

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Senior Transportation Engineer	OFFICE/BRANCH/SECTION 43/Env Analysis/Haz Waste & Noise Office	
WORKING TITLE Air Quality Specialist	POSITION NUMBER 913-140-3161-017	EFFECTIVE DATE 10/31/2014

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

Under the direction of the Chief, Office of Hazardous Waste, Air, Noise and Paleontology, a Supervising Transportation Engineer, the Air Quality (AQ) Specialist is responsible for the development and statewide implementation of the Caltrans' Project Delivery Air Quality program, which includes Mobile Source Air Toxics (MSAT), greenhouse gases and energy. The position includes providing expert engineering assistance for District projects, environmental and technical document review, negotiations with local, state and federal agencies, review and analysis of legislation and regulations. Acts as an inhouse consultant performing complex work required for these fields, which are critical to the Caltrans basic mission. Assists the Divisions of Planning, Design and Construction in evaluating the impacts of proposed projects and provides technical advice, and recommendations to the District staff regarding project-level analysis of transportation projects. Products produced may include: statewide policy, regulatory compliance strategies, guidance documents, mathematical models, training sessions, consultant contracts, standards and specifications, and evaluation of new technologies.

TYPICAL DUTIES:

Percentage	Job Description
Essential (E)/Marginal (M) ¹	
35% E	Coordinate with regulatory, local agencies and Headquarters and District staff to identify changing AQ regulations and environmental engineering project impacts. Provide technical assistance to the Districts and other Caltrans Project Delivery divisions on project and program related issues: health risk assessment strategies; hot spot analysis; MSAT analysis; and analysis of carbon dioxide production.
30% E	Work with Caltrans staff and consultant contracts to provide comprehensive statewide AQ training development and deployment to ensure quality and consistency. Write new policy documents and update appropriate chapters of the Caltrans Standard Environmental Reference (SER) and the Project Development Procedures Manual (PDPM). Develop guidance documents and tools, such as technical manuals, models, and web sites. Conduct periodic district meetings to identify issues, coordinate statewide strategies and convey new regulatory information. Review District environmental and engineering documents.
25% E	As needed, develop and manage new contracts and task orders to support the program and District activities. Develop technical reports and oversee consultant prepared reports. Develop and maintain standard and non-standard specifications. Provide support for AQ modeling needs.
5% E	Analyze federal and state legislation and regulations related to AQ that may impact Caltrans. Participate with federal, state and regional agencies in developing implementation strategies and guidance responsive to federal, state and local requirements.
5% M	Represent the Division of Environmental Analysis by serving on or leading statewide and corporate continuous improvement teams. Perform special assignments as the need arises. Develop and manage research proposals with the goal of analyzing and reducing potential project impacts.

¹ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.

MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

The incumbent is a specialist in the area of AQ and in conjunction with district and HQ staff may act as the lead in guiding district activities and directing tasks related to consultant and university contracts.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge: An in-depth knowledge of Caltrans' major activity areas and organization, departmental policies and financial constraints, and specific knowledge of AQ laws and regulations, contract administration, project development

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

procedures, transportation characteristics, issues, and planning concepts is required. Must have a working knowledge of organizational relationships and engineering functions both within and outside Caltrans that pertain to planning, design, construction, operation, and maintenance of transportation facilities. The position requires knowledge of local, state and federal regulations related to AQ and greenhouse gas issues as well as specific knowledge of AQ tool such as EMFAC, CT-EMFAC, AERMOD, CAL3QHRC, CALINE4 and OFFROAD. The incumbent must be knowledgeable of the principles and techniques related to mobile source AQ studies and principles of greenhouse gas emissions and controls.

Abilities: Based on a broad professional engineering experience and expertise must be able to reason logically and creatively and to exercise good judgment on matters related to the planning and environmental analysis of transportation facilities, and the development and updating of the Department's AQ processes, policies and procedures. Must be able to take action independently, and organize work priorities. Must be able to establish and maintain cooperative relationships, dealing with tact and persuasion with district and corporate counterparts. Must be able to communicate effectively both orally and in writing. Must possess good technical report writing capabilities and administrative leadership characteristics. Must possess the ability to plan AQ studies, coordinate with the work of others engaged in these studies, analyze the data, and report the results. Must be able to prepare reports and correspondence and be capable of effective verbal and written communications with the public, departmental staff and professional peers. Must be able represent the goals and objective of the department in public hearings on AQ issues.

