AIR POLLUTION CONTROL DISTRICT

IMPERIAL COUNTY YEAR 5 COMMUNITY AIR MONITORING PLAN FOR THE NORTH END PHASE 1 COMMUNITY

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YEAR 5 COMMUNITY AIR MONITORING PLAN
FOR THE IMPERIAL COUNTY NORTH END PHASE 1 COMMUNTIY

Prepared for

Imperial County AB 617 Steering Committee

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Contents

1 Introduction and Background 1-1
1.1 Introduction 1-1
1.2 Background 1-1
1.2.1 Assembly Bill 617 1-1
1.2.2 Community Nomination Overview 1-2
1.2.3 Imperial County Community Nominations 1-2
1.2.4 Community Steering Committee 1-3
1.3 Objective 1-3
1.4 Document Organization 1-4
2 Element 1 – Form Community Partnerships 2-1
2.1 Element 1 Overview 2-1
2.2 Community Steering Committee 2-1
2.3 Outreach Overview 2-2
3 Element 2 – State the Community-Specific Purpose for Air Monitoring 3-1
3.1 Element 2 Overview 3-1
3.2 Air Quality Issues Facing the Community 3-1
3.2.1 Federal Attainment Status 3-1
3.2.2 Additional Community Information 3-3
3.3 Community Input 3-6
3.4 Regulatory Monitoring 3-11
3.5 Expansion of Existing Monitoring Network 3-11
3.6 Potential Alternative Strategies 3-12
4 Element 3 – Identify Scope of Actions 4-1
4.1 Element 3 Overview 4-1
4.2 Community Input 4-1
4.3 Scope of Actions 4-1
4.3.1 Expansion of Existing Monitoring Network 4-1
4.3.2 Notification Systems 4-2
4.3.3 Education and Outreach 4-2
4.4 Other Supporting Actions 4-2
5 Element 4 – Define Air Monitoring Objectives 5-1
5.1 Element 4 Overview 5-1
5.2 Air Monitoring Objectives for this Plan 5-1
5.2.1 Monitoring Design 5-2
5.2.2 Locations for New Monitors 5-2
5.3 Additional Data 5-2
5.4 Evaluating Plan Progress 5-3
6 Element 5 – Establish Roles and Responsibilities 6-1
6.1 Element 5 Overview 6-1
6.2 Parties Involved 6-1
6.2.1 Community Steering Committee Responsibilities 6-2
6.2.2 ICAPCD Responsibilities 6-2

6.2.3 SCS Engineers Responsibilities 6-2
6.2.4 Community Involvement 6-3
7 Element 6 – Define Data Quality Objectives 7-1
7.1 Element 6 Overview 7-1
7.2 Data Quality Objectives for AB 617 Community Monitors 7-1
7.3 Data Quality Objectives for Complementary Monitoring 7-3
8 Element 7 – Select Monitoring Methods and Equipment 8-1
8.1 Element 7 Overview 8-1
8.2 Monitoring Methods and Equipment for AB 617 Community Monitors 8-1
8.3 Monitoring Methods and Equipment for Complementary Monitoring 8-2
9 Element 8 – Determine Monitoring Areas 9-1
9.1 Element 8 Overview 9-1
9.2 Location of Regulatory Monitors 9-1
9.3 Location of AB 617 Community Monitors 9-1
10 Element 9 – Develop Quality Control Procedures 10-1
10.1 Element 9 Overview 10-1
10.2 Quality Control Procedures for AB 617 Community Monitors 10-1
11 Element 10 – Describe Data Management 11-1
11.1 Element 10 Overview 11-1
11.2 Data Management for AB 617 Community Monitors 11-1
12 Element 11 – Provide Work Plan for Conducting Field Measurements 12-1
12.1 Element 11 Overview 12-1
12.2 Field Procedures for AB 617 Community Monitors 12-1
12.3 Safety Procedures 12-2
13 Element 12 – Specify Process for Evaluating Effectiveness 13-1
13.1 Element 12 Overview 13-1
13.2 Evaluating Effectiveness – Community Monitors 13-1
14 Element 13 – Analyze and Interpret Data 14-1
14.1 Element 13 Overview 14-1
14.2 Data Analysis and Considerations for Community Monitors 14-1
15 Element 14 – Communicate Results to Support Action 15-1
15.1 Element 14 Overview 15-1
15.2 Communicating Results of Community Monitoring 15-1
16 References 16-1

