# Community Air Monitoring Plan Appendix H

## California Statewide Mobile Monitoring Initiative (SMMI) Targeted Area Monitoring Assignment Approach

△ aclima

**July 1, 2025**

The Statewide Mobile Monitoring Initiative is part of California Climate Investments, a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.

## Background

Targeted Area Studies will be conducted in each of the 64 Consistently Nominated Communities (CNCs). These studies involve customized monitoring to collect data about specific community-raised air quality concerns. These can be conducted either with Partner Mobile Labs or Aclima vehicles. These studies will be conducted in addition to the Broad Area Monitoring that will happen throughout the 9 month monitoring period by Aclima vehicles in all 64 CNCs. The advantage of the targeted area studies over broad area monitoring are that:

1) Customized monitoring approaches can be designed to collect specific information focused directly on specific air quality concerns
2) The Partner Mobile Labs can collect data that has more detailed information about the types of pollutants present than is possible with broad area monitoring
3) Aclima vehicles conducting targeted area studies can collect data at higher frequency around a single source of air pollution to get more detailed information in time (to see time of day differences, for example). Generally the Aclima vehicles will have the ability to conduct targeted area studies around the clock, while the Partner Mobile Labs will be limited to daytime and some evening hours.

The biggest challenge in assigning targeted area studies to communities is deciding which communities should receive Partner Mobile Lab studies, because these labs are not available to conduct thorough investigations in all 64 communities. Each lab has its own unique strengths in terms of what type of targeted area study it can undertake (see Table H.1 below). Here, we have outlined an approach to make these targeted area study assignments in a way that is both equitable and takes advantage of the unique capabilities of Aclima vehicles and each Partner Mobile Lab.

## Assumptions

- Assume that each community will get at least 1 targeted area study, either conducted by Aclima or by one of the Partner Mobile Labs.
- Assume that each Partner Mobile Lab will spend ~1 week per assigned community, but that some communities may be clustered close enough that multiple communities could be monitored within the same week by the same Partner Mobile lab.
- Aclima targeted area studies will be approximately 1-2 week studies focused on a small area with high frequency monitoring in that area during that time period

## Approach

**Step 1:** Assign a few communities that have unique air quality concerns that are not readily addressed by Aclima vehicle driving that we want to prioritize (for example all of the Imperial County communities).

**Step 2:** Identify a handful of common pollutant source types that are well suited to Partner Mobile Lab studies and assign 3-4 Partner Mobile Lab studies per source type across different air districts/regions. We identified airports, refineries, landfills, and concrete/cement/asphalt sources as commonly identified sources across the state. The monitoring approach for these studies will be facility specific - generally using a fenceline approach to characterize the sources. The motivation for this is that communities concerned about these source types that do not get a Partner Mobile Lab study may benefit from data collected in other communities about similar types of concerns.

**Step 3:** Of the remaining communities, identify those with prioritized concerns around mobile sources (in particular heavy duty truck traffic concerns) to assign to Aclima.

**Step 4:** Of the remaining communities, identify those with multiple complex pollutant source types to do a general survey of impacted areas. The monitoring approach could be either neighborhood dense road network mapping or "point-to-point" or "connect-the-dots" moving between known or suspected sources.

**Step 5:** When Partner Mobile Lab resources are used up, assign the rest to Aclima as a mobile source or other appropriate study.

**Step 6:** Check prioritization of concerns from individual communities, cross reference with air district concerns and existing monitoring efforts, coordinate with Partner Mobile Labs on feasibility and science goals, get feedback from Project Expert Group, and iterate until a balanced plan is finalized.

**Table H.1** Strengths and limitations of Labs for Targeted Area Studies

| Lab | Strengths | Limitations |
|---|---|---|
| UC Riverside/Houston/Baylor | Measurements of composition of particulate matter.<br><br>Able to detect a wide range of specific VOCs, including toxics.<br><br>Source types: Oil and gas operations, landfills, industrial sources of VOCs and particulate matter, agricultural sources etc | Generally not available during overnight hours and limited to about 8 weeks from September - November. |
| UC Berkeley | Able to detect a wide range of specific VOCs, including toxics.<br><br>Source types: Oil and gas operations, landfills, industrial sources of VOCs and particulate matter, agriculture sources, some pesticides, etc | Generally not available during overnight hours and limited to 16 weeks of monitoring between June and February. |
| Aerodyne Research | Measurements of heavy metals in particulate matter.<br><br>Measurements of composition of particulate matter.<br><br>Able to detect a wide range of specific VOCs, including air toxics.<br><br>Source types: metal working, foundries, cement/concrete, pesticides, odorous sources, oil and gas operations, industrial sources of | Generally not available during overnight hours and limited to ~7 weeks in August and September. |

