LABORATORY TECHNICIAN

PURPOSE AND NATURE OF WORK

This class is responsible for technical work involved in the analysis of potable water, wastewater, and treatment byproduct samples. Work of this class may also involve the collection of samples in one or more of the City’s treatment facilities or throughout the community, if necessary, in order to ensure regulatory compliance with drinking water, wastewater, pretreatment and sludge disposal programs. Incumbents of this class may be required to work weekends and holidays. Work is usually performed with relative independence under the general supervision of a technical supervisor.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Performs a variety of chemical and bacteriological examinations of wastewater, drinking water, and treatment byproducts. Examples of analyses routinely performed include Total Suspended Solids, Biochemical Oxygen Demand, Total Solids, pH, Volatile Solids, Fecal/Total Coliforms, Metals, Total Nitrogen/Phosphorus, Chlorine, and Ammonia. Additional tests are performed as needed. Estimates proper amount of chemicals to be added according to established procedures; measures, weighs, and applies chemicals. Inspects and adjusts analytical instrumentation and makes minor repairs; unloads and stocks chemicals. Maintains sample custody and log sheets showing test results and chemicals used. Collects field samples when necessary; takes soil and plant samples in the sludge disposal process. May perform some analysis of test results.

Performs related work as required.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Some knowledge of plant equipment as it relates to water and/or wastewater treatment chemical applications.
Considerable knowledge of chemistry, biology, and/or microbiology principles and procedures.
Considerable knowledge of the operation and care of relevant laboratory equipment.
Considerable knowledge of the laws, techniques, and limitations applicable to wastewater pretreatment, water treatment, and sludge disposal.
Ability to inspect solid waste disposal sites and recommend necessary action for violators.
Ability to conduct routine water and/or wastewater tests and to interpret test results.
Ability to maintain records as required.
Ability to establish and maintain effective working relationships with fellow employees, superiors, and the public.
Ability to obtain and renew necessary certification requirements.
Ability to lift heavy weights such as manhole covers.
Ability to maintain effective pretreatment and sludge disposal programs for wastewater customers.

DESIRABLE TRAINING AND EXPERIENCE (Depending on area of assignment).

Graduation from a four-year college or university with major course work in biology, chemistry, microbiology, soil science or related field. Some experience in water quality or soil lab work; or any combination of such training and experience. Possession of the Class IV - Water Treatment or Wastewater Treatment certification, as administered by the State of Louisiana, within three years of appointment to this position.