

## CITY OF MARGATE, FLORIDA JOB DESCRIPTION

**JOB TITLE: CHIEF CHEMIST (Job code 155).**

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### GENERAL STATEMENT OF JOB

Under the general direction of the Director of the Department of Environmental and Engineering Services (DEES) or the Director's designee, performs supervisory and advanced technical laboratory work, which requires skill at sampling, analysis techniques and reporting procedures incidental to the operation of the laboratory at the Water/Wastewater Treatment Plants. Also performs routine technical work in the chemical and bacteriological analyses of water/wastewater during various stages of treatment and processing. Responsibilities include directing, participating in, and supervising activities in the analysis of various chemical, physical, and bacteriological parameters that determine the efficiency of the plant. Work is reviewed through conferences and observation of efficiency, effectiveness, and results obtained.

### ESSENTIAL FUNCTIONS

**The following duties and functions, as outlined herein, are intended to be representative of the type of tasks performed within this position. They are not listed in any order of importance. The omission of specific statements of the duties or functions does not exclude them from the position if the work is similar, related, or a logical assignment for this description. Other duties may be required and assigned.**

Prepares and maintains lab reports for compliance with federal, state, and local government regulations including, but not limited to, EPA, FDEP, DOH, BCHD OSHA, and HRS.

Approves the requisition of supplies, equipment, and chemicals, and analyzes equipment for precision.

Consults with consulting and/or city engineers to evaluate plant processes or conduct research on improved procedures and equipment to determine if the product performs to the manufacturer's claim.

Supervises employees in data collection; reviews all lab data and sampling procedures to ensure Q.A./Q.C. procedures are followed; maintains Q.A./Q.C. documentation necessary to obtain and maintain lab certification by NELAC, EPA, FDEP, DOH, BCHD, and HRS.

Safely works with corrosive chemicals to obtain analytical results.

Schedules work, leave, and overtime for employees; recommends necessary disciplinary action; and evaluates and rates employee performance.

Performs chemical analyses, prepares chemical and bacteriological media, reagents, and test solutions routinely used in the laboratory, and performs metal analysis and sludge samples.

Works with other city departments on an as-needed basis to meet various government regulations, such as Storm Water Runoff sampling.

Performs routine chemical and bacteriological analyses of samples collection for tests such as alkalinity, ammonias, chlorides, fluoride, calcium, pH, and dissolved oxygen.

Calculates results of tests performed and maintains records per established policies and procedures.

Cleans glassware, laboratory, and equipment according to regulations.

Calibrates, repairs, and maintains laboratory equipment, and maintains supply inventories and equipment of laboratory.

Performs related work as required.

## **MINIMUM TRAINING AND EXPERIENCE**

Bachelor's degree in biology, chemistry, microbiology, chemical engineering, or other closely related area; supplemented by three (3) years' laboratory experience.

## **MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS**

Physical Requirements: Tasks involve some walking, standing, bending, stooping, some lifting and carrying objects of light to moderate (5 – 15 pounds).

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, or composite characteristics (whether similar to or divergent from obvious standards) of data, people or things.

Interpersonal Communication: Requires the ability to speak and/or signal people to convey or exchange information. Includes giving and receiving instructions, assignments and/or directions.

Language Ability: Requires the ability to read a variety of technical materials relevant to water/wastewater chemical and biological aspects, and regulatory practices concerning such.

Intelligence: Requires the ability to draw valid conclusions from testing and monitoring processes. Requires the ability to apply common sense understanding to perform semi-repetitive tasks and to utilize principles of rational and influence systems.

Verbal Aptitude: Must communicate efficiently and effectively in standard English. Must speak with poise, confidence, and voice control.

Numerical Aptitude: Requires the ability to add, subtract, multiply, and divide; calculate decimals and percentages; utilize algebraic and geometric principles.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape, and visually read various information.

Motor Coordination: Requires the ability to coordinate hands and eyes accurately for testing and inspection tasks and for record maintenance.

Color Discrimination: Requires the ability to differentiate colors and shades of color.

Interpersonal Temperament: Requires the ability to deal with people from a variety of departments and backgrounds in both giving and receiving information and instructions.

Physical communications: Requires the ability to talk and/or hear: (talking: expressing or exchanging information by means of spoken words; hearing: perceiving nature of sounds by ear.).

Environmental Requirements: Tasks required frequent exposure to adverse environmental conditions.

**KNOWLEDGE, SKILLS, AND ABILITIES**

Knowledge of city, county, state and federal law regarding wastewater treatment.

Knowledge of statistical analysis, algebra, and modern software applications.

Knowledge of the modern practices, principles and techniques of bacteriology and chemistry.

Knowledge of modern practices and principles of wastewater treatment.

Knowledge of supervisory practices and principles.

Knowledge of and experience in the use of polymers in wastewater treatment.

Ability to develop and utilize various laboratory test and wastewater samples.

Ability to prepare comprehensive analytical reports and to interpret test results.

Ability to establish and maintain effective working relationships with other employees, subordinates, superiors, city officials, regulatory agency officials, consultants, and the general public.

Skilled in laboratory manipulative techniques in following and adapting scientific methods and procedures.

**EQUAL OPPORTUNITY EMPLOYER**

The City of Margate, Florida, is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act (42 U.S. C. 12101 et. seq.), the City of Margate will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer. The physical demands described are representative of those that must be met by an employee to successfully perform the essential functions of this job.

I have read and acknowledge receipt of this Job description.

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Employee Name and Signature

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Date