

ESSENTIAL DUTIES

Laboratory Analyst Grade I

Assists the laboratory supervisor in coordinating the activities and operations of the laboratory and overseeing lower level staff. (As required, assists in training or other laboratory and pretreatment staff).

Designs and performs laboratory analyses and develops new methods and techniques of analysis.

Performs chemical and physical analysis of water, wastewater, stormwater and industrial water to ensure compliance with federal environmental compliance regulations.

Monitors and reviews the results of the quality assurance/control program and analyzes laboratory data and recommends treatment modifications.

Calibrates, operates and maintains wastewater laboratory equipment including, but not limited to, analytical balance, dissolved oxygen meter, pH meter, specific ion electrodes, specific conductance meter, heating apparatus, stirring apparatus, incubator, autoclave, sterilizer, water bath, oven muffle furnace, dessicator, spectrophotometer, atomic absorption spectrophotometer, phase contract microscope, vacuum pumps, programmable calculator, distillation apparatus, and bunsen burner.

Operates and maintains field wastewater monitoring equipment including, but not limited to, automatic composite sampler, flumes, weirs, pressure transducer/interrogator level monitor, dipper flowmeter, portable pH meter, portable specific conductance meter and field dissolved oxygen meter.

Conducts physical, chemical and biological analyses of water, wastewater, sludge, settleable constituents, floatable constituents and soils including, but not limited to, acidity, alkalinity, biochemical oxygen demand, boron, calcium, chemical oxygen demand, chloride, chlorine residual, coliform MPN, fecal coliform, grease, hardness, magnesium, nitrogen (ammonia, kjeldahl, nitrate, nitrite, organic) pH, phosphate, potassium, solids (settleable, suspended, total volatile), specific conductance, sulfate, surfactant volatile acids, heavy metals, water suitability and inhibitory residue.

Writes and evaluates reports regarding industrial, commercial and institutional discharge site visits.

ESSENTIAL DUTIES

Laboratory Analyst Grade II

Assists the laboratory supervisor in coordinating the activities and operations of the laboratory and overseeing lower level staff. (As required, assists in training or other laboratory and pretreatment staff).

Designs and performs laboratory analyses and develops new methods and techniques of analysis.

Performs chemical and physical analysis of water, wastewater, stormwater and industrial water to ensure compliance with federal environmental compliance regulations.

Monitors and reviews the results of the quality assurance/control program and analyzes laboratory data and recommends treatment modifications.

Calibrates, operates and maintains wastewater laboratory equipment including, but not limited to, analytical balance, dissolved oxygen meter, pH meter, specific ion electrodes, specific conductance meter, heating apparatus, stirring apparatus, incubator, autoclave, sterilizer, water bath, oven muffle furnace, dessicator, spectrophotometer, atomic absorption spectrophotometer, phase contract microscope, vacuum pumps, programmable calculator, distillation apparatus, and bunsen burner.

Operates and maintains field wastewater monitoring equipment including, but not limited to, automatic composite sampler, flumes, weirs, pressure transducer/interrogator level monitor, dipper flowmeter, portable pH meter, portable specific conductance meter and field dissolved oxygen meter.

Conducts physical, chemical and biological analyses of water, wastewater, sludge, settleable constituents, floatable constituents and soils including, but not limited to, acidity, alkalinity, biochemical oxygen demand, boron, calcium, chemical oxygen demand, chloride, chlorine residual, coliform MPN, fecal coliform, grease, hardness, magnesium, nitrogen (ammonia, kjeldahl, nitrate, nitrite, organic) pH, phosphate, potassium, solids (settleable, suspended, total volatile), specific conductance, sulfate, surfactant volatile acids, heavy metals, water suitability and inhibitory residue.

Writes and evaluates reports regarding industrial, commercial and institutional discharge site visits.

