DUTY STATEMENT

Employee Name:	Position Number: **580-722-5591-013**
Classification: Research Scientist III (Chemical Sciences)	Tenure/Time Base: Permanent/Full Time
Working Title: Analytical Chemist	Work Location: 850 Marina Bay Parkway, Richmond, CA 94804
Collective Bargaining Unit: BU 10	Position Eligible for Telework (Yes/No): No
Center/Office/Division: Center for Laboratory Sciences/Division of Environmental Health Laboratories	Branch/Section/Unit: Drinking Water and Radiation Laboratory Branch/Chemistry & Radiochemistry Section/Chemistry Unit

All employees shall possess the general qualifications, as described in California Code of Regulations Title 2, Section 172, which include, but are not limited to integrity, honesty, dependability, thoroughness, accuracy, good judgment, initiative, resourcefulness, and the ability to work cooperatively with others.

This position requires the incumbent to maintain consistent and regular attendance; communicate effectively (orally and in writing) in dealing with the public and/or other employees; develop and maintain knowledge and skill related to specific tasks, methodologies, materials, tools, and equipment; complete assignments in a timely and efficient manner; and adhere to departmental policies and procedures.

All California Department of Public Health (CDPH) employees perform work that is of the utmost importance, where each employee is important in supporting and promoting an environment of equity, diversity, and inclusivity, essential to the delivery of the department's mission. All employees are valued and should understand that their contributions and the contributions of their team members derive from different cultures, backgrounds, and life experiences, supporting innovations in public health services and programs for California.

Competencies

The competencies required for this position are found on the classification specification for the classification noted above. Classification specifications are located on the California Department of Human Resource's Job Descriptions webpage.

Job Summary

This position supports the California Department of Public Health's (CDPH) mission and strategic plan by leveraging technology to enhance laboratory services, increase timeliness and efficiency of laboratory procedures, supports the quality of regulatory functions through high quality data and methodologies required for new regulations, and contributes to advanced protective measures and risk reduction.

The incumbent works under the general direction of the Research Scientist Supervisor I (Chemical Sciences) (RSSI (CS)) in the Chemistry and Radiochemistry Section, Chemistry Unit of the Drinking

Water and Radiation Laboratory Branch (DWRLB). The Research Scientist III (Chemical Sciences) (RSIII (CS)), plans, organizes, and directs scientific research studies of a highly developed scope and complexity. The RS III (CS) implements standardized high-complexity laboratory tests and selects or develops and validates non-standard scientific analytical methods, techniques, and procedures to provide accurate and quality results on studies for new and existing emerging chemical contaminants of public health concern. The RSIII (CS) works with advanced analytical equipment to identify and quantify illicit drug residues and/or marine toxins in powders, solids, and other environmental matrices. The RSIII (CS) selects, optimizes and implements analytical methodologies for the detection and identification of illicit drugs residues under the umbrella of community-based drug surveillance in the harm reduction program and assists with marine biotoxins analysis in shellfish. The RSIII (CS) is responsible for preparing and submitting scientific reports, composing, reviewing, updating, and submitting standard operating procedures (SOPs) and implementing good laboratory practices (GLP). Plans, coordinates, performs, and oversees quality assurance activities (including performance testing sample analysis) to maintain quality, works in a team environment, trains and assists staff in the use of new and existing technologies and methodologies. The incumbent acts as a scientific advisor and represents the Unit in trainings, meetings, and scientific conferences.

