PRINCIPAL ENVIRONMENTAL SPECIALIST

This class specification indicates, in general terms, the type and level of work performed as well as the responsibilities of employees in this classification. The job functions described are not to be interpreted as being all-inclusive to any specific employee.

DEFINITION

Under general supervision or direction, develops, implements, and manages the most complex programs, environmental studies, and fieldwork activities; performs highly advanced technical and administrative responsibilities related to environmental studies and fieldwork; performs highly complex environmental analyses and testing of wastewater, marine samples, and industrial waste samples; performs complex and specialized troubleshooting and repair activities on the full range of laboratory equipment and highly specialized instrumentation; coordinates preparation of and writes major reports; develops, recommends, and implements division policies and procedures; develops, coordinates, and manages projects; serves as project lead; and formulates and implements changes to the District’s ordinances and environmental management compliance activities.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision or direction from the assigned supervisory and/or managerial staff. Exercises no direct supervision of staff. May exercise functional and technical leadership in assigned workgroups or teams and coach and/or mentor less experienced staff.

CLASS CHARACTERISTICS

This classification is the fourth of four (4) levels within the environmental job series and has lead role duties. Employees perform the most difficult and responsible assignments, projects, analyses, and programs assigned to classes within this series requiring advanced knowledge of the concepts, practices, procedures, and policies of environmental compliance and monitoring programs. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility and provide leadership to less experienced staff. Responsibilities may include the oversight of programs and/or projects. Assignments at this level have significant impact on environmental operations and require broad knowledge of compliance programs and in-depth knowledge relative to a specific technical area. This class is distinguished from the Regulatory Specialist in that the latter performs duties related to regulatory review, analysis, and advocacy requiring advanced-level knowledge and expertise in assigned areas.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS (Illustrative Only)

The following essential job functions are typical for this classification. Incumbents may not perform all of the listed job functions and/or may be required to perform additional or different job functions from those set forth below to address business needs and changing business practices.

➢ Serves as an expert and/or internal consultant to management regarding the larger and most complex activities and/or programs in support of water quality, ocean monitoring, source control, and other environmental compliance and monitoring programs and related regulatory requirements to ensure that quality assurance/quality control (QA/QC) plans and practices are established and adhered to and that regulatory requirements have been met; develops and maintains computerized tracking systems;
conducts audits and evaluations of compliance programs; develops reports on findings and verifies that corrective action has been taken to resolve deficiencies.

- Conducts advanced and highly complex testing and analyses of wastewater, ocean water, and industrial waste samples using the most complex manual and automated methods.
- Ensures established safety precautions are adhered to, corrects unsafe work conditions/practices, and/or reports unsafe work conditions/practices to assigned supervisory or managerial staff.
- Develops and coordinates special projects often requiring complex field and scientific studies and investigations; develops methods and schedules; serves as project manager and provides direct oversight of project team members; performs document quality control; prepares all required reports.
- Performs methods development, improvement, and validation with minimal supervision; recommends and implements improved methods; advises management on best methods for analysis; participates in and oversees new procedure setups and experimentation; writes, reviews, and updates laboratory operating procedures.
- Manages assigned aspects of environmental management programs and projects including ensuring permit requirements are met and tracking and overseeing implementation of new regulations; creates and submits monthly compliance and administrative reports including spill reports, reports to Board of Directors, and regulatory reports.
- Manages studies involving the use of outside services; coordinates contractors’ work including writing requests for proposals, organizing meetings, overseeing field operations, and reviewing draft reports and data.
- Monitors inventory of supplies, equipment, and instrumentation; oversees the work of staff taking inventory of chemicals and supplies for assigned laboratory section; oversees the work of staff ordering reagents, supplies, and equipment; recommends purchase of new and/or replacement equipment.
- Oversees assigned laboratory projects; coordinates logistical and technical meetings with staff; prepares laboratory equipment for test sequences, conducts appropriate testing, collects data, processes reports and data, and prepares concise and understandable summaries.
- Develops schedules for and coordinates the preparation of all major reports including annual and quarterly reports, in accordance with the District’s National Pollutant Discharge Elimination System (NPDES) Permit; performs various statistical calculations of data; prepares technical text and tables for reports; reviews and edits sections of the reports.
- Plans, formulates, recommends, and implements approved division policies and procedures for establishing certain parameters such as industrial wastewater flow rate determinations and for computer operations and applications; develops and maintains database management systems; implements changes in concert with ordinance and regulatory changes; designs and prepares computer reports for use in quarterly and annual reports; performs document quality control; interfaces with appropriate staff in support of programming activities.
- Reviews and analyzes Environmental Protection Agency (EPA) regulations and reports on the impact on the District’s pretreatment programs; recommends approved changes to District ordinances; evaluates and prepares responses to comments on ordinance revisions submitted by industries; participates in meetings with various agencies that have inter-jurisdictional agreements with the District to discuss and coordinate program requirements including permitting, monitoring and enforcement, and regulatory changes; participates in meetings with the EPA and Regional Water Quality Control Board on regulatory changes, program modifications, and ordinance revisions.
- Performs advanced and highly complex fieldwork for sampling efforts; operates, calibrates, maintains, and troubleshoots sampling and environmental monitoring equipment and instrumentation; collects and processes a wide variety of routine to highly unique and unusual samples for permit compliance, regional projects, and/or special studies; studies a wide variety of complex samples and species for purposes of overall environmental compliance efforts; operates sophisticated data collection and analysis computer equipment.
- When assigned to Ocean Monitoring, may require field work on the District’s marine vessel.
➢ Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of environmental compliance; researches emerging products and enhancements and their applicability to District needs.
➢ Serves on various technical advisory or professional organization committees; makes presentations to regulatory agencies and professional groups; reviews pending legislation for Federal, State, and local jurisdiction.
➢ Conducts special research assignments and projects, gathers data, and prepares reports and position papers for consideration by management.
➢ Participates in and/or leads public outreach efforts including creation of public education documents and facilitating public outreach programs and activities.
➢ Provides leadership and guidance to others on programs and/or projects. As a program and/or project leader, may direct, assign, train, monitor and review the work activities of team members; determines work priorities; oversees quality and quantity of work performed and ensures adherence to established procedures by instructing employees accordingly; is a resource to employees by possessing specialized skills; develops and implements work improvements.
➢ Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:
➢ Advanced scientific principles related to area of assignment such as chemistry, biology, oceanography, and/or marine biology.
➢ Advanced principles, practices, and methods related to the care, maintenance, troubleshooting and repair of environmental and/or laboratory equipment and instrumentation.
➢ Advanced principles and operations of wastewater collection systems and wastewater processing, including pretreatment methods, source control, system design, wastewater engineering, industrial operations, wet processes, and categorization, and wastewater flows and characteristics.
➢ Advanced principles and techniques of environmental monitoring, including sample collection, constituent preservation, chain of custody procedures, and approved analytical methods, statistical sampling and analysis.
➢ Advanced principles and applications of critical thinking and analysis. Principles and practices of quality assurance/quality control.
➢ Principles of environmental auditing.
➢ Techniques of odor control in a wastewater collection system and treatment plant.
➢ Principles, practices and methods of public affairs and community outreach programs.
➢ Use and capabilities of computers, automated equipment, and standard applications software.
➢ Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
➢ Principles and procedures of record keeping and reporting.
➢ Modern office practices, methods, and computer equipment and applications related to the work, including word processing, database, laboratory information systems, and spreadsheet applications.
➢ English usage, grammar, spelling, vocabulary, and punctuation.
➢ Basic principles and practices of leadership.
➢ Techniques for effectively representing the District in contacts with governmental agencies, community groups, and various business, professional, educational, regulatory, and legislative organizations.
➢ Principles and practices of customer service and techniques for effectively communicating with the public, vendors, contractors, and District staff.

