

Position: WWTP Operator in Training (OIT)	Position Number:
Department/Site: Wastewater Division	FLSA: Non-Exempt
Evaluated by: Mark A. Freiberger, PE	Salary Grade: 114

Summary

Under supervision, the Wastewater Treatment Plant Operator in Training performs entry/trainee level labor and maintenance tasks in the maintenance, construction and repair of wastewater treatment, reuse, and conveyance facilities by assisting in the operation of these facilities while training. Provides assistance to Operators and Specialists with portions of skilled work in the repair, maintenance, and functioning of wastewater collection systems, equipment, and related infrastructure.

Distinguishing Career Features

Wastewater Treatment Plant Operator in Training – This is the entry level in the Wastewater Treatment Plant Operator series. Positions at this level, working under direct supervision, have prior experience or education in related, repair, and maintenance of machinery, pumps, or mechanical equipment, but may not have any in a wastewater treatment plant, but are not expected to function with the same amount of program knowledge or skill level as positions allocated to the Wastewater Treatment Plant Operator I level and exercise no independent discretion and judgment in matters related to work procedures and methods. Individuals at this level are expected to become fully knowledgeable of the assigned area and to learn the full range of plant maintenance, repair, and operations functions. Individuals at this level participate in regular assignment to the on-call rotation, after successful completion of Group I OIT testing, using sound professional judgement to determine proper response to alarm/emergency situation while understanding that all process control decisions must be approved by a supervisor or a higher classified operator. Certification as an operator in training is required and training is provided by the city. Certification as a Group I OIT Wastewater Treatment Plant Operator issued by the Washington State Department of Ecology is required after 6 months.

Essential Duties and Responsibilities

- Performs qualifying tasks associated with training and learning how to operate, monitor and maintain biological, chemical, mechanical, electrical, and hydraulic equipment and processes at wastewater treatment facilities.
- Participates in the operations related to pump station and wastewater treatment facility operations; operates a variety of facilities, systems, equipment, pumps, and valves; learns to operate and maintain new systems and equipment as necessary, participates in implementing new operational strategies.
- Participates in a variety of equipment maintenance duties; exercises, tests, inspects, removes, cleans, lubricates, repairs, maintains, and reinstalls equipment related to a variety of wastewater treatment plant and pump station facilities, systems, tanks, pumps, motors, valves, piping systems and related equipment; cleans and calibrates meters, probes and level sensors; trouble shoots equipment control systems; performs general housekeeping and upkeep of all areas

associated with assigned facilities.

- Participates in a variety of process control related duties; collects samples from various plant processes for laboratory analysis; operates and calibrates automatic samplers; performs a variety of tests and analysis; measures secondary settling basins sludge depths; performs mathematical calculations including those related to flows, areas, volume, weight, force, pressure, chemical dosage, and those related to various tests and analysis; evaluates laboratory and plant testing results, calculations, data, graphs, and reports and implements results in operational control.
- Assist other team members in performance of the full scope of biosolids handling duties including application of basic aerobic digestion principles and taking action to prevent malfunctions, monitors and adjusts equipment related to pressing, thickening, and mixing polymer.
- Participates in major and minor project work, improving, replacing, or relocating equipment and systems, and installing new equipment and systems.
- Participates in investigation and acknowledgement of alarms throughout the wastewater treatment facility; monitors and responds to pump station alarms; locates and notifies appropriate personnel to respond to plant and pump station alarms; provides support, security, and communication as needed when responding to alarms.
- Learn and assist other team members with a variety of recordkeeping duties; assist with creation of new logbooks and properly stores old records and logbooks; assist with review and maintenance of Safety Data Sheets (SDS) records; assist with completion, maintaining, and filing a variety of forms, lists, records, schedules, and informational logs.
- Assist other team members with a variety of duties in response to power outage emergencies; assist with operation, monitoring, adjusting, and maintaining backup generators; assist other team members with response to power outages by properly resetting, restarting, and bringing systems essential to proper plant operations back on-line; maintains proper fuel levels in generators and storage tanks.
- Assist other team members in performance of a variety of duties in response to wet weather emergencies; operates, monitors, and adjusts plant, collection system and pump station processes.
- Assist other team members with a variety of public relations related duties; conducts tours and provides educational information; receives telephone inquiries from the public; answers questions and directs inquiries to appropriate personnel as necessary, maintains good relations with professional and business contacts.
- Participates in a variety of training activities; studies equipment manuals for all facility equipment; receives and applies training on new equipment and processes as well as initial and periodic refresher training on processes, procedures, systems, equipment and safety related to assignment; maintains familiarity with all standard operating procedures pertaining to equipment and plant processes; participates in all and conducts assigned safety meetings; may provide training to new operators-in-training and interns on equipment and plant processes.
- Learn and assist other team members in performing and participates in a variety of safety related duties and activities; follows all safety plans and procedures when performing work; uses appropriate safety devices, equipment and personal protective equipment; maintains awareness of and reports/corrects any trip

hazards, spills, and unsafe equipment; properly handles, stores, and labels various chemicals; maintains familiarity with the Chemical Hygiene Plan; maintains familiarity with chemical handling procedures and responses; inspects, cleans, and maintains eye-wash stations; maintains and inspects all personal protective equipment and restocks as necessary; maintains and updates SDS catalog; maintains proper facility lighting; performs proper lock-out/tag-out procedures; employs correct confined space procedures, secures facility perimeter and ensures buildings and vehicles are secure.

