

**Duty Statement – Workforce**

**Duty Statement**

<input type="checkbox"/> Current <input checked="" type="checkbox"/> Proposed		
RPA Number:	Classification Title: Air Resources Engineer	Position Number: 673-710-3735-031
Incumbent Name: Vacant	Working Title: Emissions Modeler	Effective Date: TBD
Tenure: Permanent	Time Base: Full-Time	Intermittent Hours Per Month:
Division/Office: Air Quality Planning and Science Division	Section/Unit: On-Road Model Development Section	Reporting Location: Sacramento or Riverside HQ
Supervisor's Name: Sara Forestieri	Supervisor's Classification: Air Resources Supervisor I	CBID: R09
Confidential Designation:  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Designated Position for Conflict of Interest:  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Position Telework Eligible:  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Supervision Exercised: <input checked="" type="checkbox"/> None <input type="checkbox"/> Lead		

**General Statement**

The On-Road Model Development Section of the Mobile Source Analysis Branch assesses on-road motor vehicle activity and emission factors to develop fundamental emissions inventory estimates and models. Major projects include supporting emission inventory estimates for regulations, continued development and refinement of EMFAC, the development of emission factors particularly for heavy-duty vehicles, as well as the analysis and forecasting of California's freight and passenger transportation system. The section is also responsible for development of new programming platforms upon which next generation of EMFAC modules will be based.

**Competencies**

All employees are responsible for understanding and demonstrating the core competencies of collaboration, communication, customer engagement, digital fluency, diversity and inclusion, innovative mindset, interpersonal skills, and resilience.

**Position Description**

As described in the general statement, the focus of the section is developing CARB's on-road emissions inventory model EMFAC. This requires staff to perform research, conduct test programs, analyze data, code logic and data into computer models, and use their emissions modeling skills to assist other staff within CARB or outside organizations in estimating emissions impacts from emissions control scenarios. The position requires close interaction and teamwork with other CARB inventory staff, as well as a variety of internal and external clients, including other CARB divisions, government agencies, policymakers, industry, environmental organizations, and the public.

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% of Time	Essential Functions
35	Using engineering concepts, develop and utilize techniques to process, synthesize, and make sense of the increasing amounts of highly detailed, real-world driving data (e.g., data collected via PEMS, PAMS, OBD systems, and other telemetry-based systems) as well as currently available mobile source emissions and activity data. Explore and analyze data from zero emission vehicles, e.g., battery electric or fuel cell electric vehicles. Consider how vehicle technologies and fleet characteristics are currently changing and might be changing in the future, including the role of emerging transportation technologies, new fuels, and emissions control systems.
30	Interpret and apply data mining results to EMFAC model evaluations in order to corroborate or improve EMFAC’s characterization of emissions, activity, and vehicle population. Develop and implement updates to input data, model formulations, and techniques into the EMFAC code using Python and MySQL. Deepen CARB’s understanding of the impact of regulatory programs on California’s air quality. Write model evaluation and development work plans to be implemented independently or by contractor and/or in-house teams.
30	Summarize findings and their policy implications in reports, presentations, and management briefings to provide a robust technical foundation for CARB policy decisions and the next generation mobile source regulations, next generation in-house data collection, and on-road model development. Prepare and review technical reports, memoranda, and other documents intended for management or outside stakeholders. Independently stay abreast of and brief management on the state-of-the-science in existing, new, or evolving data collection efforts associated with characterizing mobile source inventories. Meet with clients, contractors, and stakeholders to discuss emission estimation methodologies and results. Participate in public workshops.

% of Time	Marginal Functions
5	Perform other duties as may be necessary to meet the needs of the On-Road Model Development Section. Respond to ad-hoc requests and inquiries. Assist section manager in planning, organizing, and implementing section programs. Advance the agency’s equity and community engagement goals, e.g., through participation in workgroups. Occasional travel may be required.

**Typical Physical Conditions/Demands**

This position requires either sitting or standing at a workstation with a computer. It also requires frequent use of hands, wrists, and fingers for keyboarding and document manipulation.

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**Typical Working Conditions**

The position works in a climate-controlled, smoke-free environment of a high-rise office building in downtown Sacramento in a non-windowed office cubicle, or in a cubicle in a Riverside office building. It involves prolonged periods of sitting at a desk and working on a computer. Noise levels are typically low to moderate. It may require frequent interaction with staff, stakeholders, or the public via phone, email, or video conferencing. It may involve occasional travel to attend meetings or trainings. Hybrid telework availability is according to agency policy and may be subject to change over time. The work schedule is Monday through Friday, with options for alternate work week schedules according to agency policy and may be subject to change over time.

**Special Requirements of Position (Check all that apply):**

- Duties may require pre-employment and routine screenings (background/criminal/fingerprint clearance, drug testing, fingerprinting, physical, etc.).
- Duties require participation in the DMV Pull Notice Program.
- Performs other duties requiring high physical demand. (Explain below)
- Requires repetitive movement of heavy objects and/or operation of heavy machinery or motorized vehicles.
- Travel up to   5   percentage
- Bilingual Fluency needed in \_\_\_\_\_(language)
- Other-

**Supervisor Statement**

I certify that this duty statement accurately describes the essential functions of this position. I have discussed the duties of this position with the employee and provided the employee with a copy of this duty statement.

Supervisor Name: Sara Forestieri	Supervisor Signature:	Date: Date
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**Employee Statement**

I have discussed these duties with my supervisor and have been provided a copy of this duty statement. I certify that I have read, understand, and can perform the duties of this position either with or without reasonable accommodation\*.