Tables

Table 1.1. Community Air Monitoring Plan Elements 1-4
Table 3.1. National Ambient Air Quality Standards and Attainment Status for North End Phase 1 Community 3-2
Table 3.2. Examples of Key Emission Sources in Imperial County and Associated Pollutants 3-5
Table 7.1. Data Quality Objectives for AB 617 Community Monitors 7-1
Table 7.2. Data Quality Information for QuantAQ MODULAIR-PM Air Quality Sensors 7-2
Table 9.1. Descriptions of Sites Selected for AB 617 Community Monitors 9-3

Figures

Figure 3.1. North End Phase 1 Community 3-4
Figure 3.2. What are your desired goals for the PM monitoring? 3-7
Figure 3.3. What area PM emission sources are you most concerned about? 3-8
Figure 3.4. What point PM emission sources are you most concerned about? 3-8
Figure 3.5. Which of these sensitive receptor locations would you like to place sensors at? 3-9
Figure 3.6. Locations of Existing Regulatory Monitors in the North End Phase 1 Community 3-10
Figure 6.1. North End Phase 1 Community Monitoring Organizational Chart 6-1
Figure 11.1. AB 617 Community Monitor Data Flow 11-1

Appendices

Appendix A: Community Meeting Summary
Appendix B: AB 617 Community Steering Committee Charter

Abbreviations and Acronyms

AB 617	(California) Assembly Bill 617
AC	Alternating current
CAMP	Community Air Monitoring Plan
CAP	Criteria Air Pollutants
CAPP	Community Air Protection Program
CARB	California Air Resources Board
CERP	Community Emission Reduction Program
CFR	Code of Federal Regulations
CO	Carbon monoxide
CSC	AB 617 North End Phase 1 Community Steering Committee
FEM	Federal Equivalent Method
FRM	Federal Reference Method
H_2S	Hydrogen sulfide
ICAPCD	Imperial County Air Pollution Control District
Met One BAM 1020	Met One Instruments Beta Attenuation Mass 1020
MSA	Metropolitan statistical area
µg/m^3	Micrograms per cubic meter
µm	Micron
NAAQS	National Ambient Air Quality Standards
NO_2	Nitrogen dioxide
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
Pb	Lead
PM	Particulate matter
PM_1	Extremely fine particulates with a diameter smaller than one micron
PM_{10}	Respirable Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
QA/QC	Quality assurance/quality control
Ramboll	Ramboll Americas Engineering Solutions
SCAQMD	South Coast Air Quality Management District
SCS	SCS Engineers
SIP	State Implementation Plan
SMPS	Scanning Mobility Particle Sizer
SO2	Sulfur dioxide
SOP	Standard operating procedure
TAC	Toxic air contaminant
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compound

1 Introduction and Background

1.1 Introduction

This Year 5 Community Air Monitoring Plan ("Monitoring Plan" or "Plan") presents objectives and methodologies for community air monitoring in the North End Phase 1 Community in Imperial County, California ("Community"). This Plan was developed in response to the selection of this Community to conduct community air monitoring under the California Air Resources Board (CARB) Community Air Protection Program (CAPP), a program established to help implement California Assembly Bill 617 (AB 617). This Plan specifically addresses the 14 elements laid out for community air monitoring in CARB's Community Air Protection Blueprint ("Blueprint") Version 2.0, the most recent version of the guidance document developed for the CAPP.[1] These elements ultimately serve to address three objectives, which are to:

- Determine the reason for conducting community air monitoring;
- Describe how the community air monitoring will be conducted; and
- Identify how the data will support action to reduce air pollution within the Community.

When brought together, the 14 elements demonstrate how the Community plans to conduct air monitoring at the local scale to generate air quality data that is accurate, accessible, transparent, and understandable, and ultimately useful towards improving local air quality.

1.2 Background

1.2.1 Assembly Bill 617

On July 26, 2017, California Governor Jerry Brown signed into law AB 617, an act to amend and add sections regarding air pollution to California's Health and Safety Code. The bill directs CARB and local air districts throughout the state (including the Imperial County Air Pollution Control District [ICAPCD or "District"]) to enact measures to promote public health and welfare by reducing air pollution on a local scale, particularly in communities that are disproportionately burdened by air pollution. AB 617 was designed to accomplish this via the establishment of the CAPP, which puts the emphasis on community-focused actions that go beyond the regional and statewide air quality programs already in place.

