

SEWAGE TREATMENT PLANT OPERATOR (TRAINEE)

Overall Responsibility

This is trainee level work operating a sewage treatment plant. Employee is responsible for learning correct sewage plant operations, maintenance and testing procedures and for performing same under guidance and direction of a higher level sewage plant operator.

On a trainee level, and under guidance and direction of a higher level sewage plant operator, performs the following:

1. Performs chemical analysis of effluent during the different stages of treatment, such as raw sewage, primary effluent, final effluent, returned sludge, and mixed liquor. Performs physical and chemical tests, such as tests to determine the percentage of soluble solids, suspended solids, and volatile solids; PH and alkalinity tests on activated sludge; chlorine residual tests on final effluent; dissolved oxygen tests.
2. Determines percentage of waste in returned sludge, digester gas production, consumption and waste.
3. Takes meter and gauge readings at regularly scheduled intervals; makes written records on the results of all chemical and physical analysis.
4. Makes hourly inspection of plant; checks all pumps, valves, tanks, settling tank chains, motors and other equipment.
5. Performs minor maintenance as required and calls mechanic or plant supervisor in case of major equipment breakdown. In emergency situations, activates bypass procedures.
6. Performs various house-keeping duties: sweeping, mopping, dusting, painting, lawn mowing and snow shoveling.
7. Performs related work as required.

Manual Skill

Employee must possess basic mechanical skills and demonstrate increasing skills in the electrical and mechanical repair of pumps, motors and other equipment used in the treatment of sewage, and in conducting required tests necessary for sewage treatment analysis.

Mental Skill

Employee must possess basic mathematical, speaking and writing skills; must demonstrate an increasing understanding and knowledge of the sewage treatment process including an understanding of basic sewage treatment and testing principles and procedures, chemical reactions and physical characteristics of sewage during different stages of the treatment process, and be able to identify and correct abnormal deviations from routine test results and operative procedures.

Supervision Received/Exercised

Employee receives specific work assignments from a higher level operator, and work is reviewed in process and upon completion.

Employee has no supervisory responsibilities.

Physical Demands/Work Environment

A moderate physical exertion is required, with frequent lifting of objects weighting up to 25 pounds, and occasional lifting of weights up to 50 pounds.

Work environment is slightly disagreeable, with intermittent exposure to such annoyances as heat, cold, noise and unpleasant odors.

Human Relations

Employee has regular contact with other employees, but very sporadic contact with the general public. Tact is required when dealing with the public.

Minimum Education and Experience

Graduation from a standard senior high school with some course work in mechanical or electrical repair work, or in routine chemical analysis, or any equivalent combination of education and experience.

Necessary Special Qualifications

Possession of a valid driver's license issued by the State of Pennsylvania.