



AIR QUALITY SPECIALIST I, II, III

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 immediate supervision (I), general supervision (II), and limited supervision (III), performs a variety of assignments in the Compliance or Planning Division. The Air Monitoring section staff are led by the Principal Monitoring Specialist and are supervised by the Planning Division Manager.

CLASS CHARACTERISTICS:

Air Quality Specialist I is the entry level and training class of the series. Incumbents work under immediate supervision while learning District practices, rules, policies and procedures; Local, State and Federal air pollution practices, rules and regulations; and the principles and practices necessary for the position. The Air Quality Specialist I performs the less complex work and routine assignments of the unit. Work becomes increasingly complex over time and requires less supervision as additional skills and abilities are acquired.

Air Quality Specialist II is the fully experienced, journey level class of the series, which requires performance of more difficult tasks requiring a working knowledge of District rules, policies and procedures, Local, State and Federal air pollution rules and regulations, and the principles and practices necessary for the position. Incumbents work under general supervision and perform the full range of duties for the position.

Air Quality Specialist III is the advanced journey level class in the series and performs the most difficult and complex tasks. Incumbents work with minimal supervision; are lead workers; exercise independent judgment and decision-making, and administer programs/projects within the Division. The Air Quality Specialist III is not considered a supervisory class in that the selection and discipline of employees is not assigned to this level and the number of employees for which direction is provided is limited.

ESSENTIAL FUNCTIONS:

Essential functions are broken down in two groups; general functions that apply to all Air Quality Specialists and functions that are specific to each Division. These include, but are not limited to the following:

GENERAL FUNCTIONS

- Prepares and/or assists in the preparation of public presentations, workshops, internal and external webpages, forms, policies and procedures, protocol documents, guidance memoranda, correspondence, reports, contracts, proposals, billings, articles, staff reports, District rules, and internal database programs.
- Disseminates information to and answers inquiries from regulated sources, individuals, and groups on air quality. Advises regulated sources and the public regarding policies and procedures, and requirements of the District.
- Attends meetings, conferences, or workshops; makes presentations; provides testimony or appears as an expert witness. May participate and/or represent the District in regulatory

meetings; Board meetings; the Community Advisory Council; technical advisory committees; Local, Regional, Statewide and/or National committees.

- As requested, provides information for the District's annual budget.
- Works collaboratively with staff from other District Divisions and outside agencies.
- 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.

AIR MONITORING SECTION

- Works on programs such as Industry Site ambient air monitoring, State and Local Air Monitoring Stations (SLAMS), Continuous Emissions Monitoring Systems (CEMS), Data Acquisition System (DAS), and Photochemical Assessment Monitoring Stations (PAMS). Implements Meteorological and Air Quality, Quality Assurance Program(s); operates and maintains air quality monitoring stations, including data processing and reporting.
- Conducts and 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.
- 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.
- Oversees permit mandated monitoring program(s) (i.e. Industry Sites, odor monitoring, CEMS) to ensure the collection of quality data and compliance with related permit conditions.
- 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 Principal Monitoring Specialist with Air Quality Episode notification pursuant to District Rule 602, including preparing and dissemination of air contaminant levels for different facilities and regions. Ensures that accurate information is routed to the District's real-time monitoring 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.
- Deploys air quality monitoring equipment for special studies or emergency response.
- 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.
- 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. Maintains adequate supply of parts and consumables for laboratory and field operations.
- 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.

