CITY OF OCEANSIDE

REVISED: JANUARY 2006
CLASS CODE: 1611CE
UNIT: OCEA

ASSOCIATE CHEMIST

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

Under supervision, performs water, wastewater, sludge and industrial waste testing for regulatory compliance, plant process control, and laboratory certification using chemical, physical and biological analytical procedures; to maintain quality assurance, lab records, database, equipment, instrumentation and supplies; provide back up support for other laboratory staff; and to perform related duties as assigned.

EXAMPLES OF DUTIES – *Examples of duties performed by employees in this class may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.*

Performs physical, chemical and biological tests and analyses of water, wastewater, sewage sludge, soils and industrial waste for ammonia, cyanide, fluoride, TKN and MBAS; prepares chemical solutions and standards; maintains quality assurance documents and written records of all analyses; enters data into the main laboratory database; designs database queries and creates reports; performs maintenance on laboratory equipment; evaluates and recommends the purchase of new equipment; provides back-up support for other laboratory functions and may include field sampling; provides training to new personnel on the use of equipment and database.

MINIMUM QUALIFICATIONS

Knowledge of:

Principles, practices and applications of chemistry and microbiology.
Chemistry, math, and analytical techniques utilized in water/wastewater laboratories.
Mathematical principles including statistics and algebra.
Operational characteristics of various equipment utilized in water/wastewater laboratories.
Standard safety procedures and applications.
Pertinent Federal, State, and local laws, codes and regulations.
Modern office procedures, methods and equipment including computers and applicable software applications.
Principles and procedures of record keeping.
Principles of business letter writing and basic report preparation.

Ability to:

Perform a broad range of routine and non-standard bench tests utilizing a variety of laboratory instruments.
Perform complex chemical analyses.
Perform statistical calculations.
Adapt standard methods and techniques to different sample types.
Read and follow instrument manuals.
Operate and maintain laboratory facilities and equipment.
Maintain a database of tests conducted and data collected.
Maintain and update accurate records and files.

Prepare clear and concise reports.
Perform arithmetic calculations accurately.
Work independently and efficiently to carry out assignments.
Communicate clearly and concisely, both orally and in writing.
Understand and carry out oral and written instructions.
Establish and maintain effective relationships with those contacted in the course of work.

Experience and Training Guidelines

Experience:

Two years of experience in a water or wastewater laboratory performing instrumental, gravimetric and volumetric analyses and interpretations.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in the physical, chemical or biological sciences or a related field.

License or Certificate:

A current, valid, California driver's license. Possession of a Laboratory Analyst, Grade II certification issued by the AWWA or CWPCA within 24 months of appointment.

WORKING CONDITIONS

Environmental Conditions:

Laboratory environment; work with water, wastewater and sludge conducting laboratory tests; exposure to toxic chemicals, electrical or radiant energy and fumes or gases.

Physical Conditions:

Essential functions may require maintaining physical condition necessary for sitting and standing for prolonged periods of time; speaking and hearing to exchange information; operate a variety of laboratory equipment; visual acuity to conduct laboratory tests and read and interpret data; operation of City vehicle; collecting field samples from riverbeds, streams, lagoons, shores and oceans.