

State of California
AIR RESOURCES BOARD
DUTY STATEMENT

EMPLOYEE NAME: Vacant

CURRENT DATE: 07/17/2019

CLASSIFICATION: Air Resources
Engineer

POSITION #: 673-710-3735-027

DIVISION/OFFICE: AQPSD/MSAB

CBID: R09

SECTION: On-Road Model
Implementation Section

SUPERVISOR'S NAME: Vacant

SUPERVISOR'S CLASS: Air Resources
Supervisor I

**I certify that this duty statement represents
an accurate description of the essential
functions of this position.**

**I have read this duty statement and agree
that it represents the duties I am assigned.**

Supervisor's Signature

Date

Employee's Signature

Date

SPECIAL REQUIREMENTS OF POSITION (IF ANY):

- Designated under Conflict of Interest Code.
- Duties performed may require annual physical.
- Duties performed may require drug testing.
- Duties require participation in the DMV Pull Notice Program.
- Requires the utilization of a 32-pound self-contained breathing apparatus.
- Operates heavy motorized vehicles.
- Requires repetitive movement of heavy objects.
- Works at elevated heights or near fast moving machinery or traffic.
- Performs other duties requiring high physical demand. (Explain below)

SUPERVISION EXERCISED (check one):

- None
- Supervisor

- Lead Person
- Team Leader

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FOR SUPERVISORY POSITIONS ONLY: Indicate the number of positions by classification that this position DIRECTLY supervises: N/A

Total number of positions in Section/Branch/Office for which this position is responsible: N/A

FOR LEADPERSONS OR TEAM LEADERS ONLY: Indicate the number of positions by classification that this position LEADS: N/A

MISSION OF SECTION: The On-Road Model Implementation Section develops emissions inventory methods, models, databases, and tools to support on-road emissions assessment needs in the areas of air quality planning, transportation planning, photochemical modeling, and project level assessment. Major projects include the development and refinement of EMFAC-SG, an on-road emissions inventory tool for air quality and transportation planning, and new tools to estimate on-road emissions on refined spatial scales for project level assessment and photochemical modeling. The section also works to reconcile activity estimates developed using emissions inventory models with activity estimates developed by regional transportation planning agencies and from vehicle travel measurements using highway performance measurement systems.

CONCEPT OF POSITION: This position 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 benefits 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. The specific duties include:

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% Of Time RESPONSIBILITIES OF POSITION

- 35%-E Using the engineering concepts, with the objective of deepening CARB's understanding of vehicle operations and emissions and how they influence California's air quality, 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.
- 30%-E 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. Utilize data mining results to inform modifications to the current EMFAC model as well as the design of and data needs for next-generation version(s) of EMFAC. Develop new and recommended updates to model formulations, modeling techniques, and input data. Write model evaluation and development work plans to be implemented independently or by contractor and/or in-house teams.
- 20%-E 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.
- 5%-E Meet with clients, contractors, and stakeholders to discuss emission estimation methodologies and results. Participate in public workshops. Develop and deliver oral presentations as needed. Assist section manager in planning, organizing, and implementing section programs.
- 5%-E Summarize findings and their policy implications in reports, presentations, and management briefings to provide a robust technical foundation for CARB policy decisions, next generation mobile source regulations, next generation in-house data collection, and on-road model development

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5%-M Respond to requests and inquiries. Coordinate with and provide consultation to private and governmental agencies doing related emissions development work. Perform other duties as may be necessary to meet the needs of the On-Road Model Development Section. Occasional travel may be required.