CLASS TITLE: DIRECTOR OF WATER PURIFICATION LABORATORIES

CHARACTERISTICS OF THE CLASS

Under direction, manages the operations and administrative functions of water purification laboratories in the Department of Water Management, and performs related duties as required.

ESSENTIAL DUTIES

- Directs supervisory personnel overseeing professional staff in the chemical, physical, and microbiological analysis of water samples and testing materials at the department's laboratory facilities.
- Determines work priorities and schedules staff projects.
- Manages the preparation of comprehensive analytical water quality reports detailing the condition of the City's water supply.
- Monitors and directs procedures for routine and special testing projects as required to ensure certification of the laboratory.
- Develops departmental policies to ensure water analysis procedures and documentation comply with federal and state requirements.
- Develops and implements testing procedures for improvement of the laboratory's testing operations.
- Monitors and develops work standards for use in the laboratory and evaluates staff performance.
- Manages staff training and development activities.
- Directs the preparation of operational reports.
- Prepares the annual budget and approves expenditures for laboratory staffing, equipment, and materials.
- Prepares and reviews bid specifications for equipment procurement and equipment maintenance service contracts.
- Functions as an expert on microbiological and chemical testing and water analysis issues with the Water Quality Surveillance Unit reporting water quality data to the State of Illinois, as needed.

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 Chemistry, Microbiology, or a directly related field, plus five years of work experience in water quality analyses or water purification, of which three 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

- None

WORKING CONDITIONS

- General office environment
- Exposure to hazardous chemicals and microorganisms

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, modems)
- Safety equipment
- Water quality testing or monitoring equipment
- Microbiology equipment (e.g., microscopes, scientific calculators)
- Biological and chemical testing equipment (e.g., electron microscopes, light microscopes, x-ray analyzers)
- Laboratory equipment (e.g., sterilizers, scales, centrifuges)

PHYSICAL REQUIREMENT

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

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Comprehensive knowledge of:
- *applicable federal, state, and local laws, regulations, and guidelines
- *Biology and Chemistry
- *applicable water testing and treatment practices and procedures

Some knowledge of:
- *management and supervisory methods, practices, and procedures
- contract administration methods and procedures
- budget preparation and management methods and procedures
- *applicable equipment, instruments, materials, and supplies
- procurement methods, practices, and procedures
- training methods, practices, and procedures
- *record keeping methods, practices, and procedures

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

Skills

- *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 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
• *INSTRUCTING - Teach others how to do something
• *JUDGEMENT AND DECISION MAKING - Consider the relative costs and benefits of potential actions to choose the most appropriate one
• QUALITY CONTROL ANALYSIS - Conduct tests and inspections of products, services, or processes to evaluate quality or performance

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
• 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
(Valtera Corporation)

Date: September, 2010