air pollution control district
SANTA BARBARA COUNTY

PRINCIPAL MONITORING SPECIALIST

Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications may not include all duties performed by individuals within a classification. In addition, specifications are intended to outline the minimum qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.

DEFINITION:

Under general direction performs and directs complex professional air monitoring and technical investigation work which requires advanced knowledge in specialized areas including, but not limited to, atmospheric and airborne emission (including contaminants) sampling and data collection, analysis, interpretation, and summary; the operation, maintenance, installation and servicing of ambient and enforcement air monitoring and meteorological instruments, telemetry and source test equipment; field studies; report and public meeting preparation; and, performs related duties as required.

CLASS CHARACTERISTICS:

The Principal Monitoring Specialist is a single position classification responsible for the administration and oversight of the District's ambient air monitoring program. This position is distinguished from the Air Quality Specialist position in that it requires the possession of specialized knowledge to complete and direct complex program assignments. The Principal Monitoring Specialist is distinguished from the Planning Division Manager position in that it does not have supervisory or budgetary responsibilities. This position reports to the Planning Division Manager.

ESSENTIAL FUNCTIONS: *(includes, but is not limited to, the following)*

- Provides professional advice to management, technical expertise and staff direction, scheduling, guidance, and training in program areas such as Industrial Site ambient air monitoring, State and Local Air Monitoring Stations (SLAMS), Continuous Emissions Monitoring Systems (CEMS), Data Acquisition System (DAS). Implements Meteorological and Air Quality, Quality Assurance Program(s); operates and maintains air quality monitoring stations, CEMS and DAS systems, including data processing and reporting.

- Directs, conducts and/or assists with measurements and analyses of toxic air pollutants. Interprets instrument charts; performs validation of data generated at monitoring sites; interprets and records data; maintains quality control data; tabulates data; and conducts sampling and analyses of the atmosphere and emissions from industrial or other sources.

- Directs and/or develops computerized database routines and queries to aid in the processing of air quality monitoring and CEMS data and the generation of real-time alarms and notifications.

- Oversees permit-mandated and other regulatory monitoring program(s) (e.g., Industrial Sites, odor monitoring, CEMS) to ensure the collection of quality data and compliance with related permit conditions and regulatory requirements.

- Sets up and maintains the District's air quality database program(s) and data collection equipment. Generates and maintains historical summaries and trends of local air quality and CEMS data. Develops and writes annual reports presenting data in graphical and tabular form.

- Assists the Division Manager in evaluating employee performance by providing feedback for the Air Quality Specialists in the Monitoring Section.

- Assigns tasks, oversees workload completion, approves time off requests to verify Monitoring section coverage, and approves time tracking sheets.

- Assists Division Manager with Air Quality Episode notifications pursuant to District Rule 602, including directing, preparing, and disseminating air contaminant levels for different facilities and regions. Ensures that accurate information is routed to the District's real-time air quality web page.

- Installs, calibrates, operates, maintains, and services ambient air monitoring instruments and telemetry equipment, including the preparation of necessary gaseous standard mixtures; repairs and rebuilds sensors and monitors; calibrates, services, and operates electronic test equipment. Certifies and maintains standards for use in calibration of equipment. Performs on-site inspections of air monitoring equipment operations.

- Directs and deploys air quality monitoring equipment for special studies, wildfires, prescribed burns, air quality complaints, and other air quality events.

- Researches, develops, writes, and maintains monitoring plan documents, quality assurance manuals, and operating procedures. Reviews and evaluates industry-developed monitoring plan documents, quality assurance manuals, and operating procedures.

- Attends meetings, makes presentations, and provides testimony; prepares reports related to air quality issues. Participates on state and/or national committees and work groups (e.g., CAPCOA).

- Directs, prepares and/or assists in the preparation of public presentations, correspondence, contracts, proposals, billings, articles, staff reports; disseminates information and answers inquiries from individuals and groups on air quality. Advises the public regarding policies, requirements, and procedures of the District.

- Works collaboratively with staff from other District Divisions and outside agencies.

- Monitors local, state, and federal legislation and administrative requirements, and other air quality regulations and programs. Develops data and technical materials, conducts studies, and prepares reports in support of air quality planning functions, environmental documents, permit development, complaint response and enforcement cases. Also provides same to private, state, and federal monitoring programs.