*\* Reasonable accommodation is any modification or adjustment made to a job, work environment, or employment practice or process that enables an individual with a disability or medical condition to perform the essential functions of his or her job or to enjoy an equal employment opportunity. (If you believe reasonable accommodation is necessary, check yes. If unsure of a need for reasonable accommodation, inform the hiring supervisor, who will discuss your concerns with the Reasonable Accommodation Coordinator.)*

Do you need reasonable accommodation to perform the essential functions of this position?

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Yes     No

Employee Name:	Employee Signature:	Date: Date
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### Definitions/Instructions

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**RPA Number** – RPA number as provided by Position Control

**Classification Title** – Official classification title as per CalHR

**Position Number** – Full position number (agency-unit-class-serial, e.g., 673-810-5142-###)

**Incumbent Name** – Current employee

**Working Title** – This may differ from the classification title.

**Effective Date** – Day incumbent signed new or revised duty statement.

**Tenure** – Select from Permanent, Limited-Term, Retired Annuitant, etc.

**Time Base** – Select from Full-Time, Part-Time, Intermittent, etc.

**Intermittent Hours per Month** – intermittent hours worked.

**Division/Office** – Name of division or office name of the position

**Section/Unit** – Name of section or unit of the position

**Reporting Location** – where the position reports

**Supervisor's Name** – Current supervisor

**Supervisor's Classification** – Current supervisor's classification

**CBID** – Bargaining Unit of the position. Bargaining Unit numbers can be found here using the [CalHR Bargaining Unit Search](#) page.

**Confidential Designation** – Confidential Designation is for employees with a CBID of E48

**Designated Position for Conflict of Interest** – Refer to [CARB's Conflict of Interest Code](#) or [CalEPA's Conflict of Interest Code](#) for designated positions

**Position Telework Eligible** – Will vary as per the CARB's telework policy.

**Supervision Exercised** – Contingent upon job needs and duty requirement. For allocation reach out to HR for assistance.

**General Statement** – Provide a summary of the main purpose and functions of the position as it relates to the Agency, 3-5 sentences.

*Example: To provide human resources guidance to the programs of the California Air Resources Board (CARB) and the California Environmental Protection Agency (CalEPA) through providing timely, accurate, and customer service-oriented human resources support.*

**Competencies** – Review [definitions of competencies](#) below.

**Position Description** – Provide a brief overview of the position and its main functions related to the Division.

*Example: Under the general direction of the Administrative Services Division (ASD) Chief (CEA Level B), the Human Resources Branch Chief ensures the Department's personnel programs follow laws, regulations, policies, and best practices. Provides direction, guidance, and consultation to the CARB and CalEPA management and executive teams. Performs as subject matter expert to managers and*

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*supervisors on personnel-related matters. Serves as the Department's technical expert for personnel matters and handles the most critical and sensitive human resources matters.*

**Essential Functions** – The fundamental job duties of the position. Essential Functions are recommended to be no higher than 40% nor lower than 10%. Essential Functions are the duties the position exists solely to perform. There are a limited number of employees available to perform these functions and they're typically highly specialized.

**Marginal Functions** – Other job duties related to the position that are not primary functions (i.e., may be completed/assigned to another employee). Marginal Functions are recommended to be no higher than 10%. **Percentages of Essential and Marginal Functions shall add up to 100%.**

**Typical Physical Conditions/Demands** – The level and duration of physical exertion generally required to perform the tasks required for the position.

*Example: This position requires frequent sitting, standing, walking, bending, and reaching. It also requires frequent use of hands, wrists, and fingers for keyboarding and document manipulation. Moving objects weighing up to 25 pounds may be necessary. Occasionally, you may be exposed to outdoor weather, dust, or noise.*

**Typical Working Conditions** – Refers to the working environment and work schedule. Details about any travel requirements may also be listed here.

*Example: The incumbent works in a smoke-free environment on the 19th floor of a high-rise office building in downtown Sacramento in an enclosed, non-windowed office cubicle. The work schedule is Monday through Friday. Mandatory overtime, including evening and weekend work, may be necessary during the year-end closing process or when the department is mission tasked. Travel may be required locally and within the state.*

**Special Requirements of Position** – Check all that apply

**Supervisor Statement** – Refer to job duties

**Employee Statement** – Refer to job duties

**Supervisors forward the signed copy of the duty statement to their [Division HR Liaison](#) to be placed in the employee's Official Personnel File.**

### Definitions of Competencies

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Effective development of the identified Core Competencies fosters the advancement of the following: Collaboration, Communication, Customer Engagement, Digital Fluency, Diversity and Inclusion; Innovative Mindset, Interpersonal Skills, and Resilience.

- **Collaboration** – Develops, maintains, and strengthens relationships while working together to achieve results.
- **Communication** – Listens, writes, and presents ideas, opinions, and information virtually and in person with diverse audiences.
- **Customer Engagement** – Creates a connection with internal and external customers through passive experiences and exceptional service in response to current and future needs.
- **Digital Fluency** – Use technology effectively in the performance of one's job, including integrating and accepting new technology when appropriate.

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- **Diversity and Inclusion** – Works effectively in an inclusive workplace where individual differences and perspectives are respected and leveraged to achieve organizational goals.
- **Innovative Mindset** – Demonstrates curiosity, develops new insights, considers creative approaches, and applies novel solutions.
- **Interpersonal Skills** – Interacts positively with courtesy, sensitivity, and respect with various individuals and makes every effort to understand and relate to others; includes managing feelings effectively, expressing oneself appropriately and working with others towards a common goal.
- **Resilience** – Overcomes challenges, performs well, and remains optimistic and committed under pressure and adversity.