JOB DESCRIPTION

TITLE: Laboratory Specialist

SECTION: Laboratory

DEPARTMENT: Engineering

SRN:

REPORTING RELATIONSHIP:

Reports to: Laboratory Director

Supervises the following: Not applicable

DEFINITION: Perform the more difficult and complex chemical, physical and biological analyses of potable water, sewage system water, irrigation water and other environmental sources to determine quality, safety, and suitability of water for a variety of uses.

ESSENTIAL FUNCTIONS:

1. Performs routine and special complex chemical, biochemical, bacteriological and quantitative physical testing of domestic and well water, water reclamation plant influents and effluents, raw and digested sludge, reclaimed water, irrigation and drainage water and stormwater.

2. Ensures that analytical methods are in compliance with the requirements of regulatory agencies. Assists in achieving Laboratory Certification with the Department of Health Services.

3. Assists in establishing and monitoring district laboratory procedures.

4. Assists in the development and maintenance of laboratory information systems.

5. Coordinates reporting of analytical results to district personnel.

6. Maintains district analytical equipment in compliance with required analytical tolerances. Researches and proposes requisition of new laboratory equipment in order to take advantage of new advances, increasing accuracy and efficiency.

7. Assists in the development of the annual engineering department budget as it relates to the water quality laboratory.

8. Allied functions related to the operation of an accurate, efficient water quality laboratory.

MINIMUM QUALIFICATIONS:

License or Certificate: Valid Vehicle Operator’s License issued by the state Department of Motor Vehicles. Department of Motor Vehicles driving record may influence employment or classification.
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MINIMUM QUALIFICATIONS (Cont):

Experience: Any combination of training and experience, which would likely provide the required knowledge and abilities, is qualifying. A typical way would be to have ten years of experience in increasingly responsible positions in a water quality laboratory that performs analysis in an irrigation, domestic water, wastewater and stormwater or similar environment.

Education: Typically, the successful candidate will at minimum possess a Bachelor of Science Degree in Environmental Science, Chemistry, Biology, Bacteriology or a related field from an accredited college or university.

Knowledge of:
- Principles and practices of water quality analysis including chemistry, biochemistry, bacteriology and quantitative analysis.
- Regulations and requirements of the Department of Health Services relating to certification of a water quality laboratory.
- Chemicals, reagents and equipment used in a water quality laboratory.
- Chemical, biochemical, bacteriological and physical properties of domestic and well water, water reclamation plant influents and effluents, raw and digested sludge, reclaimed water, irrigation and drainage water and stormwater.
- General knowledge of the processes involved with irrigation, domestic water, sanitation and stormwater engineering.
- Laboratory safety.
- Data management and record keeping.
- General personal computer use and applications as they relate to water quality, spreadsheets and database management.
- Technical writing skills as required for the preparation of environmental compliance reports and correspondence.

Abilities:
- Perform complex analysis of chemical, biochemical, bacteriological and physical properties of domestic and well water, water reclamation plant influents and effluents, raw and digested sludge, reclaimed water, irrigation and drainage water and stormwater.
- Train others in the analysis of chemical, biochemical, bacteriological and physical properties of domestic and well water, water reclamation plant influents and effluents, raw and digested sludge, reclaimed water, irrigation and drainage water and stormwater.
- Maintain accurate records of the analyses performed in the water quality laboratory.
- Work cooperatively with others.
- Communicate effectively verbally and in writing.
PHYSICAL REQUIREMENTS:

1. Ability to sit or stand at laboratory benches and computer screens for extended periods of time, and tolerate the extended use of standard laboratory safety equipment.

2. Must be able to work safely in a hazardous environment with potential exposure to and presence of toxic, carcinogenic, mutagenic, radioactive and other tissue destructive chemicals, bacterial cultures, raw sewage and physical hazards. May work in areas containing dust, exhausts, fumes, and vapors.

3. Ability move light to medium weights including 1-gallon bottles, small ice chests and sample-laden carts.

4. Dexterity and agility to handle and wash fragile glassware.

5. Uses personal computer, keyboard, mouse and monitor for long periods.

6. Must tolerate the District immunization program.

See Human Resources for physical assessment form.