COMPLIANCE DIVISION

- Performs inspections and investigations of air pollution sources, control systems, devices, equipment, and complaints to ensure compliance with air pollution control regulations. Reviews facility records and reports including emissions calculations, operational data, and monitoring records for compliance. Creates and maintains inspection records and evidence in such a way that effectively documents observations and actions taken.
- Uses a variety of equipment including portable toxic vapor analyzers, handheld volatile organic compound monitors, portable combustion emissions analyzers, portable aerosol monitors, portable hydrogen sulfide analyzers, personal hydrogen sulfide monitors. Maintains these devices for integrity and consistency of performance. Assists in identifying specifications for equipment acquisition and prepares cost estimates and recommendations for equipment purchases. May collect samples for lab analysis, using appropriate sampling techniques and chain of custody procedures.
- Prepares and issues written Notice of Violations, Minor Infraction Notices; documents violations with written reports, and re-inspects sites for remedial action and compliance.
- Implements the District's open burning program.
- Processes variance applications, prepares reports and represents the District for variances and abatement orders petitioned before the District Hearing Board.
- As requested, observes source tests and reviews associated plans and reports.
- Assists and/or administers the District's asbestos program including performing, delegating (with Division Supervisor approval), and overseeing completion of the following tasks: provide asbestos NESHAP regulations information to contractors and building owners; review renovation and demolition notifications; conduct inspections; develop and conduct asbestos regulation training.
- Assists and/or administers the District's mutual settlement program including performing, delegating (with Division Supervisor approval), and overseeing completion of the following tasks: negotiate settlements and prepare settlement agreements; review and respond to civil penalty enforcement cases including settlement or referral for prosecution.
- Assists and/or administers the Compliance Division safety program including performing, delegating (with Division Supervisor approval), and overseeing completion of the following tasks: coordinate regular safety training; coordinate annual respirator fit-testing and hydrogen sulfide certification; maintain safety policies and procedures, protocols, respiratory protection program manual, and other safety records.

PLANNING SECTION

- Develops emission reduction strategies from stationary and non-stationary sources of pollution and innovative mitigation programs for District permit applicants and other land use development projects; assists in Clean Air Plan efforts; assists in developing the emission inventory and

recommends emission control and reduction strategies. Analyzes air quality data and tracks trends for Santa Barbara County.

- Reviews and comments on environmental impact documents for land use development projects, oil and gas development projects, and other complex projects as related to air quality.
- Reviews and comments on Local, Regional, and Statewide planning and transportation plans and programs as they relate to air quality.
- Performs technical analyses of air quality issues using various tools, computer models, and statistics.
- Prepares CEQA documents for District plans, rules, and permits.
- Prepares analytical and performance reports, protocols and guidelines on land use and air quality to assist in development of air quality plans, analyses, and mitigation measures.
- Provides technical assistance and develops documents and tools regarding the District regulatory process for regulated businesses.
- Provides specialized technical knowledge to staff, regulated community, students, and other agencies.
- Develops and implements community education and outreach programs on air quality and related issues; maintains and updates air quality information on the District's website.
- Develops and implements clean air grant and incentive programs.
- Collects annual operational information from regulated sources and calculates emissions for the District's fee programs.
- Plans for and represents the District at community events.

WORKING CONDITIONS:

Position requires 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. 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 or other materials weighing up to 25 pounds also is required. For staff in the field, the need to lift, drag or push equipment or other objects weighing up to 80 pounds may be required.

Depending upon assignment, independent travel is required. Work is performed in an office environment and in the field and may require exposure to hazardous conditions and unpleasant elements such as dust, fumes, vapor, solvents, 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 and transference to oil platforms over open seas on a rope ladder.

QUALIFICATION GUIDELINES:

The following education and experience are the minimum qualifications necessary for entry into the classification.

Air Quality Specialist I

AIR MONITORING SECTION

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 (applicants who are currently in their final year of study leading to the required degree are encouraged to apply. Such applicants may compete in the examination and departmental selection processes but may not begin employment in a position until they have attained the required degree).

COMPLIANCE DIVISION

A Bachelor's degree from an accredited college or university, preferably with a major in chemistry, physics, engineering, environmental or atmospheric science, or a closely related technical or scientific field (applicants who are currently in their final year of study leading to the required degree are encouraged to apply. Such applicants may compete in the examination and departmental selection processes but may not begin employment in a position until they have attained the required degree).

PLANNING SECTION

A Bachelor's degree from an accredited college or university, preferably with a major in chemistry; meteorology; environmental or atmospheric science; regional, urban, environmental or transportation planning; or a closely related field (applicants who are currently in their final year of study leading to the required degree are encouraged to apply. Such applicants may compete in the examination and departmental selection processes but may not begin employment in a position until they have attained the required degree).

Air Quality Specialist II

In addition to the requirements for the Air Quality Specialist I in each Section/Division, the minimum requirements necessary are:

AIR MONITORING SECTION

At least two years of experience in technical ambient air quality data analysis, air quality data management and software applications.

