## DUTY STATEMENT

<table>
<thead>
<tr>
<th>Employee Name: Vacant</th>
<th>Current Date: 10/17/2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification: Air Pollution Specialist (APS)</td>
<td>Position #: 673-310-3887-039</td>
</tr>
<tr>
<td>Division/Office: Research Division</td>
<td>CBID: R09</td>
</tr>
<tr>
<td>Section: Remote Sensing Data Analysis Section (RSDAS)</td>
<td></td>
</tr>
<tr>
<td>Supervisor Name: Stephen Zelinka</td>
<td>Supervisor Classification: ARS I</td>
</tr>
</tbody>
</table>

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:

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### 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

- [ ] None
- [ ] Lead Person
- [ ] Supervisor
- [ ] Team Leader
STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
CALIFORNIA AIR RESOURCES BOARD

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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 Remote Sensing Data and Analysis (RSDA) Section in the Research Division serves as the central hub for methane data collected from remote sensing technology in order to support a variety of California Air Resources Board (CARB) programs and policies. The section will leverage the latest advancements in remote sensing technology to help support California’s goal of reducing methane emissions by 40% below 2013 levels by 2030. This includes utilizing methane plume observations from a set of demonstrational satellites expected to be launched in early 2024 and an additional constellation of satellites expected to be launched in 2025. The section will play an important role in upcoming agreements and contracts through which California will receive data from these satellites and develop a vision for scaling the satellite methane program to future phases.

For these purposes, RSDAS manages data, performs data quality assurance and quality control, optimizes workflows, improves data processing algorithms, and performs data analysis to increase CARB’s understanding of highly concentrated methane plume emissions in California. The section will develop tools and utilities to track methane plumes, their sources, and the steps taken to mitigate these emissions. The section is also responsible for making the methane emissions data available in such a way that it is useful for communities and the broader public to understand methane emissions and efforts taken for mitigation. The section will also work to increase CARB’s understanding of co-pollutants of methane emissions that may be of health concern, particularly in communities. As the central hub for the satellite data, the section will have an important role to coordinate with internal stakeholders at CARB, other state agencies, industry partners, and other jurisdictions who are interested in using the remote sensing data.

CONCEPT OF POSITION:
Under the general direction of the supervisor of the Remote Sensing Data Analysis Section, the APS will provide scientific and technical leadership and expertise in support of the agency’s adoption of satellite-based data for the purposes of studying and reducing emissions of greenhouse gases and other air pollutants. The APS will collaborate with internal and external stakeholders, in particular coordinating with other program staff to ensure all processes utilize the most appropriate geospatial data available to identify the likely sources of methane emissions and the potential impacts of these emissions on nearby communities. In order to provide these geospatial analyses, the APS will utilize geospatial datasets and GIS frameworks including databases and advanced spatial queries. These geospatial analyses will also be used to inform the observational tasking of the satellite constellation in order to effectively monitor the most likely sources of methane emissions.
<table>
<thead>
<tr>
<th>% OF TIME</th>
<th>RESPONSIBILITIES OF POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% - E</td>
<td>Compile, maintain, and continuously update a geospatial database of methane emitting infrastructure and land use in California in order to understand methane emission sources, attributes, and impacts to nearby communities.</td>
</tr>
<tr>
<td>20% - E</td>
<td>Analyze geospatial and remote sensing datasets to determine and characterize likely sources of methane emissions in California to inform the observational tasking requests made by CARB. Develop models and utilities to optimize observation decks for maximum coverage and frequency of potential methane sources, considering steps required for efficient deployment of new observation decks by CARB’s satellite data provider(s).</td>
</tr>
<tr>
<td>15% - E</td>
<td>Coordinate with internal and external stakeholders, including participating in outreach to community members, to understand the geospatial inputs and data products needed to support projects and inquiries related to the satellite data collected by CARB.</td>
</tr>
<tr>
<td>15% - E</td>
<td>Coordinate with program staff leads and the Office of Information Services to ensure the data pipeline and technical infrastructure developed for the satellite methane program is capable of supporting the needs and best practices for geospatial data management and dissemination</td>
</tr>
<tr>
<td>10% - E</td>
<td>Coordinate with program staff to ensure geospatial data and utilities can effectively support efforts to develop machine learning analyses and web mapping applications. Incorporate any relevant improvements produced by these efforts into the applicable geospatial data components.</td>
</tr>
<tr>
<td>10% - E</td>
<td>Prepare written reports and oral presentations on research efforts and findings, including presentations to the CARB Executive Office and Board.</td>
</tr>
<tr>
<td>10% - M</td>
<td>Represent CARB at workshops and conferences. May perform other duties as assigned within the scope of the classification.</td>
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