

**California Department of Food and Agriculture
Animal Health and Food Safety Services
Milk and Dairy Food Safety Branch
Environmental Scientist
Duty Statement**

I. Program/Position Identification

The Milk and Dairy Food Safety Branch (MDFS) is responsible for ensuring that milk, dairy products, and products resembling milk products (PRMP's) are safe, unadulterated, and properly labeled to safeguard public health. The Branch inspects dairy farms, bulk milk tanker trucks, and milk processing plants; issues permits and licenses to dairy farms and processing facilities; collects samples for regulatory testing to ensure compliance with food safety and quality standards; reviews product labels for conformance with regulations to avoid misleading information for consumers; completes in-depth reviews and food safety assessments of complex equipment or novel processing methods, and evaluates and licenses technical food safety competencies of dairy industry workers. The Branch also responds to food safety incidents, and initiates product impounds and recalls as warranted. Branch personnel provide training and supervision for county Approved Milk Inspection Services and conduct ratings and inspections of farms, processors, and manufacturers of single-service dairy containers for compliance with requirements of the United States Food and Drug Administration (FDA) to ensure approval of California dairy products in interstate commerce. In addition, the Branch ensures that commercial laboratory testing used to determine the basis of payment for milk or for screening of milk for drug residues prior to processing is conducted according to required methods to protect consumers and the marketplace.

Under the supervision of the Senior Environmental Scientist (SES) Supervisory, the incumbent will conduct environmental health inspections on dairy farms and at milk processing and PRMP plants, gather scientific data, research and investigate food safety hazards, test pasteurization equipment for proper operation and food safety controls, and provide analytical expertise and reports on specific food safety parameters on dairy farms, milk processing plants, bulk milk haulers and other dairy food and PRMP facilities, including those associated with possible illegal sales of substandard dairy products to California consumers.

Classification:	Environmental Scientist
Working Title:	Environmental Scientist
License or Other Requirement:	Registered Dairy Inspector Certificate Valid California Driver's License
Position Number:	014-165-0762-031
Division:	Animal Health and Food Safety Services
Branch:	Milk and Dairy Food Safety Branch
Location:	Modesto, CA
Date Prepared:	December 2024
Work Hours/Shift:	Full-Time

II. Essential and Non-Essential Job Functions

Incumbent in Range A will perform a variety of less difficult and responsible professional dairy food safety field work. In accordance with detailed instructions and with close supervision from the supervisor, the incumbent reviews facilities and people for food safety competency and risk, collects appropriate samples to evaluate food safety risk, gathers data on laboratory analysis results; prepares draft reports, performs preliminary analysis and research.

Range B is the intermediate working level under general supervision. Incumbent independently performs duties with moderate supervisor instruction. Risk analysis and evaluations are of average difficulty. Incumbent writes preliminary reports; prepares routine correspondence and provides data for regulatory and compliance documents.

Range C is a full journey level under direction of the supervisor; incumbent performs a variety of responsible professional scientific field work. Incumbent independently performs complex instrument and equipment testing and analysis, research, investigations and studies; writes final laboratory and facility food safety reports; assists in the development and analysis of regulations, plans, policies, procedures, alternative technologies, practices, criteria and guidelines; prepares non-routine correspondence and provides consultative advice to governmental entities and agencies.

The Registered Dairy Inspector Certificate is required by State law for person's conducting regulatory inspections of dairy farms and milk processing plants and must be obtained prior to placement.

