



<b>DUTY STATEMENT</b>	
<b>Classification:</b> Environmental Scientist	<b>Position Number:</b> 772-0762-002
<b>Division/Office/Section:</b> MMLA/STAR/Materials Management Section	
<b>Location:</b> 1001 I Street, Sacramento, CA 95814	<b>Effective Date:</b>
<b>Employee's Name:</b>	<b>Supervision Exercised:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Supervisor's Name:</b>	
<b>Collective Bargaining Identifier (CBID):</b> R10	

This position requires the incumbent to maintain consistent and regular attendance; communicate effectively (orally and in writing if both appropriate) 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 department policies and procedures regarding attendance, leave, and conduct.

**POSITION DESCRIPTION:**

Under direction of the Supervising Environmental Scientist I, the Environmental Scientist works independently applying scientific methods, principles, and analytical skills in performing difficult and complex work supporting CalRecycle’s activities in organic materials management. The incumbent will develop and maintain expertise in technical areas related to laws, policies and initiatives impacting the management of organic materials. The incumbent will design, manage and evaluate scientific research; develop, evaluate and refine new technologies and best management practices, and assess the impact of research, technologies and practices on CalRecycle’s efforts to meet legislative mandates and goals for diversion of organic materials. This position requires active involvement in stakeholder meetings; participation in interagency and advisory groups; and consulting with other government agencies, private-sector representatives, and academic institutions on application of improved recycling technologies and materials management strategies. In addition to promoting sustainable activities and concepts, the incumbent will also coordinate responses to inquiries on these subjects. This position may occasionally involve travel throughout the state.

**ESSENTIAL FUNCTIONS**

- 20% Provide management support in the scientific evaluation of technical proposals and organics recycling strategies, including analyzing the efficiency of processes that produce energy, fertilizers and secondary chemicals. Perform difficult and complex work expanding CalRecycle's programs and activities related to sorting, processing, composting, digesting, and developing markets for post-consumer food and green materials. Utilize knowledge of chemistry, atmospheric chemistry, soil science and the physical characteristics of organic materials to identify and review potential impacts on public health and the environment from emerging organics technologies and varying management options. Analyze specific project proposals to verify claims for environmental benefits. Present data in oral and written form to CalRecycle Executive Staff, key stakeholders, other regulatory agencies and interested parties.
- 20% Apply scientific methods and principles in the identification, study, and solution of waste management, soil, air and water challenges. Perform program and project responsibilities with extreme sensitivity and complexity usually dealing with emerging or undefined issues and typically involving conflict among competing programs and issues. Analyze and calculate life cycle emissions of criteria pollutants and greenhouse gases resulting from management options for organic materials. Regularly review and maintain information gathered from industry and trade publications to evaluate market changes, new technologies, processes, and products.
- 20% Apply scientific methods and principles in the development and assessment of novel scientific research proposals and in the development, guidance and evaluation of scientific research performed by university researchers. Align research objectives with CalRecycle policies and goals. Provide clear and concise scopes of work, goals, objectives, costs, and timeframes for research. Ensure appropriateness of proposed methodologies and test

protocols. Dissect and reverse engineer complex scientific calculations to ensure the validity of study results. Analyze and critique existing scientific literature on organics management impacts. Prepare clear, complete, and technically accurate reports, web updates, memoranda, presentation materials, conference proceedings, technical/trade journal articles, and correspondence to secure the necessary resources, data, cooperation, assistance, approvals, and customer feedback related to CalRecycle research projects.

20% Assist staff and management with complex scientific data management needs. Prepare and maintain advanced spreadsheets, spreadsheet-based calculators and evaluation tools to simplify and streamline data analysis and improve knowledge about CalRecycle and industry programs, ecological impacts of organics management strategies and methods to achieve statewide environmental goals. Work with stakeholders to test, troubleshoot and improve CalRecycle's tools for measuring the efficacy of individual strategies for greenhouse gas reduction. Report on evolving life cycle assessment and sustainability metrics related to organic materials handling and production of renewable energy, chemicals, fertilizers and other secondary products. Coordinate work group meetings and training sessions to develop and implement solutions for CalRecycle and its stakeholders in measuring environmental performance.

10% Manage contracts for scientific research, technical assistance, laboratory services, or other necessary analytical services. Monitor contract performance and invoicing and verify allocation of costs to goals and objectives.

#### **MARGINAL FUNCTIONS**

5% Prepare written materials for publications on CalRecycle's website promoting organics collection, sorting, processing and marketing options.

5% Review and analyze proposed legislation. Prepare legislative bill analyses and develop policy recommendations for management.