DEFINITION

This is routine work involving the performance of technical laboratory tests and sampling duties in a sewage treatment, water treatment or power plant laboratory.

Work involves responsibility for securing designated samples of water, sewage, chemical and related materials and the preparation and performance of tests according to standardized procedures but requiring accurate application of laboratory techniques.

Specific instructions and close supervision are received in the performance of newly assigned tasks, but the degree of supervision lessens as the employee becomes familiar with assigned tasks. Work is generally performed under the supervision of a technical superior and is subject to review through reports, observation or analysis on completion of tests and results achieved.

The work of this class is differentiated from the Laboratory Technical Assistant series by the education required to perform the work assigned, the type of work involving analysis and testing of samples, and the training given to Laboratory Technical Assistants.

TYPICAL DUTIES*

Performs routine chemical, biological or physical analysis of samples as required in process control of water or sewage plant operations.
Performs analysis of raw, treated, composite water and industrial waste samples.
Performs standard chemical and physical tests of boiler condensate and makeup water.
Checks and maintains laboratory equipment, materials and supplies and may assist in the calibration of laboratory instruments such as pH meters.
Collects samples from various designated points as required, in accordance with prescribed procedures.
Records and reports data from all analysis and tests in the prescribed form and time and maintains statistical records in accordance with laboratory procedures.
Assists in the instruction of laboratory assistants and may assist in checking their work.
Conducts plant tours for the general public as assigned.
Performs related work as required.
KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of laboratory techniques, terminology, equipment and materials.

Knowledge of the principles and practices of chemical, biological and physical testing and analysis including preparation of materials, equipment and samples.

Knowledge of arithmetic for use in computation of the results of tests and analyses.

Some knowledge of data processing applications.

Ability to use and maintain laboratory equipment for standard chemical, biological and physical tests.

Ability to understand and follow written and oral instructions.

Manual dexterity and skill in laboratory manipulative techniques.

Good eyesight to permit accuracy reading of various calibrated laboratory instruments; normal colour perception to permit accurate observation of tests based on colour and colour changes.

TRAINING AND EXPERIENCE REQUIREMENTS

Job Level
Completion of the two (2) year chemical technology program at N.A.I.T. or equivalent institute.

* This is a class specification and not an individualized job description. A class specification represents and defines the general character, scope of duties and responsibilities of all positions within a specific job classification. It is not intended to describe nor does it necessarily list the essential job functions for a specific position in a classification. Positions may perform some of the duties listed above but this does not necessarily qualify for placement into this classification.