AB 617 was designed to specifically improve air quality in disadvantaged communities with high exposure burdens for criteria air pollutants (CAPs)[2] and toxic air contaminants (TACs).[3] These improvements are to be accomplished through community emissions reductions programs, community air monitoring plans, or both. Section 1.2.2 describes the process by which the first

[1] California Air Resources Board. October 2023. Final Community Air Protection Program Blueprint 2.0. Available at: https://ww2.arb.ca.gov/sites/default/files/2024-04/BP2.0_FULL_FINAL_ENG_2024_04_09.pdf. Accessed: October 2024.

[2] Includes the six federally regulated air pollutants with National Ambient Air Quality Standards established by the USEPA as a requirement of the Clean Air Act. Additional information available at: https://www.epa.gov/criteria-air-pollutants. Accessed: October 2024.

[3] Defined by the California Health and Safety Code as air pollutants which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Additional information available at: https://oehha.ca.gov/air/toxic-air-contaminants. Accessed: October 2024.

round of communities was selected, including the North End Phase 1 Community in Imperial County.

1.2.2 Community Nomination Overview

As part of the CAPP, CARB's Governing Board selected California communities to participate by implementing a community air monitoring program, a community emissions reduction program, or both. AB 617 stipulated that the first round of communities was to be selected by October 1, 2018 and annually thereafter (i.e., beginning January 1, 2020). Each year, the selection process involves three steps: Identification, Assessment, and Selection. During the Identification phase, CARB staff updates the running list of potential communities for participation in the CAPP. Input is collected from air districts across the state and from the Office of Environmental Health Hazard Assessment (OEHHA), as well as internally from CARB's own experience and data resources. Community members are also able to nominate their own or other communities for consideration. Once this broad list of potential communities has been updated, the next step is to assess the options.

In the Assessment phase, CARB staff will continue to consult with community stakeholders, OEHHA, and the air districts to determine which potential communities are experiencing disproportionate burdens due to cumulative air pollution exposure. The CAPP Blueprint details the factors that are to be evaluated during this phase, which may include ambient air concentrations of specific CAPs and TACs, quantified health risk estimates based on modeling, the proximity of sensitive populations to significant sources of air pollution, and socio-economic factors. Once the available and relevant data has been assessed, the final phase, Selection, is initiated.

1.2.3 Imperial County Community Nominations

Both local air districts and citizens alike can identify communities and submit nominations to CARB as part of the CAPP community selection process. A nomination for a community in the northern part of Imperial County was submitted for consideration in Year 2 of the AB 617 program (i.e., for selection in 2019).[4] The suggested community included the City of Brawley, City of Calipatria, City of Westmorland, City of Imperial, and the unincorporated communities of Niland, Desert Shores, Salton Sea Beach, Salton City, Bombay Beach, and Seeley. Ultimately, this community was not selected by CARB in 2019.

In 2022, the nomination was modified to focus on the cities of Brawley, Calipatria, and Westmorland, identifying the new area as the "North End Phase 1" Community.[5] On February 23, 2023, CARB selected the North End Phase 1 Community to be included among the

[4] ICAPCD. October 2019. Imperial County Community AB617 Community Nominations. Available at: https://ww2.arb.ca.gov/sites/default/files/2019-11/2019%2010%2023%20ICAPCD%20CCV%20Northend%20Nomination.pdf. Accessed: October 2024.

[5] ICAPCD. August 2022. Imperial County AB617 Community Nominations (2022). Available at: https://ww2.arb.ca.gov/sites/default/files/2022-11/22%2008%2002%20ICAPCD%20North%20End%20Phase%201%20Community%20Nomination%20Letter.pdf. Accessed: October 2024.

Year 5 communities in the CAPP. The Community was selected to develop both a Community Air Monitoring Plan (CAMP) and Community Emission Reduction Program (CERP).[6]

1.2.4 Community Steering Committee

A hallmark of the CAPP is community-driven action. AB 617 was written to allow members from within the selected communities to take an active role in the development of their own air monitoring plans and emission reduction programs. Those who live and work in a selected community are both the most familiar with it and the most invested in promoting its environmental quality. Thus, AB 617 places an emphasis on community-driven action achieved under the oversight of groups known as community steering committees. These committees are to be comprised of primarily individuals who live and work within the communities they will represent. CARB suggests that these committees include "community members who live, work, or own businesses within each community (e.g., community residents, small businesses, facility managers/workers, school personnel), with a majority of representation from community residents."[7] CARB notes that a steering committee may also include representatives from local environmental justice and public health community based organizations, local agencies, local health departments, members of academia, and local labor organizations, as appropriate.

