



DUTY STATEMENT

Classification: Environmental Scientist		Position Number: 776-0762-XXX
Division/Branch/Section/Unit: MMLA/STAR/PSIT/SuMR		
Location: 1001 I Street, Sacramento, CA 95814		Effective Date:
Employee Name: Vacant		Supervision Exercised: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Supervisor's Name: Wendy Harmon		
Collective Bargaining Identifier (CBID): R10		

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 department policies and procedures regarding attendance, leave, and conduct.

POSITION DESCRIPTION:

Under direction of the Senior Environmental Scientist Supervisor to the Sustainable Materials and Research Unit in the Statewide Technical and Analytical Resources Branch, the incumbent works independently applying scientific methods, principles, and analytical skills in performing difficult and complex work supporting CalRecycle's activities in research and development of technologies that provide for the most efficient and effective management and reuse of materials. The incumbent is part of a plastics and biodegradable materials research team that utilizes knowledge of chemical and physical characteristics of polymers to identify, evaluate, and report policy options and implement programs that minimize potential impacts of plastic pollution to land and marine environments. This position requires active involvement in stakeholder meetings; participation in interagency and advisory groups; and consulting with other government agencies, industries, and academic institutions. The incumbent will develop studies, prepare technical analyses, and write reports on recycling processes and associated infrastructure, market development for postconsumer packaging materials, source reduction strategies, system optimization, and greenhouse gas impacts of packaging, with an emphasis on plastics. The incumbent will analyze resin formulations and evaluate the performance of plastics and degradable materials during recycling and composting processes in order to develop recommendations for improving product labeling requirements and refining standards, including the Resin Identification Code. This position involves travel throughout the state approximately 15% of the time.

ESSENTIAL FUNCTIONS

- 30% Provide staff support and perform technical research in the scientific evaluation of packaging materials, including the potential impacts of new resin types and degradable plastics on the environment and recycling infrastructure. Perform difficult and complex work expanding CalRecycle's programs and activities related to collection, sorting, recycling, processing, and development of markets for post-consumer materials including plastics, bioplastics, fibers, and glass. Review and evaluate stewardship programs. Conduct long-range planning and policy development; manage projects; and develop and maintain effective relationships with key industry, government, and environmental stakeholders. Prepare fact sheets on plastics and other packaging materials to facilitate purchasing and policy decisions. Coordinate site visits to facilities and businesses using recycled plastic feedstock and developing new technologies to produce and recycle plastic, bioplastic materials, and packaging. Prepare items for monthly public meetings, such as technical reports, research proposals, specifications, and other correspondence. Give presentations to CalRecycle Executive Staff, key stakeholders, and interested parties.
- 30% Apply scientific methods and principles in the management of contracts and development of projects that assess potential environmental impacts of plastic materials, compostable plastic products, degradable materials, and packaging. Analyze and calculate the life cycle greenhouse gas emissions of various packaging materials and end of life management options. Utilize knowledge of chemical and physical characteristics of polymers and degradable plastics to identify potential ecological and health impacts of materials. Collect, analyze, and evaluate data on the impacts of plastics and packaging materials on the environment. Regularly review and maintain information gathered from industry and trade publications to evaluate market changes, new technologies, processes, and products. Research and report on evolving life cycle assessment and

sustainability metrics related to plastics and packaging. Participate in standard-setting committees, such as the American Society for Testing and Materials (ASTM), and evaluate proposed specifications and test methods related to testing and labeling plastic resins and degradable plastics.

- 20% Prepare and maintain information on materials used in production of packaging and beverage containers. Identify markets for post-consumer materials in California and analyze the financial and economic aspects of supply and demand for recycled feedstock. Evaluate recycling processes and analyze the factors that affect the availability and quality of post-consumer material for use in new products and packaging (i.e., the impact of additives, multi-layer designs, and composite materials). Investigate obstacles faced by local jurisdictions, waste haulers, and recyclers to divert more material from the waste stream. Work with manufacturers to overcome barriers in order to use more post-consumer material in their products and packaging. Work with stakeholders to develop and implement scientific solutions to overcome market barriers that preclude increased use of post-consumer feedstock for manufacturing new products in California. Research and promote innovative technologies to reduce the environmental and health burdens associated with packaging materials. Coordinate work group meetings to develop and implement solutions for overcoming market barriers on the increased recycling of plastic and packaging materials. Perform technical analyses in support of CalRecycle's grant and loan programs.
- 15% Review and analyze proposed legislation. Prepare legislative bill analyses and develop policy recommendations to increase the recovery, recycling, and beneficial reuse of plastics, bio-based materials, and packaging. Assist in the execution of regulatory packages and rulemaking activities. Participate in webinars related to plastics, bioplastics, and management of packaging. Provide educational information and technical guidance to local governments, the general public, the solid waste industry, collectors, processors, and recyclers.

MARGINAL FUNCTIONS

- 05% Prepare written materials for publication on CalRecycle's website promoting the recovery of plastic, other materials, and the procurement of recycled content products.