Special Requirements

- ☐ Conflict of Interest (COI)
- ☐ Background Check and/or Fingerprinting Clearance
- ☐ Medical Clearance
- ☐ Travel: 5%
- ☐ Bilingual: Pass a State written and/or verbal proficiency exam in
- ☐ License/Certification:
- ☐ Other:

Essential Functions (including percentage of time)

40% Independently develops, implements, optimizes, validates new methods development and conducts high complexity scientific research studies on illicit drugs, adulterants and others, and supports method development, adaptation, optimization, and validation of high complexity analytical methodologies for the detection and identification of the above mentioned chemicals in different matrices such as powders, solids, wastewater, and others as needed. The RS III (CS) assists other programs and analysts with the analysis of marine biotoxins such as paralytic shellfish toxins in shellfish when necessary or as directed. Provides technical leadership advancing existing analytical methodologies (e.g., High-Res LC-MS, (UP)LC-MS/MS, GC-MS, GC-MS/MS, ICP-MS and other). Generates technical data to support regulations, good laboratory practices, and compliance protocols. Maintains expertise by assessing recent scientific developments and new technologies about technology and analytical instrumentation needs in emerging contaminants of concern to public health.

25% Independently performs analyses for organic, inorganic contaminants, general parameters such as chlorine measurements, pH, and other techniques as required by application needs. Uses automated sample process analyzers and 96-well plate sample processing extractors (SPE), centrifuges and evaporators independently, and any other analysis and equipment required to support the analyses of illicit drugs or marine biotoxins. Operates highly specialized analytical

instrumentation and maintains expertise and high-level proficiency in instrument operation. Develops compound databases, spectral libraries and uses advance unknown compound identification software. Provides troubleshooting and service on a user level or beyond and maintains instrumentation consistent with manufacturer's recommendations. Documents and maintains records on system performance and maintenance following Good Laboratory Practices (GLPs).

15% Uses Laboratory Information Management Systems (LIMS) to accession samples, enter data analysis results, and generate results reports. Prepares opioid sampling kits and coordinates shipments, tracks and receives samples. Maintains detailed and accurate laboratory documentation for all sample related data using Microsoft suite programs. Prepares accurate and complete data packages and analytical reports according to quality assurance protocols. Prepares presentations of technical data and methodologies and participates in laboratory training activities for other employees and clients as needed. Works effectively with senior and junior employees and assists them with receiving, evaluating, and reporting technical data to support regulations, GLPs, and compliance protocols. Works within guidelines and deadlines as required by federal and state regulations and supported programs.

15% Prepares and updates standard operating procedures (SOPs) for new and existing analytical methodologies to maintain certification for regulatory and non-regulatory analysis under ISO 17025, US FDA and US EPA accreditation protocols using Microsoft suite programs. Serves as a subject-matter expert (SME) and technical lead for junior scientists and external partners and clients. Trains and assists staff in the use of new and existing technologies. Briefs supervisor regularly regarding progress of ongoing projects and in developing or anticipated difficulties. Attends scientific and technical meetings on new technologies and presents scientific research results to technical experts and the community. Supports quality control program as needed to maintain laboratory certifications and accreditation. Prepares laboratory for inspections and maintains essential compliance documents. Works with the administrative team to request purchase orders for instruments and laboratory supplies and consumables, including instrument parts, reference standards, reagents, and other materials. Handles hazardous waste and apply safety protocols as well as good laboratory practices to maintain and promote a high standard laboratory.

Marginal Functions (including percentage of time)

5% Acts as a liaison to technical and scientific staff from other CDPH programs. Acts as a technical advisor for supported programs and clients. Coordinates technology and information exchange with other agencies. Assists RSSI (CS) in consulting with other departments and agencies on technical issues. Works with and assists senior and junior staff with other duties as needed.

☐ I certify this duty statement represents an accurate description of the essential functions of this position. I have discussed the duties and have provided a copy of this duty statement to the employee named above.

☐ I have read and understand the duties and requirements listed above and am able to perform these duties with or without reasonable accommodation. (If you believe reasonable accommodation may be necessary, or if unsure of a need for reasonable accommodation, inform the hiring supervisor.)

Supervisor's Name: **Syrago Petropoulou**	Date	Employee's Name:	Date

Supervisor's Signature	Date	Employee's Signature	Date

HRD Use Only:
Approved By: AM
Date: 3/24/25