

Superintendent of Water Purification

Reports to: Water Operations Manager

Supervisory: Yes

FLSA Status: Exempt

Department: Public Works, Water Division

Summary:

Directs, plans, organizes, coordinates and supervises activities and work projects related to the water treatment and purification process, laboratory activities and water supply sources for the City of Bloomington. This position is responsible for the operation of a 22.5 million gallon per day purification plant that currently treats an average of approximately 10 million gallons per day. The plant is a computer monitored, conventional lime softening facility that utilizes surface water from two reservoirs and, with future supplemental deep groundwater supply source. The Superintendent of Water Purification is the Responsible Operator in Charge of treatment and purification facilities that are staffed and operate 24-hours a day, seven days a week.

The Superintendent of Water Purification is within the Water Division of the Public Works Department. This position reports to the Water Operations Manager. This position is expected to work closely with the Superintendent of Mechanical Maintenance, the Water Property Manager, and other City departments Divisions to integrate related work activities. This position must also communicate and exchange information with State and Federal regulatory agencies, vendors, consulting engineers, civic organizations, customers, and other stakeholders.

Essential Functions:

Other duties may be assigned. (This list may not include all of the tasks and/or knowledge which may be expected of the employee, nor does it cover all of the specific duties which may be required). Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Supervision and oversight as the Responsible Operator in Charge of daily water treatment and distribution operations and certified water operators and operators-in-training engaged in daily water treatment operations. Organizes, coordinates, assigns, and reviews personnel performing water treatment operation at the purification plant. Supervise, train, advise, and verify certified operator's and operator's-in-training decisions regarding the selection of source of supply, treatment process operations, chemical feed rate settings, filtration rate settings, treatment water flow rate settings, etc.

Prepares detailed and comprehensive reports of operations for regulatory compliance, internal Water Division reporting, and process optimization, such as, consumer confidence reports, monthly operating reports, corrosion control reports, and other drinking water compliance monitoring reports.

Responsible for administration, scheduling, compliance monitoring, and reporting for various State and Federal permit operations including but not limited to NPDES and land application of lime softening residuals, Mackinaw River pumping pool operations, chlorine risk management program, and IDNR dam safety operations.

Advises and directs the Laboratory Supervisor and Laboratory Technician to assure optimum performance of the plant, regulatory compliance, and laboratory operations.

Supervises and coordinates the Water Division's source water protection activities within the framework of the partnership between the City of Bloomington and the McLean County Soil and Water Conservation District, McLean County and the Town of Normal's Watershed Conservation Program. Oversees and interprets results from lake monitoring and management activities.

Responsible for employee and plant visitor safety ensuring that proper on-the-job safety procedures are followed and safety equipment is consistently and properly used. Supervises and instructs on proper procedures, equipment and documentation of safety practices. Responsible for maintaining records, compliance reporting, and internal reporting for plant safety activities.

Coordinates and maintains positive relationships with other City departments, other governmental entities, and private utilities in the course of performing assigned work.

Assist and make recommendations for preparation and implementation of the Water division's budget, and capital improvement plan, consistent with standard operating procedures and departmental priorities.

In conjunction with Public Works management, develop, recommend, revise, and enforce organizational and departmental standards operating procedures including City policies, and safety rules and regulations.

Participate and make recommendations in personnel matters including, but not limited to, interviewing, selecting employees, handling employee complaints, recommending and administering discipline, and addressing grievances.

Responds, documents, and resolves complaints from stakeholders.

Qualifications:

1) Education/Experience:

Equivalent to a Bachelors' degree from an accredited college or university with major course work in Chemistry, Physics, Microbiology, and Civil Engineering or related field preferably. Considerable hands-on experience in water treatment, process analysis and optimization, with at least eight years' experience in water systems of the equivalent size or larger.

