

CLASS TITLE: Water and Wastewater Treatment Plant Apprentice

DEFINITION:

This is a training classification wherein the trainee learns to perform all aspects of operating a water treatment plant, wastewater treatment plant, and pumping stations to maintain compliance with State and federal operating regulations. An employee in this class works with direct supervision of a licensed operator and studies regulations and procedures in courses accredited by the State of Maryland.

Progress will be evaluated periodically in conference with the Superintendent to determine what mutually agreed upon goals and objectives have been met and to set goals for the forthcoming evaluation period.

Employees in this class are essential, thus subject to call back under emergency conditions, and will also be required to work scheduled weekends and holidays.

TYPICAL EXAMPLES OF WORK:

Learns to monitor gauges, control panels, and to operate a process control computer; to observe and report variations in operating conditions to determine processing requirements; to take needed corrective action on routine problems and to differentiate between routine problems and those considered serious or complex which need to be reported to the Superintendent.

Under supervision operates valves and gates manually and by remote control; to start and stop pumps, engines, and generators to control and adjust flow, to determine appropriate chemical dosages, and to take care of treatment process equipment.

Learns to inspect bearings, valves, filters, generators, compressors, and other mechanical and electrical equipment; to make minor repairs to malfunctioning equipment.

Obtains water and wastewater samples and learns to perform routine laboratory tests and analysis as required by State and federal agencies for the proper operation of the treatment plants.

Learns to use the plant's SCADA and computer systems.

Learns to maintain shift logs and to record meter and gauge readings.

Learns to perform routine maintenance and custodial duties and to perform preventive maintenance by lubricating equipment and to take corrective action when problems occur.

Attends such courses and seminars as may be required to qualify for certification.

Performs such other duties as may be assigned.

#### REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Willingness and ability to acquire introductory knowledge of the principles, practices, and method used in water treatment and waste water reclamation; of the operation and servicing of water and waste water treatment equipment and machinery; of basic laboratory and sample collection techniques.

Introductory knowledge of safe working practices and procedures.

Skill in the use of hand tools and custodial equipment.

Ability to write neatly and legibly; to maintain accurate records; to follow verbal and written instructions closely; to read gauges and meters accurately; to clean and maintain a neat work environment.

Willingness to obtain any and all training provided by employer such as water / wastewater classes to further education, safety training, certification training such as forklift, bucket truck, flagger, or any others designated by the employer.

#### ESSENTIAL FUNCTIONS:

Must be able to see and discern normal size typed print, (corrective vision devices are acceptable); use a microscope to observe and deduce microbiological activity and quantification; discern colors; hear the normally spoken word at ten (10) feet, (hearing aids are acceptable); discern odors as well as their concentrations; speak clearly and concisely to communicate with others; lift, push and carry 80 pounds; stand for periods in excess of one (1) hour; climb ladders and onto automotive equipment; jump two (2) feet to get off the equipment; kneel for a few minutes; pick up and work on an item on the floor; carry ten (10) pounds up and down a eight (8) foot ladder; work in an environment dealing with chemicals and be free of allergies to chemicals and water born matter; determine if an item is hot, cold, or slippery; grasp items; read and understand work orders, equipment and procedure manuals written in the English language; solve moderately difficult mathematical problems; read and utilize engineering drawings and specifications; write up problems and action taken to resolve them or action taken; work out of doors in inclement weather; walk on (1) mile.

#### MINIMUM EDUCATION, TRAINING, AND EXPERIENCE:

Graduation from an accredited high school or be in possession of a G.E.D., acceptable to the Superintendent of Schools of Maryland, to include or supplemented by a course in General Chemistry and one course in Technical English.

#### REQUIRED LICENSES and/or CERTIFICATES:

Applicant must apply for and receive a Temporary Certificate as a Water and Wastewater Treatment Plant Operator prior to commencing work. (See COMAR, Title 26, Subtitle 06, Waterworks and Waste Systems Operators.)

Maryland class "C" driver's license.

**DESIRABLE LICENSES and/or CERTIFICATES:**

Maryland Department of Agriculture Herbicide Applicator's Certification  
Maryland Class "B: CDL driver's license.

**DESIRABLE ADDITIONAL QUALIFICATIONS:**

Working knowledge of electrical and mechanical maintenance work

**WORKING CONDITIONS:**

Employee may be exposed to water and airborne diseases, work with dangerous mechanical and electric equipment, and possible exposure to hazardous and toxic chemicals.

**CONDITIONS OF EMPLOYMENT:**

Applicant must pass a urinalysis test prior to appointment to ascertain freedom of any chemical or alcohol related dependency; such tests may be repeated at random at the option of the employer subsequent to employment. The employee is required to arrange to be reached by telephone for notification of emergency call back.

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