COMPLIANCE DIVISION

At least two years of technical experience in air pollution control inspection or enforcement work, including the operation of air pollution measuring devices and related equipment.

PLANNING SECTION

At least two years of professional experience in air pollution control, CEQA review, or in air quality emission and control technology analysis.

Air Quality Specialist III

In addition to the requirements for the Air Quality Specialist II in each Section/Division, the minimum requirements necessary are:

AIR MONITORING SECTION

One additional year of increasingly responsible technical air quality experience performed in an independent manner.

COMPLIANCE DIVISION

One additional year of increasingly responsible technical air pollution inspection or enforcement experience performed in an independent manner.

PLANNING SECTION

One additional year of increasingly responsible professional 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:

AIR MONITORING SECTION

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.

COMPLIANCE DIVISION

Principles of physics, chemistry and engineering as they relate to air pollution control; basic scientific research methods; and appropriate use of personal protective equipment. Thorough knowledge of rules and regulations pertaining to air pollution control; applicable Local, State and Federal laws and regulations; current industrial and commercial air pollution control processes and related mechanical, electrical and chemical system equipment; the sources, types and characteristics of air contaminants; appropriate methods of inspection and instrument testing; available legal and administrative procedures for enforcement; the principles behind established policies, procedures and air quality inspection techniques.

PLANNING SECTION

Local, State and Federal laws pertaining to air quality; District rules and regulations, policies and procedures; permit application procedures; air pollution control equipment, technology, and processes; environmental compliance, and land use planning; air pollution or related environmental problems; principles, practices, and trends of air quality and transportation planning; relationship of physical design, demographic, environmental, and socio-economic concepts as applied to regional planning and air quality goals; statistical analysis and mathematical concepts related to the environmental and air quality planning process; meteorology as related to air quality management/air pollution control.

Ability to:

AIR MONITORING SECTION

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.

COMPLIANCE DIVISION

Exercise sound independent judgment; Communicate effectively orally and in writing; plan, organize, and carry out studies and analysis; read, comprehend, interpret, incorporate and utilize District rules and regulations; policies and procedures, applicable Federal and State laws and regulations, appropriate reference materials, accepted industry standards and basic scientific principles; create, organize, maintain and retrieve records for effective documentation and decision making; prepare clear, complete, and technically accurate technical, investigative and other reports; perform arithmetic and mathematical computations; 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; establish and maintain effective working relationships; perform in stressful or confrontational situations; demonstrate tact and diplomacy; secure cooperation and promote teamwork; work effectively with others who may have objectives counter to assigned role; understand and utilize basic elements of effective negotiations. Conduct technical studies using a variety of accepted industry field testing techniques and equipment. Effectively use pertinent tools, equipment, safety and respiratory equipment, and facilities.

PLANNING SECTION

Communicate effectively orally and in writing; evaluate air pollution issues as they relate to District sources; read, understand, interpret, apply, and explain requirements of District rules and regulations, the Health and Safety code, and the California and Federal Clean Air Acts; exercise appropriate judgment in answering questions and releasing information; analyze technical information and translate into understandable format for regulated sources and the general public; establish and maintain effective working relationships. Research, compile, and summarize a variety of complex and technical reports and informational materials; compose clear and complete technical, educational, and informational reference materials for industry and public use; maintain accurate records and files; interpret and apply Local, State and Federal laws, regulations, policies, procedures, and standards pertaining to the environmental review and planning process; perform and coordinate activities, such as the collection, analysis, and preparation of reports and recommendations; read and interpret laws, policies, procedures, regulations, maps, specifications, site and building plans, graphs and statistical data; interpret air quality and meteorological

data to conduct air quality forecasting; and exercise sound independent judgment within established policy guidelines.

Skill to:

Utilize an office computer and a variety of word processing, data management and other software applications; use tools to perform manual maintenance operations.

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, certification as a Visible Emission Evaluator by the California Air Resources Board and/or respirator certification, and/or confined space entry certification and/or hydrogen sulfide certification.

FLSA: I/II Non – Exempt
III – Exempt
I/II Flex
Form 700 Required
ETA, Unit 28

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