Analytical: Must reason logically and creatively using a variety of analytical techniques to obtain solutions, recognize erroneous data and review projects for overall soundness. The work and responsibilities of this position require a high degree of understanding on the inner relationships of the various internal/external constraints and controls related to environmental engineering that can influence the operation of the department and affect project delivery.

Possession of a current and valid licence of registration as a civil engineer issued by the California State Board for Professional Engineers and Land Surveyors.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The Senior Transportation Engineer is responsible for independent action in carrying out the assigned duties. As a technical expert the incumbent is expected to routinely make final decisions on questions raised either verbally or in memos from the districts relating to the environmental analysis and the project development process. Based on engineering experience and expertise, the incumbent must be able to provide accurate and thorough recommendations on the various environmental and project development documents. Failure to carry out these responsibilities could result in:

- Inconsistent statewide decisions in the development and operation of transportation facilities.
- Project delays or program failure.
- Unnecessary investigations or sampling, data acquisition and expenditure of funds.
- Litigation that could delay and/or add substantial cost to essential projects or programs.
- Loss of public confidence in Caltrans as a responsible public agency and first-rate engineering organization.

PUBLIC AND INTERNAL CONTACTS

The Senior Transportation Engineer must establish and maintain working relationships on a daily basis with Caltrans district management and with district planning and engineering staff; and with other disciplines in the Environmental Analysis Division; as well as with staff working in other Headquarters' Divisions or Programs such as Design, Local Programs, Transportation System Information, Planning, Transportation Programming, Traffic Operations, New Technology and Research, Engineering Services, and Administration. The incumbent must also establish and maintain a good working relationship with external agencies such as the Federal Highway Administration, Metropolitan Planning Organizations and other state and federal agencies. The incumbent arranges for, attends, participates in, and where appropriate, represents the Department at meetings with interest groups, individuals, and local, regional, state and federal agencies in regard to AQ environmental/engineering issues.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Must be able to organize and prioritize large volumes of varied documents. The workload is subject to frequent, substantial and unexpected changes that could affect the scheduling or completion of assignments. The incumbent must be able to grasp the essence of new information and master new technology and improvements.

The incumbent must have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice. Must have the ability to develop and maintain cooperative, collaborative working relationships and recognize difficult, emotionally charged and/or sensitive situations and handle them effectively and appropriately. Must deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity. Must

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

formulate effective strategies consistent with the business and competition related to emerging technology and develops new insights into situations and applies innovative solutions to improvements.

Must be capable of translating between engineering, transportation, planning and environmental terminology and common language. Must be able to effectively communicate in English and may be required to make presentations, lead workshops, and serve on quality teams.

The incumbent must be open to change and new information, adapts behavior and work methods in response to new information, changing conditions, or unexpected obstacles. Must behave in a fair and ethical manner toward others, and demonstrates a sense of responsibility and commitment to public service. The incumbent values cultural diversity and individual differences in the workforce.

The incumbent must be able to sit for prolonged periods of time while using a keyboard/mouse and video display monitor, to read, review or prepare documents. Must be capable of sustained mental activity needed for report writing, auditing, problem solving, analysis and reasoning.

The incumbent must be willing and able to travel throughout the state to other district offices and project sites. While traveling, the incumbent must be capable of lifting and carrying their own luggage, computer equipment, or other materials, weighing over 10 pounds.

WORK ENVIRONMENT

The work environment will include office and occasionally, field environments. The work environment is fast-paced and requires considerable flexibility in managing time, priorities and assignments. It can be demanding and/or stressful. The incumbent may be required to travel to meeting facilities and/or project sites. In the field the incumbent may experience all climatic conditions, including sun, wind, rain, snow, ice, or other conditions such as, dust, dirt, construction equipment, traffic, animals, insects, or loud noises. While at their base of operation, employees will work in a climate-controlled office under artificial light. However, due to periodic problems with the heating and air conditioning, the building temperature may fluctuate.

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

EMPLOYEE (Print)

EMPLOYEE (Signature)

DATE

I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

SUPERVISOR (Signature)

DATE