ESSENTIAL DUTIES

Laboratory Analyst Grade III

Plans, priorities, assigns, supervises and reviews work performed on the chemical, biological, and bacteriological analysis of wastewater, biosolids, soils, and industrial pre-treatment waste samples.

Performs specialized tests and analyses on raw and digested sludges and water, including tests for volatile and suspended solids, volatile acids, alkalinity, chlorides, biochemical oxygen demand, coliform MPN, and standard plate counts.

Evaluates the work of laboratory personnel engaged in chemical, physical, biological, biochemical and instrumental analysis to insure laboratory quality standards are maintained and work is completed according to schedule.

Provides technical information, recommends and assists in the implementation of goals and objectives, and interprets and implements policies and procedures.

Provides preliminary written reports on results, reviews data prepared by lower level staff, reviews literature on technical issues and prepare reports on special projects.

Maintains the quality assurance program as specified by the Environmental Protection Agency and other regulatory agencies.

Participates in the selection, training, motivation and evaluation of staff; participates in the monitoring of employee performance objectives; prepares employee performance reviews; provides or coordinates staff training; and implements disciplinary procedures.

Analyzes and interprets laboratory data and recommends changes to water and wastewater treatment plants to insure quality standards.

Establishes schedules and methods for collecting samples.

Directs special investigations in wastewater, soils, biosolids waste, industrial pretreatment, process controls and recommends changes as appropriate.

Prepares, organizes, and completes monthly, quarterly, and annual wastewater discharge and biosolid reports, and ensures compliance with established permits and regulations.

Provides or coordinates staff training and works with employees to correct deficiencies.

Participates in the preparation and administration of the laboratory budget, submits budget recommendations and monitors expenditures.

Estimates time, materials and equipment required for job assignments and orders materials as required.

ESSENTIAL DUTIES

Laboratory Analyst Grade IV

Manages laboratory division staff, including developing and implementing laboratory division plans, goals and objectives consistent with authority goals and objectives.

Directs, controls and implements laboratory services for the analysis of wastewater, potable water and industrial wastewater.

Manages laboratory division budget, including: (a) preparation of budget and staffing recommendations; (b) initiating and/or approving purchase requests; (c) adhering to purchasing policies and procedures; and (d) monitoring expenditures to ensure that division's expenses remain within budget.

Manages monitoring programs and ensures that all monitoring program reporting requirements are met. Monitoring programs include: (a) discharge monitoring, (b) ocean water monitoring, (c) in-house biosolids and residuals monitoring, and (d) stormwater permit monitoring.

In support of monitoring programs performs analyses on samples of wastewater, wastewater solids and industrial wastewater using standard physical, chemical and bacteriological instrumental methods.

Ensures laboratory maintains current and appropriate certifications with State Department and Health Services.

Develops and implements plant and field sampling and testing programs.

Manages authority revenue sampling programs, including collection systems program and analysis; data collection, compilation, and review; and quarterly and annual report preparation.

Keeps current on new federal, state, and local wastewater related regulations and their impact on monitoring and other related programs.

Reviews and prepares written comments and recommendations on proposed federal, state and local wastewater regulations.

Reviews and approves staff recommendations on division work organization, assignments, work schedules and training needs.

Identifies and addressing division training needs.

Reviews and disciplinary actions.

Prepares and approves technical reports and correspondence on various matters as required and approves sections of National Pollution Discharge Elimination Systems (NPDES) reports pertaining to analytical data.

Coordinates laboratory services with operations, pretreatment programs and municipal supplies.

Establishes staffing supply, and equipment budget needs for the laboratory, prepares justification and support documentation, and compiles annual budget requests.

California Water Environment Association | Technical Certification Program

Oversees and ensures the laboratory accreditation and quality assurance programs to meet EPA and other regulatory requirements.

Assists in the establishment of discharges and in the review of applications for discharge of industrial wastewater and contaminated groundwater to sewer system.

Represent City and Treatment Plant in public and private meetings on matters relating to analytical procedures.