A. Essential Functions:

Function #1: Assess Food Safety Status of Dairy Food Processing Facilities 30%

- Utilize and maintain knowledge of current state-of-the-art field equipment and technologies to obtain measurements of dairy foods and food processing parameters that relate to food safety or component analysis
- Travel and respond to emergency food contamination incidents or food-borne illness outbreaks linked to milk products plants: conduct potentially complex environmental health investigations to identify, mitigate and correct the cause of contamination and emerging issues; prepare protocols, procedures, questionnaires, and guidelines for investigation; and serve impound notices and/or official quarantine recall orders, as directed
- Collect and review documentation and distribution information of recalled dairy food products; analyze documents collected for completeness and follow-up with regulated firms to ensure that all impacted products' distribution information has been provided; ensure that recalled foods are properly segregated for rework or destruction; manage and oversee the voluntary condemnation and destruction of adulterated recalled foods in a manner that prevents their diversion or scavenging by the public
- Investigate and resolve all complaints received, from consumers, industry or other public or environmental health agencies in a timely manner, including traveling to any follow-up inspections, sampling and/or collaboration with allied agencies, as necessary
- Prepare and complete complex and highly specialized environmental health investigation reports; summarize data from foodborne outbreak investigation; take lead responsibility in

completing independent reviews of risk management plans for dairy food processing facilities, make formal written recommendations for MDFS management with resolutions for appropriate changes to firm's process or procedures that will prevent potential future problems or violations

- Develop and implement an inspection schedule for assigned milk products plants, including routine environmental health evaluations, official scored evaluations, and pasteurization equipment testing, to ensure proper sanitary maintenance and operation and that inspection and testing frequency requirements are met as required by California Food and Agricultural Code (FAC), California Code of Regulations (CCR), Pasteurized Milk Ordinance (PMO) and the Interstate Milk Shipment (IMS) program
- Travel to processing plant facilities and perform pasteurization equipment fail-safe testing on each pasteurization unit quarterly, have any necessary corrections made immediately, and apply tamper evident seals to time, temperature and pressure controls after tests are validated
- Investigate and resolve complex inspection problems related to the function of equipment used in milk products plants and take enforcement action as required to ensure compliance with food safety laws
- Maintain a field record of all environmental health evaluations and ensure that all actions are documented and provided to the Regional Office, including, but not limited to, submission of official notices and scorecards, results of all investigations, samples taken and laboratory results for proper filing and records retention
- Prepare clear, complete and technically accurate reports
- Travel to various facilities to review pasteurization, storage tank and clean in place charts, receiving paperwork and other processing plant documents to confirm operations are conducted in compliance with requirements
- Review plans and drawings for proposed construction or facility remodeling for new permit packages at assigned plants, and with assistance from the SES Supervisory, consult with the submitter on any required modifications to meet sanitary and environmental health requirements and, after approval, supervise construction to see that the permit plans are followed
- Review environmental health reports and feasibility studies to determine the effect on proposed actions relating to milk products plants
- Travel to processing plants facilities and evaluate installation of, or repairs to, dairy processing, handling, storage or packaging equipment with regard to sanitary design and operation, to ensure compliance with food safety and environmental health requirements
- Evaluate, with assistance from the SES Supervisory, any proposals for approval of emerging milk processing technology, equipment and/or cleaning regimens at assigned plants; provide detailed comments to forward to Sacramento Headquarters with copies of the proposal and, if granted, serve as lead to evaluate conditions during pilot projects or qualification testing on site
- Travel and oversee industry drug residue surveillance activities during on-site quarterly evaluations, collect samples from 10% of the bulk milk pickup tankers, and review industry records of the sampling program, as appropriate
- Serve as a point of contact for local milk plant personnel and dairy organizations on regulatory requirements applicable to milk processors, including implementation of new or revised food safety or environmental health laws and/or regulations as they occur

- Document time spent on special projects and non-routine work for Sacramento Headquarters to invoice, and ensure all documents required by policy are reported to the Regional Office and available upon request by Sacramento Headquarters or regional staff
- Collect license fees, environmental health inspection fees, and delinquent penalty fees when applicable

