

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

**GENERAL SUMMARY:**

Under the supervision of the Wastewater Operations Supervisor, employees in this classification will be required to perform all duties necessary to efficiently operate the Wastewater Treatment Plant. This includes conducting laboratory analysis on wastewater samples to determine the effectiveness of the wastewater process and to produce an acceptable effluent discharge that is required by the National Pollutant Discharge Elimination System permit. Employees must have good organizational skills and excellent attention to detail.

**EXAMPLE OF DUTIES:**

- a. Performs laboratory analysis using standard procedures for Biochemical Oxygen Demand, Total Phosphorous, Chlorine Residual, Suspended Solids, Fecal Coliform, Total Solids, pH, Dissolved Oxygen, and Ammonia Nitrogen and preparation of related reagents.
- b. Performs quality control procedures for laboratory analysis as required to confirm test results.
- c. Collects grab samples and composite samples of plant influent, primary effluent, and biosolids as well as special samples, industrial monitoring, and direct discharges, utilizing manual and automatic sampling equipment. Backwashes, cleans, and maintains sampling equipment.
- d. Performs testing and measurement of in-plant processes, utilizing field test equipment for temperature, Dissolved Oxygen, biosolids settling, biosolids percent concentration, and clarifier solids depth.
- e. Operates belt filter press and conveyors including in-plant truck transport of biosolids.
- f. Utilizes laboratory and field data to adjust pumping, transfer, mixing, decanting, aerating, and draining equipment.
- g. Conducts walk-through inspections of plant facilities to determine correct operating rates and condition of plant equipment, takes required readings, and records problems on log sheets and/or work orders.
- h. Accepts chemical deliveries into plant and provides direction for proper and safe unloading of Chlorine, Caustic Soda, Ferrous Sulfate, Polymer, Potassium Permanganate, Sodium Bisulfite, and maintenance chemicals.
- i. Changes Chlorine (1 ton) cylinders according to safety procedures, fills chemical day tanks, mixes chemical batches for disinfection, biosolids conditioning, Phosphorous removal, odor control, and dichlorination.
- j. Records plant and laboratory data on specified charts, log sheets, bench sheets, or computer terminal.
- k. Performs mathematical calculations to calculate flows, levels, chemical usage, energy consumption, pressures, residual levels, rainfall, etc. and performs a major role in preparation of regulatory reports.

- l. Performs all activities necessary to operate screening, skimming, grinding, pumping, draining, filling, thickening, operating, and decanting equipment, including adjusting, debris removal, seal water adjustment, and disposal of residues.
- m. Operates vehicles and necessary equipment for inspection of collection system and pump stations, including minor trouble shooting. Assists in operation of emergency pumps, ventilators, generators, and portable equipment.
- n. Performs cleaning operations on equipment, spills, tanks, floors, walls, flumes, and channels using brushes, scrubbers, hoses, washers, etc.
- o. Conducts confined space entry, participates in safety committee and plant safety meetings, installs signage, follows all plant safety requirements, and utilizes and inspects safety equipment as necessary.
- p. Performs minor maintenance activities and adjustments, appearance related activities on building and grounds.
- q. Records water and sewer complaints received by telephone. Uses the radio to communicate and coordinate with other staff members. Notifies supervision and on-call persons as needed.
- r. Performs any other assigned duties, as deemed necessary by Supervision, to continue the efficient operation of the wastewater treatment plant.

The foregoing are not to be construed as a list of all the duties of this classification and Supervision has the right to assign other duties, as deemed necessary, to continue with the efficient operation of the employer's business.

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

- a. Ability to use the following types of tools for this position: general hand tools (screwdriver, wrench, hammer, etc.) to make simple repairs to equipment during the absence of the Maintenance personnel and lab equipment and glassware to perform all lab tests required by the NPDES permit.
- b. Ability to use the computer software used in this position, including Microsoft Office Suite, to assist in preparing EGLE monthly reports and to communicate with other operators or supervisors regarding any problems with the operation of the plant.
- c. Reasonable knowledge of traffic laws, regulations, and ordinances involved with sewer maintenance and special vehicle operation.

**EDUCATION AND EXPERIENCE:**

High School diploma or GED is required; an associate's degree in applied science is preferred. One year of laboratory, chemical process, or environmental experience is preferred.

**GENERAL EDUCATIONAL DEVELOPMENT:**

- a. *REASONING:*  
Apply common sense understanding to carry out detailed tasks involving written and/or oral instructions.
- b. *COMMUNICATION:*  
Ability to communicate with the public, coworkers, and others in a professional manner.

c. *LANGUAGE:*

Ability to read and interpret documents such as safety rules, operating and maintenance instructions and procedural manuals. Ability to write routine reports and correspondence.

d. *MATHEMATICAL:*

Make arithmetical calculations involving fractions, decimals and percentages.

**CERTIFICATES, LICENSES, REGISTRATIONS:**

Valid Michigan Driver's License

Must obtain a Waste Water D Certification within 3 testing cycles after being exam eligible

**PHYSICAL DEMANDS:**

Heavy to very heavy work. Involves lifting objects up to 50lbs, climbing, balancing, stooping, kneeling, crouching, crawling, reaching and handling.

**WORKING CONDITIONS:**

Both inside and outside work. Exposed to weather. Subject to noise, vibrations, fumes, unpleasant odors, and dust. Selected duties may require confined space entry and use of appropriate safety and/or respiratory equipment. Worker must adjust to a variety of shifts, involving working alone in physical isolation from others.

**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.**

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Ryan Goebel, Director

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Keri L. Christian, Accounting & HR Manager

03.21.2022