CLASS TITLE: ANALYTICAL CHEMIST

PURPOSE OF THE CLASSIFICATION: Under general supervision is responsible for performing and reviewing results of complex scientific and technical work involving instrumental inorganic chemical analysis of water, wastewater, stormwater, and environmental samples; and performs other related assigned duties.

ESSENTIAL TASKS:

- Performs complex instrumental analysis via atomic absorption, graphite furnace, spectroscopy and inorganic methodology under the Safe drinking Water, Act, Clean Water Act and other government regulations
- Reviews, analyzes, and interprets collected data
- Develops criteria and methods for selection and analysis of chemicals, source water, Industrial Pretreatment and other environmental samples for inorganic compounds
- Calibrates and maintains advanced technical laboratory instrumentation
- Performs independent studies and analytical method improvement and assists in the development of specifications for selection of laboratory instrumentation
- Maintains precise records and provides/presents various technical reports
- Performs safe chemical handling of toxic, caustic and acidic materials by following the Material Safety Data Sheet (MSDS) and chemical Hygiene Plan
- Conducts troubleshooting and maintenance of analytical instrumentation
- Trains, evaluates and directs subordinate employees as required
- Orders and maintains inventory of chemicals and consumable instrumentation parts
- Must report to work on a regular and timely basis

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential tasks.

QUALIFICATIONS:

<u>Training and Experience</u>: Graduation from an accredited college or university with a bachelor's degree in chemistry, or a closely related field, and two (2) years of experience involving environmental testing, various means of atomic absorption instrumentation and inorganic extraction procedures, including experience involving troubleshooting and maintaining specialized laboratory instrumentation; or an equivalent combination of training and experience per Personnel Policies and Procedures, Section 128.

Knowledge, Abilities and Skills: Comprehensive knowledge of the procedures, equipment, and technology of specialized instrumentation; considerable knowledge of theories, principles, and practices of inorganic chemistry; considerable knowledge of qualitative and quantitative inorganic chemical analysis; knowledge of safety standards in handling hazardous chemicals; and knowledge of federal, state, and local regulations pertaining to water, wastewater and environmental standards. Ability to prepare reports and maintain records; ability to train and advise subordinates; ability to communicate effectively, both verbally and in writing; and the ability to utilize the highest level of interpersonal skill in order to understand, select, develop, and motivate people at any level within or outside the organization.

<u>Physical Requirements:</u> Physical requirements include arm and hand steadiness and finger dexterity enough to use a keyboard and telephone; occasional lifting, carrying, pushing, and pulling up to 50 pounds; may be subject to walking, standing, sitting, reaching, bending, handling, and smelling; and vision, speech, and hearing sufficient to perform the essential tasks.

<u>Licenses and Certificates:</u> Possession of a valid Oklahoma Class "D" Operator's License.

WORKING ENVIRONMENT: Working environment is primarily indoors in a laboratory setting and may be exposed to various hazardous chemical, toxic fumes/vapors/odors, high noises/voltage and biohazards.

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Group: Cultural, Legal, and Sciences Series: Sciences

Effective date: June 20, 2012