STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY CALIFORNIA AIR RESOURCES BOARD

DUTY STATEMENT

ASD/HRB-12 (REV. 03/2020) PAGE 1 OF 5

DUTY STATEMENT

Employee Name:	Current Date: March 2024	
Classification: Air Resources Engineer	Position #: 673-910-3735-055	
Division/Office: ECCD / In-Use Programs Branch	CBID: R09	
Section: Heavy Duty In-Use Compliance		
Supervisor Name: Elena Florea	Supervisor Classification: ARS I	
I certify that this duty statement represents an accurate description of the essential functions of this position.		
Supervisor:	Date:	
I have read this duty statement and agree that it	represents the duties I am assigned.	
Employee:	Date:	
SPECIAL REQUIREMEN	TS OF POSITION (IF ANY):	
 ✓ Designated under Conflict-of-Interest Code. ☐ Duties performed may require pre-employment 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): Safety footwear is needed or hazardous work conditions which include vehicle emissions testing, emission control components respection, and vehicle maintenance activity etc. Management requires that staff use safety footwear due to working in the lab or field under the conditions listed above. ✓ Duties require use of hearing protection and annual hearing examinations. 		
X None	☐ Lead Person	
Supervisor	☐ Team Leader	

STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY CALIFORNIA AIR RESOURCES BOARD

DUTY STATEMENT

ASD/HRB-12 (REV. 03/2020) PAGE 2 OF 5

<u>FOR SUPERVISORY POSITIONS ONLY</u>: 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 Heavy Duty In-Use Compliance Section within the In-Use Programs Branch is primarily responsible for managing and administering the heavy duty in-use compliance testing programs in the Emissions Certification and Compliance Division (ECCD). These programs are essential to protect public health by helping to guarantee that the low heavy duty engine emission standards are met in-use. This will be done by continuing the implementation of the Heavy-Duty In-Use Compliance Program, developing, and implementing the Off-Road In-Use Compliance testing Program, expanding heavy-duty testing capabilities, and overseeing the manufacturer-run Heavy Duty In-Use Testing Program. The section will provide in-use compliance testing, evaluation, and investigation support to affected engines, collect, and maintain reported compliance data. The purpose of these programs is to acquire in-use exhaust emissions data to identify possible emissions component defects or emissions noncompliance issues such as unapproved auxiliary emission control devices or defeat devices that can lead to corrective actions (i.e. recall) by the manufacturer.

CONCEPT OF POSITION: Under general supervision of the manager of the Heavy Duty In-Use Compliance Section, this position is responsible for managing the heavy duty in-use compliance test programs and conduct emissions and defeat device analysis. The ARE will create test plans, direct procurement of vehicles/ off-road equipment, collaborate with various CARB sections to have vehicles instrumented, and coordinate testing. The successful candidate will perform engineering analysis of emission test data and complex technical information, generate clear and concise technical reports, and organize/present the results. The ARE will communicate and coordinate with the engine manufacturer to support testing and when necessary, develop corrective actions, review and process voluntary/influenced recalls, and track their implementation. For the manufacturer selfrun in-use testing program, the successful candidate will review and process in-use compliance test reports and coordinate with manufacturers on the completion and compliance of testing. Other tasks may include traveling to testing sites and manufacturer's emissions test facility to perform laboratory audits, not to exceed 10% of the time; and assisting CARB enforcement staff with litigation or settlement actions for in-use compliance investigations for heavy duty engines, vehicles, and equipment. The candidate must have excellent written and verbal communication skills to engage with a variety of stakeholders, as well as create and review technical documents.

High physical demand: Safety footwear and glasses are needed for hazardous work conditions which include transportation and set-up of gas cylinders for laboratory audits, and set-up for emissions testing (vehicle emission testing, emission control component inspections, vehicle maintenance activity, etc.) and in-field work. It is required by management, that staff use safety footwear due to hazardous conditions. Up to 10 percent travel will be required.

DUTY STATEMENT

ASD/HRB-12 (REV. 03/2020) PAGE 3 OF 5

Notes: Related to any of the above below, travel outside of the normal work hours will be required and entail overnight or several days stays. Under certain circumstances work outside the normal work hours will be required. Typical method of travel can be by flying or driving a car / truck depending on the activity / event.

% OF TIME	RESPONSIBILITIES OF POSITION
30% - E	Independently develop, coordinate, and implement heavy duty in-use compliance test programs. This includes: • Vehicle/equipment procurement – direct interaction with the engine/vehicle/equipment manufacturer regarding technical direction for vehicle acceptance into test programs. Conduct telephone questionnaires to qualify program vehicles. Evaluate proper operation and maintenance of vehicles for testable conditions. Provide direction for test articles restorative maintenance as needed. • Vehicle/equipment testing – amend and develop standard operating procedures and vehicle/equipment testing requirements. Conduct in-use compliance emissions and field-testing. • In-use compliance investigations – examine in-field performance issues and emissions testing concerns. Determine the effectiveness of in-use emission control devices. Perform engineering analysis of emission test data and complex technical information, generate clear and concise technical reports, and organize/present the results. Communicate and coordinate with the engine manufacturer to develop corrective actions. Analyze and evaluate final in-use compliance emissions testing report and emission test equipment, using sound principles of engineering, science, statistics, and mathematics.
25% - E	 Independently develop, coordinate, and implement the heavy duty in-use testing program (HDIUT). This includes: Develop and implement procedures, guidance, and protocols for the in-use compliance testing program and evaluation of heavy-duty engines. Receive, organize, review, and analyze in detail the heavy-duty in-use testing data submitted by heavy duty engine manufacturers.

DUTY STATEMENT

ASD/HRB-12 (REV. 03/2020) PAGE 4 OF 5

	 Plan and conduct discussions via email and telephone with manufacturers regarding testing and integrity of submitted data, to assure that current regulations are followed. Process in-use compliance test reports. Ensure that the manufacturer or contractor is using correct emissions test procedures and test schedules that meet the stringent test requirements. Part of this task involves traveling to manufacturer's emissions test facility and physically perform laboratory audit of the emission laboratory equipment and verify equipment maintenance records.
15% - E	Review and process corrective actions and/or recalls for in-use compliance failure, any catastrophic failure or other safety related matter, or if a substantial number of units experience the failure of an operational feature to potentially enact the recall provisions. Assist manufacturers with the administrative processing of recalls.
10% - E	Conduct additional heavy-duty testing. This testing is done on a heavy-duty engine or chassis dynamometer, and/or on the road using Portable Emission Measurement System (PEMS). For engine testing, oversee engine removal, dynamometer set-up, proper testing procedures, and test data and analysis.
10% - E	Represent CARB and/or IUPB at meetings. Conduct work with CARB Divisions and other local, state, or federal agencies such as coordination for in-use testing, data analysis, presentation of findings, and share data from emissions tests programs. Present formal reports and other informational items. Provide support for developing any appropriate regulatory modifications related to in-use compliance program requirements.
5% - E	Assist CARB enforcement staff with litigation or settlement actions for in-use compliance investigations for heavy duty engines, vehicles, and/or equipment.
5% - M	Research and review other in-use compliance information such as certification information and other technical information as needed to support the In-Use Compliance programs. Work on special projects and perform other duties within the scope of the classification, as required, such as, but not limited to answering questions via email and telephone regarding in-use compliance, and compliance with the regulation,

STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY CALIFORNIA AIR RESOURCES BOARD

DUTY STATEMENT

ASD/HRB-12 (REV. 03/2020) PAGE 5 OF 5

occasionally serve as acting manager and providing support and feedback
on special assignments and referrals.