- Assists in the development, design, and preparation of specifications for equipment, spare parts, and site installation. Installs upgrades to air monitoring equipment; develops improvements to air monitoring network. Prepares cost estimates and recommendations for equipment purchases.

- Directs and/or conducts field or laboratory analyses; performs testing, measurements and equipment analysis and establishes instrumentation specifications; performs internal audits of systems and monitoring sites; prepares written reports.

- Resolves technical disputes; provides assistance and input in budget development; sets priorities and schedules the work of others.

- Maintains adequate supply of parts and consumables for laboratory and field operations.

- Able to work full time and to successfully perform all of the essential functions of the position.

- Other duties as assigned and as required to fulfill the essential functions of the position.

WORKING CONDITIONS:

Physical demands include but are not limited to prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing statistical reports and data using a computer keyboard and small hand tools. Additionally, the position requires near vision in reading correspondence, statistical data on the computer, and acute hearing is required when providing telephone service and communicating in person. The need to lift, drag and push files, computer reports, monitoring equipment, computers or other materials weighing up to 80 pounds also may be required.

Work is performed in an office environment and in the field and may require occasional exposure to hazardous conditions and unpleasant elements such as dust, fumes, vapor, solvents, and high temperatures from operating processes; high noise levels, vibration and/or outside weather conditions. Fieldwork involves moderate physical exertion such as walking, bending, stooping, kneeling, squatting, twisting, reaching, climbing, and working on uneven surfaces. Depending upon assignment may be required to climb ladders and high structures to evaluate processes in operation and/or occasionally perform work at elevated heights.

Transportation to offshore sites may require the use of airplane, helicopters or marine vessels in inclement weather and open sea conditions.

QUALIFICATION GUIDELINES: *(The following are minimal qualifications necessary for entry into the classification)*

Education and/or Experience:

A Bachelor's degree from an accredited college or university, preferably with a major in environmental planning, environmental or atmospheric science, statistics, physics, chemistry, mathematics, meteorology, engineering, or a closely related physical, chemical, or biological scientific field, and, at least four years of experience in technical ambient air quality data analysis, air quality data management and software applications, and two additional years of increasingly responsible technical air quality experience performed in an independent manner.

KNOWLEDGE/ABILITIES/SKILLS: *(The following are a representative sample of the KAS's necessary to perform essential duties of the position)*

Knowledge of:

Complex principles and practices used in air pollution analysis and control including physics, chemistry, mathematics, natural sciences, and meteorology as related to air quality management/air pollution control; Local, Regional, State and Federal regulations and policies governing air pollution control activities; scientific computer programming/modeling applications, research methods, methods of statistical analysis, principles and methods of measuring atmospheric conditions and pollution levels, methods of measuring stationary source emissions, chemical and physical characteristics of air impurities and their interactions with the environment; nomenclature and equipment used in air quality monitoring, data collection, and planning; air pollution control devices and industrial processes; engineering calculations and statistical methods.

Installation, operation, maintenance, testing, and repair of instruments and equipment employed in sampling, monitoring, and transmission of data involving electronics and chemical, physical and mechanical principles; rules and regulations relating to air quality standards and quality assurance standards applicable to air monitoring; electricity, electronics, mechanics and related mathematics as they apply to the use of air sampling instruments and equipment used to test the instruments; safety methods and devices used in working with and around electrical and electronic circuits and industrial gases.

Ability to:

Evaluate and provide expert technical guidance in specialized areas of ambient air monitoring and associated programs; plan, direct, guide and train other staff. Communicate effectively orally and in writing; plan, organize, and carry out studies and analysis; prepare clear, complete, and technically accurate reports; analyze data, develop recommendations based on findings, and reach sound and defensible conclusions; collect environmental data, collect stationary source emission data; work effectively with various governmental agencies, private firms, and the general public; analyze situations and take effective action; speak before groups, organizations, regulatory bodies and professional meetings; respond constructively to conflict and develop effective resolutions; and, establish and maintain effective working relationships. Effectively use pertinent hand tools, equipment, and facilities.

Skill to:

Effectively handle and resolve interpersonal conflicts; operate standard office equipment and a variety of word processing, data management and other software applications.

SPECIAL REQUIREMENTS:

Possession of or ability to obtain and maintain a Class C California driver's license. As required, possession of, or the ability to obtain respirator certification and/or confided space entry certification and/or hydrogen sulfide certification.

FLSA: Exempt
Form 700 Required
ETA, Unit 28

Adopted: TBD