changes, weekly and quarterly instrument checks, and semiannual analyzer and sampler calibrations.
- Maintain station and equipment records; download and manage data from data loggers; coordinate with vendors and contractors on equipment repairs; and order materials in accordance with the District's purchasing policy.
- Participate in temporary air and meteorological monitoring projects by installing, operating, and removing portable monitoring stations. Assist with air monitoring activities for enforcement actions and investigations.
- Conduct research and complete special studies on air monitoring.
- Develop air monitoring forms, automated calibration spreadsheets, and other tools to improve program efficiency. Provide training in air monitoring instrumentation and equipment operation.
- Perform routine maintenance at monitoring stations, including painting, vegetation control, and housekeeping as needed.
- Establish and maintain effective working relationships with representatives of community organizations, regulatory agencies, District staff, contractors, vendors, and the public.
- Represent the District on committees, at public meetings and professional conferences, and before governmental or regulatory bodies, as appropriate to the employee's level of responsibility and expertise.
- Participate in technical audits and respond to audit findings.
- Support grant implementation activities and maintain records of grant-related work.
- Perform other duties as assigned.

QUALIFICATION GUIDELINES

Education and Experience:

Any combination of education and experience that provides the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications is:

- **Air Monitoring Technician I, II, and III:** Equivalent to completion of two years of college coursework in electronics, environmental science, engineering technology, or a closely related field.
- **Air Monitoring Technician I:** One year of experience operating analytical or scientific instrumentation. Additional related coursework or technical training may substitute for the required experience.
- **Air Monitoring Technician II:** Three years of experience operating air pollution monitoring instruments, or two years of experience equivalent to an Air Monitoring Technician I.
- **Air Monitoring Technician III:** Five years of experience operating air pollution monitoring instruments, or four years of experience equivalent to an Air Monitoring Technician II or comparable position.

KNOWLEDGE AND ABILITIES

Knowledge of:

- Principles, practices, and methods of environmental science.
- Electronic theory and principles.
- Methods and techniques for installing, maintaining, calibrating, and troubleshooting instruments used to measure meteorological conditions and air contaminants.
- Air monitoring equipment, instrumentation, setup, operation, and maintenance.

- The functions and use of the Aerometric Information Retrieval System (AIRS) database.
- Data acquisition systems and their applications.
- Applicable federal, state, and local laws, regulations, codes, and standards governing air monitoring activities.
- Principles and techniques for planning, scheduling, and organizing work assignments.
- Standard office procedures, practices, and equipment.
- Modern office equipment, including computers and applicable software applications.
- Recordkeeping methods and techniques, including report preparation and technical writing.
- Occupational hazards and safe work practices applicable to air monitoring operations.
- English usage, spelling, grammar, vocabulary, and punctuation.
- Customer service principles and techniques for interacting effectively and professionally with the public, vendors, contractors, and District staff.
- Audit standards and regulatory compliance requirements.
- Grant implementation and reporting requirements.

Ability to:

- Diagnose and resolve instrumentation and equipment problems.
- Operate electronic testing and diagnostic equipment.
- Read and interpret technical manuals, plans, diagrams, and electrical schematics.
- Install, calibrate, troubleshoot, maintain, and repair air monitoring instruments and equipment.
- Interpret, explain, and apply applicable laws, regulations, policies, and procedures.
- Read, interpret, analyze, and accurately record technical data.
- Plan, organize, prioritize, and complete work assignments effectively.
- Work independently with minimal supervision and collaboratively as part of a team.
- Exercise sound judgment and make decisions within established policies and procedures.
- Respond professionally and effectively to questions and concerns from contractors, property owners, regulatory agencies, and the public.
- Analyze complex technical issues and develop practical, effective solutions.
- Understand and follow written and verbal instructions.
- Operate computers and use standard word processing, spreadsheet, database, and other business software applications.
- Observe safe work practices and safely operate hand and power tools.
- Communicate clearly and effectively, both orally and in writing.
- Establish, maintain, and foster positive and effective working relationships with those encountered in the course of work.

PHYSICAL DEMANDS

Must be able to perform the essential functions of the position. Duties require extended periods of sitting and standing, walking on level, uneven, or slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping, and performing repetitive hand movements. Employees must be able to regularly lift, carry, and push tools, equipment, and supplies weighing up to 20 pounds and up to 50 pounds or more as needed.

The position also requires climbing ladders, working at heights, operating motor vehicles, and performing repetitive hand-eye coordination and fine motor movements necessary to use computers, keyboards, mice, and other office equipment to prepare reports and manage data. Regular vehicle travel is required.

Employees may occasionally interact with individuals who disagree with regulatory requirements or enforcement actions. The ability to remain professional and to exercise diplomacy, tact, and sound judgment in these situations is essential.

WORKING CONDITIONS

Employees work in both office and field environments. Office work is performed in a climate-controlled setting with moderate noise levels. Fieldwork is performed outdoors in a variety of weather conditions, including hot, cold, wet, and windy weather.

Employees may be exposed to dust, fumes, diesel exhaust, gasoline vapors, and other airborne contaminants while performing fieldwork. In accordance with the District's safety policies, the use of personal protective equipment may be required.

SPECIAL REQUIREMENTS

This position requires possession of, or the ability to obtain and maintain, a valid California Class C driver's license.