SENIOR 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, performs a variety of complex environmental studies, analysis and fieldwork that include testing of wastewater, marine samples, air samples, ocean sediments and industrial waste samples; troubleshoots and repairs equipment and instrumentation; prepares and compiles data for the generation, submission, and distribution of reports and related documentation, gathers, tabulates, and analyzes data in support of the District’s environmental monitoring programs; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision or direction from the assigned supervisory and/or managerial staff. Exercises no direct supervision of staff. May coach and/or mentor less experienced staff.

CLASS CHARACTERISTICS

This classification is the third of four (4) levels within the environmental job series. Employees at this level perform more difficult assignments, projects, analyses, and studies assigned to classes within this series, receive only occasional instruction or assistance as new or unusual situations arise, and have full and thorough knowledge of the concepts, practices, procedures, and policies of environmental programs to which assigned. Responsibilities may include guidance on programs and/or projects. This class is distinguished from the Principal Environmental Specialist in that the latter is responsible for providing functional and technical direction to less experienced staff, in addition to carrying sole responsibility for the development, implementation, and administration of the most complex programs. In addition, the Principal Environmental Specialist level provides advice and analysis on regulatory issues, which is considered in program direction and policy decisions.

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.

- Performs or may coordinate a variety of complex sampling, testing, and analyses for various environmental compliance and monitoring programs, such as toxicity testing on District discharges, invertebrate taxonomy identification, ocean monitoring sampling, stormwater, biosolids, water quality sampling, industrial waste samples using manual and automated method, NPDES sampling and analyses; maintains required documentation and prepares reports on testing and analyses; interprets test results and assists in troubleshooting causes of problems; maintains, sets up, and/or calibrates equipment.
- 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.
➢ Participates in or may coordinate research projects related to the District’s environmental monitoring programs or special studies in support of District and division goals; performs a variety of complex statistical calculations and data input and analyses using specialized computer software; performs graphical analysis of data; assists in the preparation of project reports; may propose and develop research plans and conduct research or technical projects which include field collection work, estimating staff hours, and other resource requirements to complete the project.

➢ Coordinates the preparation and review of designated sections of the annual report to ensure accuracy, completeness, and adherence to regulatory requirements; establishes schedules; coordinates review of and comments on data with department staff and contractors; performs quality assurance/quality control (QA/QC) review of report for accuracy, format, and consistency of data; performs similar activities for monthly and quarterly reports.

➢ Assists with methods development, improvement, and validation under general guidance of senior personnel; assists in new procedure setups and experimentation; assists in writing and updating laboratory operating manuals.

➢ Performs regular and preventative maintenance on assigned equipment and instruments; troubleshoots equipment and instrument repairs and breakdowns; cleans and prepares glassware; maintains quality assurance logs for equipment.

➢ Performs complex fieldwork for sampling efforts; operates, calibrates, maintains, and troubleshoots sampling and monitoring equipment and instrumentation; collects and processes a wide variety of samples for permit compliance, regional projects, and/or special studies.

➢ Coordinates sampling and data submissions from District laboratories and contractors; tracks and coordinates transfer of samples or data; coordinates data review with department staff; performs QA/QC review on regulatory submissions to ensure accuracy, completeness, and adherence to prescribed format.

➢ Coordinates with outside research facilities on cooperative ventures; prepares comprehensive reports and may present findings to superiors, other agencies, and the general public; may provide process and technical support to staff.

➢ Monitors contractor sampling and data handling activities to ensure contract compliance and adherence to District policies and procedures as well as regulatory requirements; performs monitoring activities and on-site inspections; performs QA/QC review of contractors monitoring data to evaluate procedures as well as sampling and monitoring data; drafts, evaluates, and makes recommendations on RFPs for outside contracts; may participate in contract negotiations with contractors.

➢ Performs a wide variety of inspections of District treatment facilities, District or offsite construction sites, industry dischargers, watershed areas, urban run-off diversion systems, and other areas, sites, and system to ensure compliance with complex laws, rules, regulations, and District policies and standards.

➢ 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 and monitoring; researches emerging products and enhancements and their applicability to District needs.

➢ Serves on various technical advisory or professional organization; makes presentations to regulatory agencies and professional groups; reviews and comments on 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 public relations programs including public education and public outreach programs and activities.

➢ Performs related duties as assigned.
QUALIFICATIONS

Knowledge of:

➢ Principles and operations of wastewater collection systems and wastewater processing, including pretreatment methods, system design, wastewater engineering, industrial operations, wet processes, and categorization, and wastewater flows and characteristics.
➢ Practices and methods of environmental and/or laboratory testing and analysis.
➢ Routine principles, practices, and methods related to the care, maintenance, troubleshooting and repair of environmental and/or laboratory equipment and instrumentation.
➢ Principles and applications of critical thinking and analysis.
➢ Principles and techniques of sampling procedures, statistical sampling, and analysis.
➢ Principles and practices of quality assurance/quality control related to environmental compliance and monitoring.
➢ Techniques of odor control in a wastewater collection system and treatment plant.
➢ 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.
➢ Techniques for providing guidance and training to less experienced staff.
➢ Principles and practices of customer service and techniques for effectively communicating with the public, vendors, contractors, and District staff.

Ability to:

➢ Perform work of a specialized nature requiring the ability to use independent judgment and personal initiative.
➢ Resolve conflict through supervision in establishing workable solutions and alternative approaches.
➢ Inspect the work of others and maintain established quality control standards.
➢ Train others in proper work procedures.
➢ Adhere to safe work practices and procedures in the workplace.
➢ Collect, analyze, and interpret detailed environmental and biological data.
➢ Apply critical thinking and analysis to a broad range of situations and in making decisions and problem solving.
➢ Work in a laboratory and use various lab equipment such as pipettes, microscopes, etc.
➢ Troubleshoot, maintain, and repair equipment and instrumentation; clean and wash lab equipment correctly and safety, including acid washing.
➢ Operate a variety of liquid and gas testing and sampling equipment.
➢ Operate analytical instrumentation for airflow measurements sampling waste stream.
➢ Conduct complex research on a wide variety of environmental issues, and prepare effective technical staff reports.
➢ Read and interpret engineering drawings.
➢ Perform mathematical and statistical calculations.
➢ Collect, chart, and compile data and participate in the preparation of clear and concise technical and compliance reports.
➢ Collect samples at a variety of sites and in varying conditions.
➢ Identify problems, research and analyze relevant information, develop and present recommendations and justification for solution.
➢ Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, rules, and regulations.
➢ 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 biology, chemistry, microbiology, environmental science, marine biology, statistics, or quality assurance, or a related field; AND,
2. Three (3) years of work experience in a testing laboratory, field collection environment, pretreatment program, 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 use standard office equipment, including a computer, and partially in the field to collect samples and/or 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 and over the telephone. This is partially a sedentary office and partially a field operations classification; frequent standing in 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 inspection and/or sampling equipment. Positions in this classification frequently 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 partially indoors and around laboratories and partially in the field or on the District’s marine vessel and may be exposed to hot and cold temperatures, inclement weather conditions, loud noise levels, vibration, road hazards, boating hazards, 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.