- Participates as training allows in regular assignment to the on-call rotation; responds to plant alarms and after normal working hour emergencies and required jobs. Uses sound professional judgement to determine proper response to alarm/emergency situations, notify supervisory staff as necessary.

Qualifications

▪ Knowledge and Skills

The position requires the ability to learn wastewater fundamentals to include mechanical and electrical processes, techniques, applicable industrial safety practices, hand and power tools, and materials used in wastewater treatment environments. Requires knowledge of or ability to learn process control equipment and process troubleshooting techniques including preventative maintenance. Requires knowledge of or ability to learn the processes and chemicals used in testing and treating effluent. Requires knowledge of or the ability to learn the operating characteristics of pumps and pumping equipment. Requires knowledge of or the ability to learn emergency maintenance and repair procedures related to wastewater treatment facilities. Requires knowledge of or ability to learn laboratory operations including sampling procedures and analysis and recording of test results. Requires knowledge or ability to learn NPDES permit requirements, and other federal, state and local laws, codes and regulations. Requires sufficient knowledge of common computer software for preparing documents, recording data, and email and an intermediate understanding of the role of computer-aided applications used in wastewater management. Requires sufficient language and writing skill to prepare documentation of work activity and follow instructions. Requires sufficient math and algebra skill to perform routine computations. Requires sufficient human relations skill to convey technical terminology and collaborate with fellow team members.

▪ Abilities

Requires the ability to learn and carry out the qualifying essential functions of the position with supervision and technical guidance. Requires the ability to diagnose complex operational problems and perform effective maintenance and repairs on equipment. Requires the ability to learn and independently maintain assigned maintenance and operational processes and procedures. Requires the ability to learn and use computer-aided hardware and software including SCADA systems, programmable logic controllers and variable frequency drives, laboratory equipment, hand tools, power equipment, and specialized process-related equipment. Requires the ability to record and compile complex data and information. Requires the ability to learn and make process adjustments with supervision to ensure that flow stability is maintained. Requires the ability to interpret drawings, utility maps, equipment instructions and maintenance manuals. Requires the ability to maintain accurate and detailed logs and records of work and tests performed. Requires the ability to work well with others in a team environment. Requires the ability to respond to emergency situations outside of normal working hours.

▪ **Physical Abilities**

Requires the ability to stand, walk, and manipulate (lift, carry, move) light to medium weights of up to 50 pounds on an intermittent basis, pushing, pulling, guiding over 50 pounds on an infrequent basis. Requires the ability to stoop, kneel, and crouch to place and move work objects. Requires the ability to perform full arm extension and movement out and overhead. Requires sufficient hand-eye coordination, hand and finger dexterity including ability to grasp, and visual acuity to operate equipment and read technical and safety information. Requires the ability to work on varying work shifts and in disagreeable work conditions that have septic and chemical exposure risks.

▪ **Education and Experience**

Education/Training: Must be a high school graduate or equivalent. In addition, two (2) years of post-secondary college or technical training or a bachelor's in science in water/wastewater/process technology, chemistry, biology, engineering, environmental science, or related field is desirable. Relevant work experience is considered as it pertains to water/wastewater treatment.

Experience: Three months of experience in the operation, repair, and maintenance of machinery, pumps, or mechanical equipment including Three months of experience in a wastewater treatment plant. Equivalent combinations of education and experience that provide the incumbent with the necessary qualifications will be considered.

▪ **Licenses and Certificates**

- Possession of a Group I OIT Wastewater Treatment Plant Operator Certificate issued by the Washington State Department of Ecology or ability to obtain within Three months.
- Valid First Aid and CPR cards or ability to obtain within six months.
- Valid Washington State Traffic Control FLAGGER license or ability to obtain within six months.

Other Licenses which are desired and may be required:

- Erosion and Sedimentation Control (ESC Lead) certified.
- Fork/Scissor Lift Operator Certification.

Working Conditions: Work is performed indoors and outdoors where extensive safety considerations exist from physical labor, moving equipment, chemical reactions, septic situations, and temperature, odor, and noise extremes. Exposure to noise of wastewater treatment plant machinery and other equipment; mechanical and electrical hazards of operating equipment; fumes and odors of sewage, chemicals, and gases; potential contact with raw sewage; toxic substances such as chemicals, cleaners, solvents, and gases; all types of weather and temperature conditions. Work and/or walk for long periods of time on various types of surfaces including slippery or uneven surfaces and rough terrain. Subject to 24-hour emergency callbacks and routine assignment to on call rotation; requires working varying hours, overtime, weekends, and holidays. Work environment is informal, team-oriented, having both routine and variable tasks with variable pace and pressure. Work is performed in both indoors in plant area and outdoors in field and collateral facilities.

This job/class description describes the general nature of the work performed, representative duties as well as the typical qualifications needed for acceptable performance. It is not intended to be a complete list of all responsibilities, duties, work steps, and skills required of the job.