Function #2: Collection of Product and Water System Samples

15%

- Develop and implement a schedule and plan for collection of milk, milk products, well water, and re-circulated water system samples at assigned facilities to ensure that each respective type of sample is collected as required by the FAC, CCR, and PMO
- Develop sample plan and coordinate the collection and submission of environmental, compliance, and surveillance samples in response and follow-up to food safety incidents
- Travel and properly collect, identify, document, maintain, transport, package and ship representative samples to the state central milk regulatory laboratory, within the required timeframe for the type of sample being collected, in accordance with requirements and procedures of the CCR and PMO; use Chain of Custody documentation as appropriate
- Analyze test results and document as appropriate in food quality or safety related reports and correspondence
- Follow up on all test results that indicate that samples collected reflect potential food safety or compositional risks or procedural issues and take action as appropriate, including traveling to perform additional sample collection as required
- Understand and apply the principles of risk assessment and risk management in the application of daily workflow
- Issue required warning notices, restricted use/degrade notices, and reinstatement notices as necessary based on repeat violations for non-compliance with applicable microbiological and/or compositional standards, in accordance with procedures of the FAC and CCR
- Maintain a field book or log containing the laboratory results of all samples collected and any associated follow-up and/or enforcement actions
- Ensure that all actions are documented and communicated to the Regional Office, including, but not limited to, submission of official notices and lab reports for proper filing and records retention, and all associated functional time reporting

Function #3: Assess Food Safety Status of Dairy Farms

15%

- Develop and implement an inspection schedule for assigned dairy farms, including routine evaluations, official scored evaluations and sample collection to ensure proper sanitary maintenance and operation and that assessment frequency meets or exceeds FAC, CCR, PMO, and IMS
- Collaborate and coordinate with federal, state and local officials to ensure that the dairy farms meet the requirements of the PMO, FAC, CCR, Porter-Cologne Water Quality Act, and other applicable environmental health ordinances
- Using scientific methods and principles, address complex inspection problems related to the function of equipment used on dairy farms, and take action as required, such as restricting the use of milk if it does not conform to required standards or issue impound notices as warranted to protect public health from imminent food safety hazards
- Gather and share information with producers and dairy organizations on regulations relating to milk and milk products, and changes in other regulations that may affect the industry

- Review proposed construction or facility remodeling of milking barns and other dairy-related construction at assigned dairy farms for new permit packages, with assistance from the SES Supervisory, consult with the submitter on any required modifications to meet sanitary requirements and, after approval, supervise construction to see that the approved permit plans are followed
- Review environmental health reports and feasibility studies to determine the effect on proposed actions relating to dairy farms
- Review and understand technical research reports on emerging food safety and public health issues
- Travel and evaluate potentially complex or novel equipment and equipment installations, such as milking equipment, with regard to sanitary design and installation to ensure state and federal sanitary requirements are met
- Maintain records of all evaluations and ensure that all actions are documented and communicated to the Regional Office
- Travel and respond to Appendix N drug residue violation incidents as outlined in the PMO, including sampling/inspecting, redirecting tankers as appropriate and completing all required reports
- Provide information to sheep, cattle, and goat dairy farms on regulations pertaining to antibiotic use tracking and antimicrobial drug stewardship and ensure compliance with requirements
- Document the hours spent conducting non-routine inspection services on dairy farms for Sacramento headquarters to invoice, and ensure all documents required by policy are reported to the Regional Office and available upon request by Sacramento headquarters or regional staff

Function #4: Evaluate Bulk Milk Tanker Trucks for Food Safety

10%

- Travel, maintain, and evaluate bulk milk tanker trucks for compliance with sanitary design and operation in accordance with requirements of the FAC and PMO
- Travel and issue annual permit stickers to inspected tankers found to be in compliance
- Travel and inspect free-standing bulk milk tanker truck cleaning and sanitizing facilities as assigned
- Maintain records of all evaluations and ensure that all actions are documented and communicated to the Regional Office, including all associated functional time reports and activity recaps for purposes of industry billing

