

**BAY COUNTY DEPARTMENT OF WATER AND SEWER  
JOB DESCRIPTION  
WTP OPERATIONS SPECIALIST**

**GENERAL SUMMARY:**

Under supervision of the Operations Supervisor, WTP Operations Specialists perform all the duties necessary to operate the Bay Area Water Treatment Plant. They ensure that the plant is producing potable water that achieves all target quality standards.

**EXAMPLE OF DUTIES:**

- a. Monitors water treatment & filtration system and performs all activities necessary to operate it. Components of the system include raw water tank, pumps and micro strainers, membrane skids, control valves, backwash system, air blowers, chemical cleaning and treatment systems, waste neutralization, and air compressors.
- b. Operates the plant SCADA system to adjust and set flow, chemical dosages, chemical cleaning, integrity testing and other processes.
- c. Monitors and adjusts membrane waste wash water treatment and recovery system, including equalization basins and parallel plate clarifier units. This includes overseeing the efficiency of the clarification process.
- d. Conducts walk-through inspections of plant facilities at the top of each hour to determine correct operating rates and condition of plant equipment; takes required readings at the required times and reports problems to supervision. Records problems or changes in the Operations logbook.
- e. Uses standard procedures as dictated by "Standard Methods" to conduct water analysis tests such as Chlorine Residual, Fluoride, Turbidity, Conductivity, Hardness, Alkalinity, Calcium, Chloride, Sulfate, Ortho-phosphate, Total Coliform & E. coli, Heterotrophic Plate Count, pH, Taste & Odor, etc.
- f. Utilizes laboratory and field data to ensure that plant operations are in compliance with operating guidelines and that treated water entering the distribution system is within state and federal clean water standards.
- g. Performs quality control procedures for laboratory analysis as required to confirm test results. This includes performing regular monthly quality control tests on lab equipment, media, and de-ionized water.
- h. Plays an important role in plant security, as defined in the plant security policy. This includes controlling access to the plant, monitoring security cameras for irregularities, and notifying supervision or calling 911 if a security breach is identified.
- i. Determines chemical feed rates and adjusts chemical dosages as required.
- j. Records and maintains all required plant and laboratory data on specified log sheets in compliance with regulatory requirements and Plant policy.

- k. Performs mathematical calculations to calculate flows, levels, chemical usage, pressures, residual levels, etc. which assist in preparation of regulatory reports.
- l. Monitors water levels of the raw water tanks, finished water tanks and distribution water towers, and adjusts flow rates in response to water demand. This includes making regular contact with the Saginaw-Midland Municipal Water Supply Corporation (SMMWSC) to communicate raw water flows needed.
- m. Monitors online analyzers to ensure they are operating properly. Compares analyzer reads with lab results to confirm accuracy. Replaces reagents and cleans components of each analyzer when necessary.
- n. Performs and is responsible for the cleaning of equipment, small spills, tanks, floors, walls, bathrooms, and common areas using brushes, brooms, vacuums, mops, scrubbers, hoses, washers, etc.
- o. Performs minor maintenance activities and adjustments. May assist maintenance with minor mechanical repairs.
- p. Participates and follows the plant Health & Safety Program, including attendance and participation at monthly plant safety, security, and staff meetings.
- q. Uses all necessary personal protective equipment (PPE) when performing the above tasks. Fully adheres to the plant's lone worker policy and uses the lone worker monitor when alone on site.

The previous examples are not to be construed as a complete list of all the duties of this classification. Supervision has the right to assign other duties as deemed necessary to ensure efficient operation of the employer's business.

#### **THE FOLLOWING KNOWLEDGE AND ABILITIES ARE REQUIRED ON THIS JOB:**

- a. Ability to work independently and efficiently on a shift that may include nights, weekends, and holidays.
- b. Ability to use the plant computer software and SCADA to monitor treatment and pumping conditions, to log data, and to assist in preparing EGLE monthly reports.
- c. Knowledge of drinking water treatment processes and regulatory requirements.
- d. Ability to establish and maintain effective working relationships with other employees.
- e. Ability to use general hand tools (screwdriver, wrench, hammer, etc.) to make simple repairs to equipment during the absence of the Maintenance personnel, and the ability to use lab equipment and glassware to perform all lab tests as required by EGLE.

#### **EDUCATION AND/OR EXPERIENCE:**

High School diploma or general education degree (GED); or no less than one-year related experience and/or training or equivalent combination of education and experience.

Experience operating a microfiltration plant or conventional water treatment plant preferred.

**GENERAL EDUCATIONAL DEVELOPMENT:****a. REASONING:**

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram or schedule form.

**b. MATHEMATICAL:**

Ability to add, subtract, multiply, divide all units of measure, using whole numbers, fractions and decimals. Ability to compute ratio, rate and percent.

**c. LANGUAGE:**

Ability to read and interpret documents such as safety rules, operating and maintenance instructions and procedure manuals.

**CERTIFICATES, LICENSES, REGISTRATIONS:**

- a.** Must have an F-4 State of Michigan Waterworks System Operator Certification or must obtain it within the two-year F-4 provisional license period.

**PHYSICAL DEMANDS:**

Work involves walking, sitting, balancing, stooping, kneeling, crouching, crawling, reaching and handling. Standing may be continuous.

**WORKING CONDITIONS:**

Mostly indoor work. Subject to noise and vibration, fumes, odors, dust. Worker must adjust to a variety of duties, involving working alone and apart in physical isolation from others. Must be able to work scheduled hours, overtime, both scheduled and unscheduled, on days of relief and beyond regular work schedule and to perform shift work, including holidays, nights and weekends.

**THE BAY COUNTY DEPARTMENT OF WATER AND SEWER IS AN EQUAL OPPORTUNITY EMPLOYER. IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, THE DEPARTMENT OF WATER AND SEWER WILL PROVIDE REASONABLE ACCOMMODATIONS TO QUALIFIED INDIVIDUALS WITH DISABILITIES AND ENCOURAGES BOTH PROSPECTIVE EMPLOYEES AND INCUMBENTS TO DISCUSS POTENTIAL ACCOMMODATIONS WITH THE EMPLOYER.**

---

Ryan Goebel, Director

---

Keri Christian, Accounting/HR Manager