| | VOCs and particulate matter, etc. | |
|---|---|---|
| Aclima | Useful for identifying the locations of these source types: mobile sources, including diesel; natural gas leaks and other sources of methane, sources of VOCs, sources of PM.<br><br>Ability to drive at different hours of the day and days of the week.<br><br>Available to monitoring throughout the 9 month time period | Cannot identify or quantify specific VOC toxics, only locations of VOCs.<br><br>No speciated particulate matter measurements, except black carbon. |

**Table H.2** Lab assignments for each CNC

| CNC Name | Assigned Lab |
|---|---|
| "The West Side" (Huron, Avenal and Coalinga) | Riverside |
| Bloomington, Fontana, Rialto | Aclima |
| Buena Park, Anaheim, Fullerton, Orange | Aclima |
| Central and East Riverside, Rubidoux | Riverside |
| Chiriaco Summit | Aerodyne |
| Colton, Grand Terrace, San Bernardino | Aclima |
| Corona, Temescal Valley | Riverside |
| Compton, Rancho Dominguez, Willowbrook, Lynwood | Riverside |
| Delano | Aclima |
| East Contra Costa County (includes Pittsburg Bay Point) | Berkeley |
| East Palo Alto | Berkeley |
| El Monte, South El Monte, Avocado Heights, Hacienda Heights, La Puente (west), Bassett | Aerodyne |
| Fairfield | Aclima |
| Fairmead | Aclima |
| Florin (Community C) | Aclima |
| Gardena, Alondra Park, Lawndale | Aclima |

| | |
|---|---|
| Gilroy | Aclima |
| Greater Oakland | Berkeley |
| Hayward (parts) | Berkeley |
| Inglewood, Hawthorne, Westmont, Vermont | Aclima |
| Kettleman City | Aerodyne |
| Koreatown etc | Riverside |
| Lanare | Aclima |
| Le Grand | Berkeley |
| Lindsay | Aclima |
| Lost Hills | Riverside |
| Maywood, Commerce (east), Vernon, Bell | Riverside |
| Meadoview | Berkeley |
| Mira Loma, Jurupa Valley, Eastvale, Pedley | Aclima |
| Morgan Hill | Aclima |
| North Bakersfield | Aerodyne |
| North Central San Mateo | Aclima |
| Northern Imperial County Corridor - unincorporated communities of Niland, Desert Shores, SaltonSea Beach, Salton Sea, Bombay Beach, Seeley | Aerodyne |
| Norwood/Old North Sacramento, Del Paso Heights (Community B in District analysis) | Berkeley |
| North Sacramento | Berkeley |
| Oak Park, Fruitridge | Berkeley |
| Pacoima, North Hollywood, Sun Valley, San Fernando, Sylmar | Aclima |
| Paramount, North Long Beach | Riverside |
| Rancho Cucamonga, Ontario (east) | Aclima |
| Redwood City | Aclima |
| Rodeo to parts of Crockett | Berkeley |
| Salton City | Aerodyne |
| San Francisco | Aclima |
| San Jose | Berkeley |
| San Leandro | Aclima |
| San Rafael | Aclima |

| | |
|---|---|
| Santa Ana | Aerodyne |
| Santa Rosa | Aerodyne |
| South Madera - La Vina, Parkwood, Parksdale, Borden, Italian Swiss Colony, Iragose, and Ripperday | Berkeley |
| South Merced | Berkeley |
| South Modesto (Modesto, Modesto Airport neighborhood ) | Berkeley |
| South Natomas | Aclima |
| South San Francisco | Berkeley |
| South Tulare & Matheny Tract | Aclima |
| Torrance | Riverside |
| Treasure Island | Berkeley |
| Tri-Valley | Aclima |
| Vallejo | Berkeley |
| Van Nuys | Aclima |
| Wasco | Aclima |
| West Berkeley | Aerodyne |
| West Modesto | Berkeley |
| West Stanislas County | Berkeley |