

**DUTY STATEMENT**

**DUTY STATEMENT**

Employee Name: Vacant	Current Date: 08/09/2024
Classification: Air Pollution Specialist	Position #: 673-860-3887-007
Division/Office: OIS	CBID: R09
Section: Science & Technology	
Supervisor Name: Skip Campbell	Supervisor Classification: Air Resources Supervisor 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 REQUIREMENTS 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):
- Duties require use of hearing protection and annual hearing examinations.

**SUPERVISION EXERCISED**

<input type="checkbox"/> None	<input type="checkbox"/> Lead Person
<input type="checkbox"/> Supervisor	<input type="checkbox"/> Team Leader

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

**DUTY STATEMENT**

ASD/HRB-12 (REV. 03/2020) PAGE 2 OF 4

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

FOR LEADPERSONS OR TEAM LEADERS ONLY:

Indicate the number of positions by classification that this position LEADS:

MISSION OF SECTION:

The mission of the Office of Information Services (OIS) is to leverage the most effective information technologies (IT) available to achieve the California Air Resources Board's (CARB) program goals. The mission includes ensuring that such technologies are professionally managed, properly maintained, and efficiently used. The Science and Technology Section (STS) provides science and regulatory-based expertise within OIS to address increasingly complex, multifaceted technology and environmental issues. STS works closely with CARB scientists, engineers, and IT staff to perform analysis and plan for the design, development and support of information technology solutions to address complex CARB scientific or engineering program needs. STS supports efforts requiring the highest level of expertise in addressing complex technology and environmental issues.

CONCEPT OF POSITION:

Under direct supervision, the Air Pollution Specialist (APS) blends science and technology to develop the best solutions for addressing ARB's complex needs for geospatial analysis. The APS conducts research and analysis with other ARB scientists and engineers to validate results and methodologies developed for a broad range of subject areas including air quality simulation models, air emissions estimation models, quantification methods for the effects of air pollutants on human health, vegetation, and wildlife, demographic analysis of economic impacts on disadvantaged communities, and the development of spatial data storage and retrieval systems. The APS facilitates the development of standards and guidelines for the appropriate use of Geographic Information Systems (GIS) technologies.

The APS provides technical leadership and promotes collaboration among ARB's GIS user community, working with ARB program staff (scientists and engineers) and OIS staff to plan for and implement geospatial technologies, and perform GIS data management data activities such as the development of metadata, categories, and tags. The APS supports program-led development of cartographic and other spatial data products by sharing knowledge of GIS products and promoting the use of best practices.

**DUTY STATEMENT**

The position supports Cloud-based GIS environments and tools and installs and configures spatial databases and server and GIS products. The APS works closely with program staff to ensure software, hardware and network infrastructure accommodates user needs and recommends improvements, including the use of scripting to automate tasks and emerging technologies to improve efficiency. The APS implements GIS data security (in collaboration with the ARB Information Security Officer) on the GIS infrastructure to ensure that confidential data is protected, and attends interagency coordination or Statewide GIS user workgroup meetings and reports activities back to ARB management and GIS users.

<u><b>% OF TIME</b></u>	<u><b>RESPONSIBILITIES OF POSITION</b></u>
35% E	The incumbent will design and implement Geographic Information Systems (GIS) technologies and software to spatially allocate modeled data. The APS will migrating to and maintaining Cloud and server-based technology tools and resources to support data analysis and reporting and establish geospatial databases, data services, application programming interfaces (APIs), data interoperability, and Cloud-based resources to facilitate data exchange and analysis associated with PM2.5 National Ambient Air Quality Standards (NAAQS). The APS will aid in the design of IT projects utilizing geospatial services and associated technologies.
30% E	The APS installs and configures spatial databases and works closely with program staff to ensure software, hardware and network infrastructure accommodates user needs, and recommends improvements. The APS identifies appropriate software development tools, including desktop and server applications and researches emerging technologies to improve how the technology is used. The APS uses data extracted from CARB's High-Performance Computing (HPC) environment to manage and display spatially and temporally refined data (meteorology, terrain, and chemically speciated emissions). The APS uses GIS to perform assigned work and trains other ARB Scientists and Engineers on GIS-based standards and technologies, including validating spatial analysis assumptions and strategies, developing cartographic products, using and managing imagery services and using scripting languages (including ArcGIS python API and ArcPy) to perform analysis and automate repetitive analysis tasks in desktop geospatial software.
20% E	The incumbent administers, maintains, and documents ARB's geospatial system infrastructure to ensure critical GIS services remain available to support the department's mission and needs. The APS maintains various server and desktop-based spatial analysis environments to support the development and maintenance of ARB's GIS infrastructure, including various data collection technologies. The APS assesses user needs and effectiveness of technology delivery while optimizing geospatial system

**DUTY STATEMENT**

	performance in desktop, database, laboratory equipment, air pollutant emissions measurement and transportation activity devices.
10% E	The incumbent defines standards and best practices for data documentation and data exchange (metadata, categories, and tags). Including spatial data sharing with external stakeholders. The APS implements GIS data security (in collaboration with the Information Security Officer) to ensure that confidential data is protected and available to appropriate staff.
5% M	The APS participates in various GIS-centered workgroups and coordinates with other entities such as the California Environmental Protection Agency (Cal/EPA) Boards, Departments and Offices, other State science, transportation, energy and health organizations, and the California Geographic Information Office (GIO) in support of program needs. The APS attends meetings and participates in coordinated State efforts to reduce redundancy and share knowledge. The incumbent attends interagency coordination or Statewide GIS user workgroup meetings, and reports activities back to OIS management.