Ability to:
➢ Plan, schedule, assign, and oversee activities of assigned workgroups or teams.
➢ Oversee programs and/or projects and promotes the individual professional growth and development of less experienced staff.
➢ Resolve conflict through workable solutions and alternative approaches.
➢ Inspect the work of others and maintain established quality control standards.
➢ Train others on proper work procedures.
➢ Adhere to safe work practices and procedures in the workplace.
➢ Apply critical thinking and analysis to a broad range of situations and in making decisions and problem solving.
➢ Identify and implement effective course of action to complete assigned work.
➢ Perform work of a highly specialized nature requiring the ability to use independent judgment and personal initiative.
➢ Identify problems, research and analyze relevant information, develop and present recommendations and justification for solution.
➢ Evaluate and recommend improvements in operations, procedures, policies, or methods.
➢ Develop, plan, and conduct complex research projects on a wide variety of environmental compliance topics; design information gathering tools; analyze problems, evaluate alternatives, make sound recommendations, and prepare effective technical reports.
➢ Independently provide guidance, document review, and general oversight for projects.
➢ Maintain confidentiality and be discreet in handling and processing confidential information and data.
➢ Write scientific and technical papers that are understandable to non-technical readers.
➢ Collect, chart, and compile data and participate in the preparation of clear and concise reports.
➢ Collect samples at a variety of sites and in varying conditions.
➢ Conduct inspections or audits to gather detailed information on manufacturing processes, wastewater sources, pretreatment systems, pollution prevention efforts, hazardous waste management and waste disposal practices.
➢ Troubleshoot, maintain, and repair equipment and instrumentation.
➢ Analyze engineering drawings, process flow schematics and site plans.
➢ Document noncompliance events and produce compliance or enforcement actions/letters.
➢ Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, rules, and regulations.
➢ Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
➢ Effectively communicate in person, over the telephone, and in writing.
➢ Utilize a computer, relevant software applications and/or other equipment.
➢ Operate a motor vehicle and travel to various District sites, projects and/or meetings.
➢ Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
➢ Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Employment Standards:**
Any combination of education and experience that provides the required knowledge, skills, and abilities may be qualifying as determined by OCSD.

1. Bachelor’s degree from a college or university accredited by the U.S. Department of Education with major coursework in a science with an emphasis in biology, chemistry, microbiology, environmental science, marine biology, statistics, or quality assurance, or a related field; AND,
2. Five (5) years of work experience in a testing laboratory, field collection environment, and/or related environmental compliance.

**Licenses and/or Certifications:**
➢ Valid California Class C Driver’s License.
**Disaster Service Workers:**
All Orange County Sanitation District employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employment with the Orange County Sanitation District requires the affirmation of a loyalty oath to this effect. Employees are required to complete all related training as assigned, and to return to work as ordered in the event of an emergency.

**PHYSICAL DEMANDS**

Must possess mobility to work partially in a standard office setting and laboratory and use standard office equipment, including a computer; to inspect various sites; when assigned to work on the District’s marine vessel, must be capable of working in wet, unstable conditions, at times while the vessel is under way to the next sampling location; shore based duties may include traversing uneven terrain, climbing ladders, stairs, and other temporary or construction access points; ability to travel to various District sites, projects and/or meetings; vision to read printed materials and a computer screen and make inspections; and hearing and speech to communicate in person, before groups, and over the telephone. This is predominately sedentary office work with some time spent in the field performing research; frequent standing in work areas and walking between work areas is required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment and laboratory and sampling equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 35 pounds.

**ENVIRONMENTAL ELEMENTS**

Employees work primarily indoors but are occasionally exposed to loud noise levels, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances, odors, and fumes. Employees may interact with upset staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.