

## **Utility Division - Water Plant Operator**

### **Definition**

Monitors daily operation of equipment and processes of the water treatment plant. Performs a variety of skilled technical and labor duties in the operation and maintenance of the City's water treatment plant and related facilities. Performs other Utility Division related and miscellaneous duties as assigned.

### **Supervision Received and Exercised**

Receives general supervision from Water Plant Division Superintendent and other supervisory personnel as required.

May provide functional and technical oversight over lower level plant operations and maintenance staff personnel.

### **Examples of Important Responsibilities and Duties**

*Essential and Important responsibilities and Duties may include but are not limited to:*

Participates in the operation and maintenance of all aspects of the water treatment plant from the well collector intake facilities to the proper handling and disposal of process sludge.

Participates in the operation and maintenance of all raw water pumping stations and the associated collector main system network.

Participates in the operation and maintenance of the finished water distribution system network.

Participates in the maintenance of all equipment associated with the water treatment plant.

Maintains inventory of all parts, equipment chemicals and supplies necessary to operate and maintain the water treatment plant.

Provides accurate data collection and input procedures to aid in the preparation and maintenance of all operational records and reports, both internal and external, associated with the water treatment plant.

Participates in the performance of all laboratory activities, collects appropriate samples, provides accurate analysis and accurately records all pertinent data on the appropriate report forms, both internal and external, associated with the operation of the water treatment plant.

Participates in the operation and maintenance of Supervisory Control and Data Acquisition (SCADA) and other control and automation related systems and equipment as an integral function of the water treatment plant.

Follows established policies and procedures in the operation and maintenance of the water treatment plant to ensure full compliance with all Federal, State and local standards and safety regulations are met within the water treatment plant. Follows established policies and adheres to all City, Departmental and Divisional policies.

Adheres to all recognized safe work practices, follows safety policies and procedures, and reports all unsafe working conditions, acts, and incidents or accidents to the supervisor by the end of their shift.

Participates in all appropriate training activities at the direction of Division supervisory personnel.

Participates in conducting tours of the water treatment plant at the direction of Division supervisory personnel.

Participates in the 24-Hour After Hours Response System as it pertains to the Division.

Performs a variety of related duties and responsibilities as assigned by Division supervisory personnel.

### **Qualifications**

#### **Knowledge of:**

- Operation and maintenance of water treatment plant equipment.
- General working knowledge of motors, pumps, valves, variable frequency drives, programmable logic controllers, SCADA software applications, etc. as they pertain to the water treatment plant.
- General operating principles and practices of a water treatment plant environment.
- General properties of the various chemicals associated with a water treatment plant including accurate calculation of dosing rates.
- General knowledge of principles and methods of bacteriological, biological and chemical analysis as they pertain to a water treatment plant.
- General knowledge of pertinent sampling and quality control techniques and requirements.
- Thorough knowledge of personal computers utilizing Microsoft Word, Microsoft Excel, and any other software applications that may be utilized in the Plant and/or Department.

#### **Ability to:**

- Establish and maintain effective working relationships with co-workers and Division supervisory staff. Collaborate efficiently with co-workers on various tasks as assigned by the Division supervisory personnel
- Function as an integral part of the Division, Department and the City team(s). Build professional relationships within the Division, Department and the City.
- Effectively follow both oral and written instructions.
- Communicate effectively both orally and in writing with co-workers, Division supervisory personnel and the public.

- Make responsible and timely operational and maintenance related decisions in the absence of direct supervision.
- Assist in troubleshooting equipment failures and making expedient and efficient repairs at the direction of Division supervisory personnel.
- Gather information, use facts, data, and quantitative measurements to assess potential outcomes, propose solutions, track quality, problem solve, and enable improvement.
- Utilize all hand as well as mechanical tools and equipment pertinent to the operation and maintenance of a water treatment plant.
- Effectively utilize technology solutions and job-specific software to assist in collecting data, troubleshooting, generating operating reports, etc.
- Utilize all safety equipment pertinent to the operation and maintenance of the water treatment plant.
- Operate a motor vehicle in a safe manner.
- Climb ladders, spiral staircases, and perform work in high elevations within and around the water treatment plant grounds.
- Perform work in a variety of climate conditions.
- Work second or third shift if required.
- Work second or third shifts and/or split work weeks if required.

### **Experience and Training Guidelines**

*Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

#### **Experience:**

A minimum of two (2) years of experience in a water treatment environment.

#### **Training:**

Equivalent to the completion of the twelfth grade.

#### **License or Certificate:**

A valid Illinois CDL Drivers License with Tanker Endorsement and without an Air Brake restriction within six (6) months from the date of hire.

A valid Illinois Environmental Protection Agency Class C (or higher) Water Supply Operator's Certification License (preferred) or a Water Supply Operators Operator in Training Certificate in Class "C" (or higher) with the ability to obtain Class C Water Supply Operator (or higher) license within six months of date of hire.

### **Tools and Equipment Used**

Motor vehicle, generators, pumps, gauges, common hand and power tools, shovels, wrenches, detection devices, mobile radio, phone, calculator, and a variety of lab equipment, fork truck, overhead crane, man-lift, infra-red reading control devices.

## **Physical Demands**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee frequently is required to stand and talk or hear. The employee is occasionally required to walk; sit; climb or balance; stoop, kneel, crouch, or crawl; and smell.

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

## **Work Environment**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is usually loud in field settings, and moderately quiet in office settings.