



CLASSIFICATION NO. 322

Established: 12/99

Revised: 9/05, 1/25

FLSA: Non-Exempt

EEO: 3

## **WATER QUALITY ANALYST**

### **CLASS CHARACTERISTICS**

Under direction, to develop and provide program analysis and technical assistance in planning water quality improvement programs and projects for wastewater treatment systems and storm/surface water management; to provide analysis and resolution of regulatory issues that may impact the District's programs, projects, and functions; to monitor and provide regulatory evaluation, analysis and compliance with wastewater and storm/surface water permits; to develop sample collection procedures and perform analysis of complex water quality data; to provide information and assistance to staff, outside agencies and the general public regarding complex water quality issues; and to do other work as required.

### **DISTINGUISHING CHARACTERISTICS**

Clackamas Water Environment Services (WES) produces clean water, protects water quality, and recovers renewable resources via the provision of wastewater services, stormwater management, and environmental education. Through the management of various resource recovery facilities, pumping stations, and compliance initiatives throughout the district, WES protects public health and supports the vitality of the communities serviced, the natural environment, and economy.

The Water Quality Analyst plans, develops and recommends programs and procedures for monitoring, evaluating and managing storm/surface water, and water resource recovery facility discharges through the analysis and reporting of regulatory requirements, and laboratory and instrumentation data. Incumbents act as primary liaison between County staff, consultants, and outside agencies to develop solutions to water resource issues and oversee regulatory compliance programs through the evaluation and administration of National Pollutant Discharge Elimination System (NPDES) and Water Pollution Control Facilities (WPCF) permitting.

The Water Quality Analyst differs from the Environmental Program Coordinator which is responsible for implementing, coordinating and monitoring county-wide environmental utilization programs. It is further distinguished from the Policy, Performance, and Research Analyst which provides comprehensive professional analysis, forecasting, planning, and assistance to support business operations and does not perform permitting responsibilities nor does it require specialized water quality and compliance knowledge.

### **TYPICAL TASKS**

Duties may include but are not limited to the following:

1. Participates in the development of goals and objectives for water quality programs; assists in the development and implementation of policies and procedures; acts as project manager for wastewater treatment and stormwater management improvements; works with

consultants and outside agencies to identify, analyze and develop solutions and/or alternatives to resolve water quality issues; develops and assists in the planning of water quality monitoring programs for storm/surface water and wastewater treatment plant discharges.

2. Manages the design and implementation of District projects related to water quality, Total Maximum Daily Loads (TMDL), and NPDES permits; develops, schedules, and prepares scopes of work; identifies staffing needs and advises on estimated project costs; maintains communication with internal and external stakeholders over the course of the assigned project.
3. Oversees the planning, direction, and implementation of NPDES and WPCF permits; administers District regulatory permits by developing permit applications or renewals; prepares, completes, and submits operational reports, monthly DEQ reports, and required environmental and annual reports to applicable regulatory agencies; develops, maintains, and presents permit training programs for District and member city staff.
4. Acts as liaison to the public, regulatory agencies, and other stakeholders on permitting, wastewater compliance, and water quality issues; researches, analyzes and reports on regulatory changes that affect District policies and programs and recommends solutions to maintain compliance and effective operations; represents the District's interest as a technical resource in various meetings and committees; collaborates with other agencies to review and propose legislative and regulatory language with statewide impact; coordinates responses to state and federal regulatory agencies on matters of compliance; develops and recommends program implementations, improvements and operational procedures to District management staff.
5. Utilizes complex computer programs to conduct hydraulic and hydrologic modeling and to facilitate direct access to systems by other departments and outside agencies as necessary; collects, enters, researches, and analyzes a variety of complex water quality data using statistical tools and models; creates and reviews comprehensive reports to monitor program activities for compliance, operational effectiveness, and to understand District impact on the environment; presents reports and program metrics to internal and external stakeholders; provides information, assistance, and training to outside agencies and the general public on topics of water quality and resource recovery.
6. Monitors daily operational plant processes for efficiency, cost effectiveness, and regulatory compliance; performs environmental compliance audits and develops corrective action plans in response to audit findings; reviews, analyzes and researches new methods and systems of operation to improve plant performance.
7. Meets with management and staff to update, inform and advise on goals and objectives; develops and provides training to staff on new or revised operational methods, processes, and procedures; acts as a technical resource to staff on matters of operations and compliance.
8. Participates in the administration and preparation of contract documents; assists in drafting scopes of work and determining performance measures; coordinates the work of contractors and reviews performance to ensure compliance with contract provisions, timelines, and regulatory requirements.

## **REQUIRED KNOWLEDGE AND SKILLS**

Working knowledge of: Hydrologic, hydraulic and water quality models; local, state and federal regulations impacting surface water and groundwater; principles and practices of water quality data analysis and modeling; advanced laboratory testing protocols; principles and practices of wastewater treatment and stormwater management; terms and conditions of water quality permits; principles and practices of pollution prevention and environmental protection; principles of project management; processes for contract approvals.

Skill to: Work as part of an interdisciplinary team to develop studies and plans that address a wide range of water resource issues; gather, analyze, and interpret technical data; communicate complex and technical information and data effectively to a variety of audiences, both orally and in writing; listen and comprehend issues and concerns expressed by peers, staff, management, consultants and the public; identify, research, and analyze complex regulatory problems; establish and maintain effective working relationships with staff, management, developers, consultants, other agencies, members of community groups and the public.

## **WORKING CONDITIONS**

Incumbents may be exposed to bacteria, viruses and toxins in wastewater, chemicals, exhaust fumes and dust, loud noises, and vibration. Some duties involve exposure to adverse weather conditions and hazardous locations, such as streets, live sewers, confined underground areas, and elevated platforms.

## **MINIMUM QUALIFICATIONS**

Minimum qualifications are used as a guide for establishing the minimum experience, education, licensure, and/or certifications required for employment in the classification. The following minimum qualifications are established for this classification. Additional minimum qualifications and special conditions may apply to a specific position within this classification and will be stated on the job announcement.

**Experience:** A minimum of four (4) years of related experience that would provide the required knowledge and skills to perform the responsibilities of this position.

**Licenses/Certifications:** None required.

## **PRE-EMPLOYMENT REQUIREMENTS**

Driving is required for County business on a regular basis or to accomplish work. Incumbents must possess a valid driver's license, and possess and maintain an acceptable driving record throughout the course of employment.

Edited: 7/12