**LABORATORY TECHNICIAN I**

**NATURE OF WORK**

 This is technical work in performing chemical and bacteriological tests employed in controlling water and wastewater treatment.

**DUTIES AND RESPONSIBLITIES (examples and not a complete listing)**

* Collects, receives and prepares samples of potable water and wastewater influent and effluent, industrial wastes, and sewage sludge’s for analyses.
* Observes proper sample handling, preservation and storage procedures.
* Must satisfy Initial Demonstration of Capability requirements.
* Conducts inorganic tests such as: pH, temperature, carbonaceous biochemical oxygen demand (CBOD), chemical oxygen demand (COD), total solids, suspended solids, volatile solids, alkalinity, chlorine residual, total and orthophosphate, ammonia, nitrate, and other required analytes according to approved SOPs.
* Performs calculations.
* Conducts microbiological testing for Total coliform, E. coli, heterotrophic plate count, and other required bacteriological testing according to approved SOPs.
* Analyzes periodic QC, PE and certification samples.
* Maintains detailed laboratory records, including chain-of-custody, raw data records.
* Notifies manager of all values obtained outside quality control limits and when analytical run experiences problems or equipment malfunction.
* Properly washes and prepares laboratory glassware, sample bottles, and sampling equipment.
* Operates, calibrates, and maintains laboratory instrumentation and sampling equipment.
* Takes and records daily temperature readings of lab ovens, incubators, refrigerators, etc.
* Prepares reagents and media, as required, and maintains logs of preparation and standardization.
* Keeps order lists and breakage records.
* Documents date received on all chemicals and supplies as well as the date all chemicals are opened. Observes expiration dates.
* Performs monthly checks of safety showers, eye wash stations and fume hoods in the laboratory.
* Operates autoclave and dishwasher with appropriate sterilization and suitability checks.
* Performs data entry.
* Digests samples for analysis on the AA.
* Assists in maintenance of safety and other regulatory program records.
* Cleans laboratory.
* Performs other tasks, as required.

**Laboratory Technician I**

 **EDUCATION AND EXPERIENCE**

A bachelor’s degree in chemistry, biology, or environmental science with some knowledge of water and wastewater analyses and credits in microbiology is desirable.

A high school diploma or GED, with pertinent experience in a laboratory setting and a basic knowledge of the principles of chemistry, biology, and bacteriology as related to the analysis of water and wastewater, may be substituted.

**MINIMUM QUALIFICATIONS**

 Two (2) years’ experience as Laboratory Technician or related experience in an environmental laboratory.

 **Physical Abilities:**

* Must be capable of operating a motor vehicle in order to obtain water and wastewater samples from points throughout the customer service area.
* Must be able to climb ladders and stairs, enter manholes and other confined spaces while wearing appropriate protective gear.
* Must be capable of lifting 50 pound sample containers and sampling equipment.
* Must be able to stand for extended periods of time.
* Must be able to read and comprehend written instructions, SOPS, and safety documents.

**Under Supervision:**

* Must be capable of interpreting and recording daily log entries and following written or verbal instructions.
* New hires must complete Tech I training requirements within the probationary period.