

COLLIER COUNTY, FLORIDA CLASSIFICATION SPECIFICATION

CLASSIFICATION TITLE: CHEMIST

PURPOSE OF CLASSIFICATION

The purpose of this classification is to perform microbiological and chemical analysis of environmental water and drinking water to ensure water quality and to ensure compliance with federal, state and local standards.

ESSENTIAL FUNCTIONS

The following duties are normal for this position. The omission of specific statements of the duties does not exclude them from the classification if the work is similar, related, or a logical assignment for this classification. Other duties may be required and assigned.

Serves as Laboratory Safety Officer; implements safety policies and procedures in compliance with applicable laws and regulations; follows safety procedures, utilizes safety equipment, and monitors work environment to ensure safety of employees and other individuals; updates materials safety data sheets (MSDS); disposes of hazardous waste materials per established procedures.

Schedules collection of various samples according to established guidelines; schedules main clearances.

Receives and logs samples from various sources; maintains chain of custody of samples to ensure integrity of test results.

Prepares microbiological media, reagents, and control samples; prepares stock buffer solutions; maintains quality control of media, dilution/rinse water, coliform confirmation, Millipore filters, petri dishes, thio-bags, and autoclaves.

Performs laboratory analysis of microbiological and chemical components; inputs and interprets data for various inorganic organic, and microbiological analysis; programs and runs analysis on autoanalyzer.

Performs standard chemical and bacteriological examinations to analyze samples as required by environmental agencies, department procedures, and standard laboratory procedures for various parameters; conducts testing to identify levels of alkalinity, ammonia, chloride, chlorine, conductivity, copper, fecal coliform, heterotrophic plate count, iron, lead, nitrate, pH, sulfate, THM, total dissolved solids (TDS), total suspended solids (TSS), total phosphorus, water hardness, or other analytes.

Maintains quality control; performs quality assurance and quality control procedures to ensure integrity of samples and test results; conducts quality assurance and quality control audits.

Maintains logs, charts, computer records, and other records of sampling activities, laboratory analysis, testing results, or other activities in compliance with regulatory reporting requirements and laboratory certifications on quality control, quality assurance, and laboratory procedures; monitors and logs temperatures of refrigerators, incubators, and water baths; monitors and records data for corrosion meter.

Calculates and records results of tests; compares results against standards.

Reports test results to regulatory agencies, supervisory personnel, water treatment plant personnel, or others as appropriate; informs Department of Environmental Protection (DEP) of results of main clearance inspections and results of all tests to meet regulatory requirements.

Operates a variety of machinery, equipment and tools associated with laboratory operations, which may include a laboratory truck, microscope, comparator, scale/balance, nanopure water system, dionized water system, autoclave, oven, magnetic stir plate, hot plate, incubator, laboratory refrigerator, spectrophotometer, ammonia meter, fluoride meter, pH meter, colony counter, autoanalyzer, titration burette, desiccator, propane torch, alcohol burner, vacuum pump, laboratory paraphernalia, laboratory glassware, medias, testing materials, hand tools, or two-way radio.

Performs general cleaning/maintenance tasks necessary to keep vehicles, equipment, and tools in operable condition, which may include inspecting equipment, refueling vehicles, calibrating laboratory equipment, washing/cleaning laboratory paraphernalia, sterilizing/decontaminating glassware, performing basic repair of laboratory equipment, cleaning laboratory truck, and cleaning shop/work areas; monitors equipment operations to maintain efficiency and safety; reports faulty equipment.

Monitors inventory levels of laboratory equipment, chemicals, and supply items; ensures availability of adequate materials to conduct work activities; initiates orders for new or replacement materials.

Prepares or completes various forms, reports, correspondence, chain of custody records, log books, daily/monthly reports, client reports, billing sheets, event forms, bench worksheets, data sheets, bacteriological analysis forms, work orders, inventory records, graphs, or other documents.

Receives various forms, reports, correspondence, log books, chain of custody forms, laboratory reports, data sheets, compliance lists, main clearance schedules, invoices, packing slips, engineering plans, site plans, street maps, standard methods, textbooks, material safety data sheets, policies, procedures, manuals, catalogs, directories, reference materials, or other documentation; reviews, completes, processes, forwards or retains as appropriate.

Operates a personal computer, general office equipment, or other equipment as necessary to complete essential functions, to include the use of word processing, spreadsheet, database, graphics, e-mail, Internet, or other computer programs.

Communicates with supervisor, employees, other departments, regulators, customers, contractors, local businesses, the public, and other individuals as needed to coordinate work activities, review status of work, exchange information, or resolve problems.

Maintains a comprehensive, current knowledge of applicable regulations, standards, and guidelines; maintains an awareness of new methods, trends, and advances in the profession; reads professional literature; maintains professional affiliations; attends workshops and training sessions as appropriate.

ADDITIONAL FUNCTIONS

Performs the duties of Laboratory Supervisor in absence of same.

Performs general/clerical tasks, which may include making copies, sending/receiving faxes, typing documents, filing documentation, or processing incoming/outgoing mail.

Performs other related duties as required.

In the event of a declared state of emergency, employees in this classification may be called to work during days or hours other than those for which they are regularly scheduled.

MINIMUM QUALIFICATIONS

Bachelor's degree in Chemistry, Biology, Microbiology, Environmental Science, Physical Science, or closely related field; supplemented by four (4) years previous experience and/or training that includes laboratory operations, laboratory analysis, chemistry, and water utility operations; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. May require possession and maintenance of a valid Florida driver's license. Fingerprinting may be required.

PERFORMANCE APTITUDES

Data Utilization: Requires the ability to evaluate, audit, deduce, and/or assess data using established criteria. Includes exercising discretion in determining actual or probable consequences and in referencing such evaluation to identify and select alternatives.

Human Interaction: Requires the ability to provide guidance, assistance, and/or interpretation to others regarding the application of procedures and standards to specific situations.

Equipment, Machinery, Tools, and Materials Utilization: Requires the ability to operate, maneuver and/or control the actions of equipment, machinery, tools, and/or materials used in performing essential functions.

Verbal Aptitude: Requires the ability to utilize a wide variety of reference, descriptive, advisory and/or design data and information.

Mathematical Aptitude: Requires the ability to perform addition, subtraction, multiplication and division; ability to calculate decimals and percentages; may include ability to perform mathematical operations involving basic algebraic principles and formulas, and basic geometric principles and calculations.

Functional Reasoning: Requires the ability to apply principles of influence systems, such as motivation, incentive, and leadership, and to exercise independent judgment to apply facts and principles for developing approaches and techniques to resolve problems.

Situational Reasoning: Requires the ability to exercise judgment, decisiveness and creativity in situations involving the evaluation of information against sensory, judgmental, or subjective criteria, as opposed to that which is clearly measurable or verifiable.

Leadership:

Customer Service:

Financial Accountability:

ADA COMPLIANCE

Physical Ability: Tasks require the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling, and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (12-20 pounds).

Sensory Requirements: Some tasks require the ability to perceive and discriminate colors or shades of colors, depth, texture, and visual cues or signals. Some tasks require the ability to communicate orally.

Environmental Factors: Performance of essential functions may require exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, humidity, rain, temperature extremes, fumes, hazardous materials, traffic hazards, water hazards, bright/dim light, toxic agents, disease, pathogenic substances, animal/wildlife attacks, or animal bites.

Collier County is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.