2) General Skill Levels:

Knowledge of:

- The chemical, biological, and physical sciences essential to the theoretical and practical mechanics of coagulation, sedimentation, lime softening, chemical feed, calculation of dosage, pathogen removal and inactivation, granular media filtration processes, and water distribution system and storage operation in a manner which will provide safe, potable water for human consumption.
- The principles, practices, and management of municipal drinking water supply, treatment, and distribution system and its components, including the principles and operation of conventional lime softening water treatment unit processes, principles, operation, and calibration of water treatment instrumentation and control systems, water chemistry, regulatory and reporting requirements for potable water treatment operations, pump construction, and work methods.
- City, county, state, and federal regulations as they pertain to surface and ground water supply, treatment, and distribution.
- Computer and computer software system(s) including but not limited to the email, work order system, internet searches, GIS, and SCADA diagnostics and programming.
- Practices, methods, tools, equipment, and materials used in water treatment processes.
- Occupational hazards and safety precautions necessary in the water treatment and distribution system.

- Principles of supervision, training, mentoring and coaching in a collectively bargained work environment.
- Customer focused approaches as related to the duties of the position.
- Regulatory Report requirements, preparation methods and techniques.
- Developing and managing within a budget.

Skills:

- Transferring technical knowledge to operational activity to achieve desired results.
- Communicating clearly, effectively and professionally both orally and in writing.
- Organizing work, setting priorities, directing a work force, meeting critical deadlines and following up on assignments with minimum direction.
- Using tact, discretion, initiative and independent judgment within established guidelines.
- Troubleshooting and resolving complex biological, mechanical, and operational systems problems, including preparing and maintaining a variety of reports and records.
- Supervising, directing, coaching, mentoring and training direct reports.
- Analyzing operational situations and implementing improvements and solutions to problems.
- Utilizing computer applications such as email, Word and Excel as related to the duties of the position.

Ability to:

- Prepare detailed operational reports, consumer confidence reports, monthly operating reports, corrosion control reports, and other drinking water compliance monitoring reports. Monitor and evaluate the efficiency and effectiveness of service delivery methods and procedures; recommend, within departmental policy, appropriate service and staffing levels.
- Analyze situations, identify alternative solutions, projecting consequences of actions, and implementing recommendations.
- Plan, direct, coordinate and review the work plan for Public Works Purification staff; assign work activities, projects and programs; review and evaluate work products, methods and procedures; meet with staff to identify and resolve problems.
- Review and respond to questions, comments, complaints and request for service by general public and recommend, establish, and implement revisions to departmental rules, regulations, policies, and procedures as appropriate.
- Ensure that proper on-the-job safety procedures are followed and safety equipment is properly and consistently used.
- Read and understand technical and apply guidelines and regulations to operational situations.
- Work evenings, nights and weekends as required and respond to emergency and planned off hour situations.
- Coach, train and mentor employees to develop a positive and productive work environment. Respectfully discipline employees to correct negative behaviors when needed.
- Ensure that work standards are met, including the ability to visit and visually inspect outdoor worksites, to identify and take appropriate corrective action when standards have not been met.
- Document, track and interpret work performance measurements and make operational adjustments to ensure efficient and effective results.
- Interpret and apply federal, state and local policies, laws and regulations.

3) Certificate or Licenses:

a. Required

Possession and maintain of an Illinois Driver's License

Possession of current Class A Water Supply Operator Certification by the Illinois Environmental Protection Agency.

4) Physical Requirements/Working Conditions:

Work is performed in both office and field environments. Work requires driving between sites and occasionally to other locations for meetings. The physical demands on this position may include traveling to and traversing outdoor worksites with uneven terrain to inspect work. Light physical activity performing non-strenuous daily activities of a productive/technical nature at moderate noise levels in a well-lighted, heated and/or air conditioned indoor office setting with adequate ventilation, including: Physical ability to sit, stand, walk, climb, balance, stoop, kneel or crouch. Physical ability to reach items with arms and hands and manual dexterity and fine motor skills sufficient to perform all essential and additional job functions and basic requirements listed above. Physical ability to hear ordinary conversation, such as questions from stakeholders.