

☐	Current
☒	Proposed

Classification / Working Title Environmental Scientist	Employee Name				
Position Number 014-767-0762-008	Supervisor Name / Classification Audrey Tu Sr Environmental Scientist (Supervisory)				
Division / Branch / Unit Inspection Services / Center for Analytical Chemistry	Effective Date				
Collective Bargaining Unit Identifier (CBID) R10	Work Week Group (WWG) 2				
Tenure Permanent	Timebase Fulltime				
Physical CDFA Headquarters Location 169 E Liberty Ave, Anaheim CA 92801	Division / Program Hyperlink https://www.cdfa.ca.gov/is/cac/				
As an employee of the California Department of Food and Agriculture (CDFA), we are stewards of public resources, we operate in a transparent, authentic, and ethical manner and are accountable for our actions. We expect true, open partnership with our colleagues within CDFA and with our partners outside of CDFA. We demonstrate courtesy, dignity, compassion, and consideration in every interaction. Together, we strive to create a workplace and implement programs that promote diversity, equity, belonging, and accessibility. We base our vision for the future and our everyday decisions on fair, objective measures and cutting-edge science.					
Division / Branch / DAA Information: The Center for Analytical Chemistry (CAC) provides analytical expertise in environmental, food, and fertilizer safety, and in issues concerning crop protection, farm worker safety, data gathering activities, and emergency response. The Center is comprised of two main programs: Environmental Safety and Food Safety. The Environmental Safety laboratories (ESL) provide vital analytical support to the California Department of Pesticide Regulation (DPR) and California Environmental Protection Agency (CalEPA) by performing soil, water, and air analyses mandated by various environmental laws; monitoring pesticide exposure of field workers; and by performing regulatory testing of pesticides for label compliance. ESL also assists the Feed, Fertilizer, and Livestock Drugs Regulatory Services branch (FFLDRS) through the provision of label compliance testing of commercial fertilizers. The Food Safety laboratories (FSL) support DPR, US Department of Agriculture (USDA), and US Environmental Protection Agency (US-EPA) in their legislative tasks as well as the California County Agricultural Commissioners in their enforcement activities by conducting chemical analyses on environmental and food samples to monitor for and collect data on hazardous agrochemicals such as pesticides and their metabolites. The independent Quality Assurance (QA) section provides support to the CAC in the implementation and management of International Standards Organization (ISO) 17025 accreditation program, quality assurance of its testing activities, method reviews and validation and compliance audits.					
Position Identification: Under general supervision of the Senior Environmental Scientist (Supervisory), the Environmental Scientist will conduct analyses, gather scientific data, review and report on pesticides and other chemicals that affect the environment and the food supply. The incumbent is responsible for providing depositions and analytical expertise on disputed analytical results. The Environmental Scientist (ES) position is a single classification where the incumbent can be assigned any duties within the class concept.					
Special Requirements: <table border="0"> <tr> <td>☐ Conflict of Interest Filer (Form 700)</td> <td>☐ California Driver's License</td> </tr> <tr> <td>☒ Medical Clearance</td> <td>☐ Travel Required over 10% - Employer Pull Notice (EPN) Required</td> </tr> </table>		☐ Conflict of Interest Filer (Form 700)	☐ California Driver's License	☒ Medical Clearance	☐ Travel Required over 10% - Employer Pull Notice (EPN) Required
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☐ License / Certificate Required ☐ Bilingual: Pass a State written and/or verbal proficiency exam in _____ ☐ Telework (TW) Eligible: The amount of telework is at the discretion of the CDFA. It is based on the current TW policy and is subject to change.	☐ Field Work: ____ % ☐ Other (Specify): _____
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Essential Functions:
Incumbents in Range A will perform a variety of less difficult tasks. The incumbent, under close supervision, follows detailed work instructions to perform environmental analysis and research to gather data on environmental issues.

Range B is the intermediate working level under general supervision. The incumbent performs a variety of scientific work; gathers data on environmental issues; performs environmental analysis, research, and studies of average difficulty; writes preliminary reports; prepares routine correspondence; and provides data and compliance documents to regulatory agencies.

Range C is a full journey level working under direction, performing a variety of professional scientific work. Incumbent independently performs complex environmental analysis, research, and studies; writes final laboratory reports; assists in the preparation and review of regulatory and compliance documents; prepares non-routine correspondence and provides consultation to governmental agencies.

