City of San José CLASS SPECIFICATION

TITLE: Environmental Laboratory Manager (5117)

DEPARTMENT	ACCOUNTABLE TO	FLSA STATUS
Environmental Services	Deputy Director	Exempt

CLASS SUMMARY

Plans, organizes, and directs the operations of a chemical, biological, and instrumentation laboratory in the Environmental Services Department to provide critical services including analysis for monitoring operations and compliance at the Water Pollution Control Plant (WPCP), for monitoring industrial discharges to the Plant, and to support various studies aimed at understanding water quality issues in the Bay and urban tributaries. Performs highly complex consultation to senior staff within the department in activities involving laboratory services and water quality issues. Performs related work as required.

DISTINGUISHING CHARACTERISTICS

This class is distinguished from the Environmental Laboratory Supervisor in that it has responsibility for the operations of the entire chemical, biological and instrumentation laboratory, while the Environmental Laboratory Supervisor supervises a laboratory section that includes a staff of Chemists, Biologists or Microbiologists, and Laboratory Technicians. Additionally, this classification acts as a high level, internal technical consultant regarding laboratory services and water quality issues.

QUALIFICATIONS

(These qualifications are typically required. An equivalent combination of education, experience, knowledge, skills, and abilities sufficient to satisfactorily perform the duties of the job may be substituted.)

Minimum Qualifications

Education and Experience

Any combination of training and experience equivalent to successful completion of a Bachelor of Science degree in Chemistry, Microbiology, Chemical Engineering, Sanitary Engineering, Environmental Science or a closely related field (must include courses in analytical chemistry and bacteriology) and four (4) years of progressively responsible experience in laboratory work involving the chemical, bacteriological and instrumental analysis of wastewater including at least two (2) years of responsible supervisory and managerial experience in operating a Chemical, Biological, and Instrumentation Laboratory.

Required Licensing (such as driver's license, certifications, etc.)

None

Other Qualifications

(Incumbents may be required to have different combinations of the listed qualifications, or more specific job-related qualifications depending on the position.)

Basic Knowledge, Skills and Abilities

(Needed at entry into the job in order to perform the essential duties.)

- Knowledge of the principles, laws and regulations regarding water and wastewater treatment.
- Knowledge of the chemical and bacteriological characteristics of water, wastewater and industrial waste; general quantitative and qualitative analyses; organisms, particularly microorganisms

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common to fresh water, estuarine water and wastewater; standard laboratory equipment and its uses; sources of information related to water, wastewater and industrial waste analysis and sampling techniques and methods of statistical analysis.

- Knowledge of standard analytical procedures; administrative techniques, including planning, scheduling training and budgetary control functions; state and federal standards related to water pollution control and water quality; data processing techniques as applied to the solution of laboratory and plant processing problems; principles and techniques of effective supervision.
- Ability to interpret laboratory and Plant operating data and make sound recommendations for solving problems and increasing efficiency; prepare clear, complete and concise correspondence and reports of technical nature; and deal tactfully and effectively with other City employees, representatives of governmental and industrial organizations, and others.
- Ability to manage, motivate and lead laboratory personnel in a positive and effective manner.
- Ability to prepare and administer a program budget.
- Ability to understand, interpret and explain City, departmental, and division policies and procedures.

Desirable Qualifications

(Knowledge, skills and abilities; licenses, certificates, education, experience that is more position specific and/or likely to contribute to more successful job performance.)

- A Master of Science degree from an accredited college or university in Chemistry, Microbiology, Chemical Engineering, Sanitary Engineering, Environmental Science or a closely related field.
- Knowledge of the bacteriological and chemical characteristics of potable water, wastewater and
 related effluents; general chemical qualitative and quantitative analysis and bioassays,
 microorganisms, organic and non-organic pollutants of water and wastewater; methods,
 procedures and sample chain-of-custody requirements, modern state-of-the-art instrumentation
 and its effective utilization; sources of information on wastewater and industrial waste control.
- Ability to design laboratory programs to meet the needs of varied operating units; develop and evaluate complex research projects; develop and evaluate process control, regulatory compliance monitoring and laboratory quality assurance programs.

DUTY	TYPICAL CLASS ESSENTIAL DUTIES: (These duties and estimated	FRE-
NO.	frequency are a representative sample; position assignments may vary	QUENCY*
	depending on the business needs of the department.) Duties may include, but	
	are not limited to, the following:	
1.	Directs the operations of the chemical, microbiological and bioassay laboratories. Supervises staff to include: prioritizing and assigning work; conducting performance evaluations; ensuring staff are trained; and, making hiring, termination, and disciplinary recommendations and any other recommendations related to the change in status of employees.	Daily
2.	Serves as a member of the Senior Management Team; assists in the development and implementation of department goals, objectives, policies and procedures; provides highly responsible professional and technical advice to senior staff within the department.	Weekly

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	depending on the business needs of the department.) Duties may include, but	
	are not limited to, the following:	
3.	Performs administrative duties for the laboratory, including preparation and control	Daily
	of the annual laboratory operations budget and monitoring of new developments;	
	evaluates equipment and procedures related to laboratory operations, recommends	
	purchase of state-of-the-art instrumentation and institutes changes in procedures to	
	meet the laboratory's goals and to effectively utilize personnel.	
4.	Plans, organizes, reviews and evaluates laboratory programs that support wastewater	Daily
	treatment plant operations and processes, industrial waste compliance monitoring	
	and revenue, National Pollutant Discharge Elimination System (NPDES) permit	
_	monitoring and Environmental Protection Agency (EPA) pretreatment requirements.	3.6 .11
5.	Directs the implementation of the Regional Water Quality Control Board's	Monthly
	biomonitoring requirements which include the performing of flow-through bioassays.	
6.	Provides technical consultation to engineering, operations and industrial waste staff	As Required
	as required in the evaluation, investigation and solution of problems where	
	laboratory analysis is necessary.	
7.	Researches and prepares a variety of highly technical and administrative reports;	Weekly
	prepares written correspondence on the more sensitive issues; prepares and presents	
	information at professional conferences, committees, and to City Council upon	
	request.	<i>p</i>
8.	Implements a vigorous quality assurance program; recommends improvements in	Daily
	procedures and methods to maintain a high quality work product.	4 D ' 1
9.	Compiles and prepares correspondence and periodic technical evaluations of new	As Required
	programs as required by the Regional Board, State Board and EPA; directs the	
10.	preparation of extensive reports and records. Coordinates the use of a laboratory data management system, confers with	Weekly
10.	programming staff regarding applications.	WCGKIY
11.	Represents the division and department to outside agencies and organizations;	As Required
11.	participates in professional groups and committees; acts as a technical and	115 Required
	professional resource providing support and assistance reflective of the City's	
	concerns and interests.	
12.	Performs other duties of a similar nature or level.	As Required

^{*}Frequency defined as %, (totaling 100%) <u>or</u> "Continuous" (daily or approximately 20%+), "Frequent" (weekly or approximately 15%+), "Occasional" (monthly or approximately 10%+), "As Required" (Intermittent or 5% or less)

CLASSIFICATION HISTORY: Established 7/7/80; Revised & retitled Laboratory Supervisor 8/88 (Formerly Senior Chemist); Revised 10/88; s000; revised and retitled Environmental Laboratory Manager 8/08; s001