Code: 5647



Family: Health and Human Services Service: Operation and Construction Group: Engineering, Designing, and Structural

Series: Civil Engineering

CLASS TITLE: DIRECTOR OF WATER QUALITY SURVEILLANCE

CHARACTERISTICS OF THE CLASS

Under direction, occupants of this class title manage a unit within the Water Quality Surveillance Section in the Bureau of Water Supply, and performs related duties as required

ESSENTIAL DUTIES

- Directs supervisory personnel overseeing professional and paraprofessional staff engaged in conducting water main, seepage, and water quality complaint investigations, the collection of drinking water compliance samples
- Oversees the lead program including the management of lead research programs and pilot plant projects
- Determines work priorities and schedules staff projects
- Directs the collection of water samples for water quality analysis and the preparation of various investigative reports
- Supervises consumer lead result and water quality check result communications
- Directs the sterilization of pumping stations, tunnels, water mains, and other structures of the City's water intake and distribution systems
- Oversees lake surveys and approves reports of findings for source water quality
- Directs the preparation of monthly water quality survey summaries and special reports for submission to federal and state regulatory agencies
- Coordinates the section's water sampling and testing activities with other bureaus in the department
- Directs the chlorination of new or repaired water mains and the collection of bacterial samples to ensure pipes are properly disinfected
- Directs the investigation of consumer complaints and reviews and approves investigation reports
- Supervises early warning systems of water quality security and safety systems
- Initiates emergency sampling protocols for the City of Chicago Water System
- Implements and supervises Environmental Protection Agency (EPA) compliance projects (e.g., Stage 2 DBP Rule, TCR and LCR)
- Researches and recommends equipment and supplies purchased by the section
- Directs the calibration and maintenance of water quality monitoring equipment
- Develops work standards and evaluates staff performance
- Keeps abreast of state and federal regulations governing water quality standards
- Coordinates and monitors safety programs and training of section personnel
- Prepares the section's budget and oversees its administration
- Oversees the preparation of various administrative reports
- Consults with other departments and agencies on joint investigations, as required

CLASS TITLE: DIRECTOR OF WATER QUALITY SURVEILLANCE

 Provides technical information on water sanitary activities at hearings and regulatory proceedings, as required

NOTE: The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.

MINIMUM QUALIFICATIONS

Education, Training, and Experience

 Graduation from an accredited college or university with a Bachelor's degree in Sanitary, Civil, Environmental, or Chemical Engineering or a directly related field, plus five (5) years of work experience in water quality analysis, of which three (3) years are in a supervisory role related to the responsibilities of the position; or an equivalent combination of education, training and experience, provided that the minimum degree requirement is met

Licensure, Certification, or Other Qualifications

- A valid State of Illinois EPA Water Operator's certification (Class D or higher) OR a valid State
 of Illinois EPA Water Operator-in-Training certification (Class C or higher)
- A valid State of Illinois driver's license is required

WORKING CONDITIONS

- General office environment
- Exposure to outdoor weather conditions

EQUIPMENT

- Standard office equipment (e.g., telephone, printer, photocopier, fax machine, calculator)
- Computers and peripheral equipment (e.g., personal computer, computer terminals, hand-held computer, tablets)
- Two-way radio
- Safety equipment
- Water quality testing and monitoring equipment, and field equipment

PHYSICAL REQUIREMENTS

Ability to walk and stand for extended or continuous periods of time

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Considerable knowledge of:

- *applicable federal, state, local laws, regulations, and guidelines
- *mechanical and electrical recording equipment, instruments, materials, and supplies used in sanitary engineering work
- *sanitary engineering principles, practices, and procedures
- *lead chemistry
- *applicable water testing and treatment practices and procedures

Moderate knowledge of:

*management and supervisory methods and procedures

Some knowledge of:

- geographical locations in the City
- applicable computer software packages and applications
- public administration principles, practices, and procedures
- *investigatory methods, practices, and procedures
- training methods, practices, and procedures

Knowledge of applicable City and department policies, procedures, rules, and regulations

<u>Skills</u>

- *ACTIVE LEARNING Understand the implications of new information for both current and future problem-solving and decision-making
- *ACTIVE LISTENING Give full attention to what other people are saying, taking time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- *CRITICAL THINKING Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- *MONITORING Monitor and assess performance of one's self, other individuals, or organizations to make improvements or take corrective action
- *SCIENCE Use scientific rules and methods to solve problems
- *COMPLEX PROBLEM SOLVING Identify complex problems and review related information to develop and evaluate options and implement solutions
- *MANAGEMENT OF FINANCIAL RESOURCES Determine how money will be spent to get the work done and account for these expenditures
- *MANAGEMENT OF MATERIAL RESOURCES Obtain and see to the appropriate use of equipment, facilities, and materials needed to do certain work
- *MANAGEMENT OF PERSONNEL RESOURCES Motivate, develop, and direct people as they work and identify the best people for the job
- *JUDGEMENT AND DECISION MAKING Consider the relative costs and benefits of potential actions to choose the most appropriate one

Abilities

- COMPREHEND ORAL INFORMATION Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION Read and understand information and ideas presented in writing
- WRITE Communicate information and ideas in writing so others will understand
- REASON TO SOLVE PROBLEMS Apply general rules to specific problems to produce answers that make sense
- COME UP WITH IDEAS Come up with a number of ideas about a topic
- MAKE SENSE OF INFORMATION Quickly make sense of, combine, and organize information into meaningful patterns

 REACH CONCLUSIONS - Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)

Other Work Requirements

- PERSISTENCE Persist in the face of obstacles on the job
- INITIATIVE Demonstrate willingness to take on job challenges
- LEADERSHIP Demonstrate willingness to lead, take charge, and offer opinions and direction
- ADAPTABILITY/FLEXIBILITY Be open to change (positive or negative) and to considerable variety in the workplace
- DEPENDABILITY Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ATTENTION TO DETAIL Pay careful attention to detail and thoroughness in completing work tasks
- ANALYTICAL THINKING Analyze information and using logic to address work or job issues and problems

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago Department of Human Resources March, 2019