40%	Environmental Sample Analysis • Analyze environmental and food samples, such as water, soil, foliage, produce, milk, swabs, biological materials, clothing, commercial fertilizers, and air using gas and liquid chromatographs coupled with various detectors such as mass spectrometers to obtain quantitative values of environmental contaminants including toxins, pesticides, and their metabolites. • Conduct analyses and collect critical, realistic pesticide residue data for the local, state and federal agencies in their risk assessment and enforcement activities and assist in developing pollution prevention strategies and assess regulatory requirements. • Analyze pesticides and quaternary ammonium chloride products for label compliance following the National Enforcement Investigational Center's guidelines. • Analyze minerals, dietary supplements, heavy metals, and copper containing herbicides, by Inductively Coupled Plasma analyzer (ICP-OES), flame and graphite furnace atomic absorption spectrophotometers to support the Fertilizing Materials Inspection Program and Integrated Pest Control branch. • Perform quantitative gravimetric analysis and Microscopy on food and fertilizer materials following approved methodologies. • Prepare equipment and materials required for environmental sample analysis using established laboratory methods and procedures to ensure data quality and defensibility. • Communicate orally, electronically and in writing with management and project/study leaders on the status of sample analyses to ensure contract compliance, and meeting client needs in a timely and professional manner. • Conduct homogeneity studies for the prepared proficiency test samples program.
25%	Method Validation and Verification • Review or revise existing methods, Standard Operating Procedures (SOP), and work instructions using established scientific techniques and methods to meet customer needs; determine the accuracy and validity of the methods on new matrices and on alternate technologies.

	• Perform validation of analytical methods according to laboratory procedures and protocols to ensure established scientific techniques are followed, meet customer needs, and in compliance with ISO 17025 requirements. • Apply scientific methods and principles in the identification, research, and solution of problems in environmental monitoring of toxic and hazardous materials management to meet the California Environmental Quality Act (CEQA) requirements as requested by other CDFA programs, other State and Federal agencies such as the County Agricultural Commissioners, EPA, U.S. Food and Drug Administration, and USDA. • Review data results using established scientific and statistical methods to ensure data quality and compliance with ISO 17025 requirements. • Prepare and submit preliminary environmental reports based on complex analytical results from investigations and studies for clients and stakeholders.
20%	Environmental Sample Preparation • Prepare environmental and food samples for analysis using appropriate extraction, clean-up, and digestion techniques to ensure sample quality meets the specified requirements in SOPs. • Prepare sample extracts following established SOPs to meet calibration range and linearity. • Wash, clean, and prepare glassware according to specific analysis. • Prepare proficiency test samples under the guidance of USDA and the Association of Official Analytical Collaboration (AOAC) International and distribute them to clients. • Handle and dispose of toxic and hazardous materials according to the laboratory's procedures and SOPs to comply with State and Federal laws and regulations to protect employees' health and safety, and the environment. • Document in both written and electronic logs all sample preparation procedures as specified in Laboratory Quality Manual to ensure data quality meeting client needs and complying with established scientific standards.
10%	Equipment Troubleshooting and Maintenance • Perform basic daily routine maintenance of equipment as specified in equipment manual and laboratory procedures that meet client needs and comply with contract requirements. • Perform and document troubleshooting, and basic instrument repairs as specified in equipment manuals and laboratory procedures to ensure data quality. • Monitor environmental conditions such as temperature of laboratory area and laboratory equipment to ensure optimal environment condition for running analysis.
Non-Essential/Marginal Functions:	
5%	Other related duties as assigned.
Desirable Qualifications: • Education and experience in analytical chemistry • Strong Collaboration and Interpersonal Skills • Highly adaptable, comfortable with change, and committed to continual growth and development • Effective multi-tasker • Demonstrated experience with project and time management • Ownership of work and a dedication to mission objectives	
Work Environment and Equipment Used: The duties of this job are performed indoors approximately 100% of the time. The employee's workplace has the necessary laboratory equipment and supplies for performing required analyses. The employee has desk space, materials, and a computer necessary to perform required tasks. The building has an air-conditioning/heating system. The employee may be exposed to fumes, gases, or odors in certain work areas.	

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
HUMAN RESOURCES BRANCH
DUTY STATEMENT
SO-92 (EST. 12/2025)

Employee Certification

This duty statement reflects the typical duties of the essential functions described for the position. It is not considered an all-inclusive list of work requirements. I have read and discussed the duties of this position with my supervisor and understand I may perform other duties as assigned, including but not limited to, work in other functional areas to cover absences, peak work periods, or balance workload.

I certify I possess qualifications, including but not limited to, integrity, initiative, dependability, good judgement, and the ability to work cooperatively with others. Additionally, I am able to perform the assigned duties with or without reasonable accommodation. Should I have any concerns about performing the assigned duties, I will discuss them with the hiring manager who will provide the required information for the Office of Civil Rights.

I have read the duty statement and discussed the duties with my supervisor.

Employee Name (Print)	Signature	Date
Supervisor Statement: I have discussed the duties outlined in the duty statement and provided a copy to the employee.		
Supervisor Name (Print)	Signature	Date

CC: Employee
Official Personnel File
Supervisor's Drop File