Function #5: Administration of Personal License Examination and Evaluations

10%

- Review personal license permit applications required for various industry employees (Butter Grader, Pasteurizer General, Pasteurizer Limited, Sampler and Weigher General, Sampler and Weigher Limited, Technician, Tester-Babcock, Tester-Infrared, Tester-Lactose, Tester-Mojonnier, Tester-Oven Solids) and collect payments and issue receipts for fees paid for the respective applications
- Proctor personal license examinations: grade the written portion of each examination and conduct oral and practical examinations to applicants who have successfully passed the written examination

- Evaluate the drug residue sample collection technique of Sampler and Weigher Limited licensees as required under the FAC
- Travel and conduct field evaluations of the bulk milk sampling and pick up technique of Sampler and Weigher, General licensees as required under the FAC and PMO
- Ensure that all exams, courses, and evaluations are properly documented, and all required documentation is submitted to the Regional Office, including fees paid and associated functional time reporting
- Establish and maintain cooperative relations with all persons contacted; this includes professionals from a variety of disciplines within and outside of State government

Function #6: Federal and Local Agency Cooperation

10%

- Collaborate and coordinate with FDA officials and FDA-certified state regulatory officials on ratings, check ratings, laboratory evaluations, and sampling surveillance programs as warranted
- Maintain FDA certification and/or an FDA commission as directed by management to conduct public health inspections, ratings, or evaluations in the field for official state-federal cooperative purposes
- Travel and conduct inspections of milk plants for compliance with federal current Good Manufacturing Practice regulations under contract with FDA as directed by the regional SES Supervisory
- Travel and conduct IMS ratings for plants, dairy farms, and dairy container manufacturers, as directed
- Travel and conduct IMS laboratory evaluations of industry, commercial and local government laboratories and laboratory personnel, as directed
- Travel and attend training courses and seminars required to maintain certifications, commissions, or technical competencies for completing state-federal cooperative public health work
- Ensure all required inspection documents and reports are completed according to prescribed deadlines and delivered to the Regional Office and/or to Sacramento headquarters as directed
- Travel and participate in environmental health inspection standardization exercises with county Approved Milk Inspection Service personnel.

Function #7: Functional Time Reporting and Recurring Documentation

5%

- Complete functional time reports weekly and submit to the Regional Office in a timely manner
- Complete Recap sheets for non-routine and special services each week as applicable and submit to the Regional Office in a timely manner
- Complete absence reports and travel expense claims monthly, as applicable, and submit to the Regional Office in a timely manner
- Ensure that records on all assigned inspection and sampling activities sent to the Regional Office are correct and complete

B. Non-Essential Functions:

Function #1 - Miscellaneous Duties

5%

- Perform other job-related duties as requested by a supervisor

III. Work Environment

The duties of this job are performed outdoors approximately 75% of the time. The incumbent works out of his/her home office and reports to the Regional Office only to pick up supplies, attend meetings and turn in required documents. Most of the workday will be spent traveling to various locations throughout the region.

When working outdoors, the incumbent may be exposed to extremes in temperature, fumes and gases. The noise level in equipment rooms may be high.

The incumbent must follow CDFR, Division, and Branch employee health and safety policies.

IV. Employee's Statement

(Initial applicable statement)

_____ I have read and understand the duties and essential functions of the position.
I understand Reasonable Accommodation¹ and how it applies to essential functions.
I can perform the duties of this job without Reasonable Accommodation.

OR

_____ I have read and understand the duties and essential functions of the position.
I understand Reasonable Accommodation¹ and how it applies to essential functions.
I will need Reasonable Accommodation to perform one or more of the essential functions described in this duty statement.

Employee Signature² Date

Supervisor Signature Date

Print Name

Print Name

**CC: Employee
Official Personnel File
Supervisor's Drop File**

¹ A reasonable accommodation is an adjustment or modification to a job or workplace that allows qualified employees or prospective employees to perform the essential functions of the job successfully.

² Duties of this position are subject to change and may be revised as needed or required. If/when duties change you will be provided a revised duty statement to sign.