

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

**GENERAL SUMMARY:**

This classification requires the performance of all duties necessary to operate the Wastewater Treatment Plant. To produce an acceptable effluent discharge that is required by the National Pollutant Discharge Elimination System permit by performing the following duties:

**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, 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 dechlorination.
- 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, 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, utilizes and inspects safety equipment as necessary.
- p.** Performs minor maintenance activities and adjustments, appearance related activities on building and grounds.
- q.** Performs paging, calling, radio and messaging activities for water and sewer complaints and emergencies, coordinates activities of all on-call persons, sewer cleaning emergency crews and performs required supervisory notifications.

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 Lotus 1-2-3, to assist in preparing DNR monthly reports and the operator's message system to report to other shifts or supervisor 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/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.

**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. Valid Michigan Driver's License

**PHYSICAL DEMANDS:**

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

**WORKING CONDITIONS:**

Both inside and outside work. Exposed to weather. Subject to noise and vibration, fumes, odors, dust. Selected duties may require confined space entry and use of appropriate safety and/or respiratory equipment. Worker must adjust to a variety of duties, involving working alone and apart 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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