In late 2023, ICAPCD assembled a steering committee for the North End Phase 1 Community. Referred to as the AB 617 Community Steering Committee ("Steering Committee"), this group is intended to be involved with all aspects of the CERP and the CAMP, including participant recruitment, identification of key objectives, monitoring site selection, emission reduction strategy selection, and evaluation and dissemination of air monitoring data. The Steering Committee is also intended to maintain communication with other community members throughout the planning process to gather input from concerned citizens and facilitate ongoing discussion.

1.3 Objective

The North End Phase 1 Community was tasked with developing both a CAMP and a CERP. This Plan serves to satisfy the requirements of the former, and was developed according to the guidelines laid out for community air monitoring in the CAPP Blueprint 2.0. The goal in developing this CAMP is ultimately to better understand the impacts of air pollution in the Community through gathering more detailed information and data about air quality on a local scale. This information will in turn be used to inform and support the CERP that is to be developed concurrently. These programs will contribute to the overall objective of promoting public health and welfare in the Community through improvements in local air quality.

A key objective of AB 617 and the CAPP is to bring environmental justice considerations into the scope of actions in disadvantaged communities. These chosen disadvantaged communities have been nominated and selected by CARB as areas where there will be benefits from monitoring and

[6] CARB. AB617 Community Air Protection Program Fifth Annual Community Recommendations. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-02/2023%2001%20ComRec%20Fact%20Sheet_ENG%20Final.pdf.pdf. Accessed: October 2024.

[7] California Air Resources Board. September 2023. Final Draft Community Air Protection Program – Blueprint 2.0. Available at https://ww2.arb.ca.gov/sites/default/files/2023-09/BP2.0_Final_Draft_9.24.2023_FD.pdf. Accessed October 2024

community emissions reductions strategies. The North End Phase 1 Community is one of those designated communities. Following the principles of the CAPP, this Plan aims to encompass the principles of environmental justice: to mitigate disproportionate impacts of environmental pollution on disadvantaged communities, engage in conversations of mutual respect with all peoples, and ensure the right to ethical and sustainable use of land and resources.

1.4 Document Organization

This Plan was developed and organized following the guidelines laid out in the CAPP Blueprint prepared by CARB. Specifically, each of the subsequent chapters in this Plan addresses one or more of the 14 planning elements (summarized in Table 1.1 below).

Table 1.1. Community Air Monitoring Plan Elements

What is the reason for conducting community air monitoring?	
1	Form community partnerships.
2	State the community-specific purpose for air monitoring.
3	Identify scope of actions.
4	Define air monitoring objectives.
5	Establish roles and responsibilities.
How will monitoring be conducted?	
6	Define air quality objectives.
7	Select monitoring methods and equipment.
8	Determine monitoring areas.
9	Develop quality control procedures.
10	Describe data management.
11	Provide work plan for conducting field measurements.
How will data be used to take action?	
12	Specify process for evaluating effectiveness.
13	Analyze and interpret data.
14	Communicate results to support action.

2 Element 1 – Form Community Partnerships

2.1 Element 1 Overview

The first element presented in the CAPP Blueprint is to form community partnerships. Community members are well suited for providing direct insight on the air quality issues in their community and their input is necessary to ensure effective community-focused monitoring. As part of this element, a community steering committee must be formed to facilitate communication between community members and the air district, as well as to carry out air monitoring goals and objectives. Additionally, a community steering committee is used to develop outreach opportunities to ensure that the community is able to participate in the decision-making process. The Steering Committee formed by the ICAPCD fulfils the requirements of this element.

2.2 Community Steering Committee

The purpose of the Steering Committee is to identify and prioritize air pollution issues, guide actions for the CAMP and the CERP, create and execute air monitoring objectives, provide information to Community members, and support local actions related to air monitoring. The Steering Committee for the Community was convened by the ICAPCD following its selection as a CAPP Year 5 community.

On July 26, 2023, ICAPCD and CARB met with community members to initiate the process of creating and nominating members to the Steering Committee for the Community. The purpose of this meeting, which was open to the general public, was to begin the process of selecting Steering Committee members from those interested in being a part of it. The goal was for this Steering Committee to consist of nine individuals, ideally with equal representation from each city (i.e., three people each from Brawley, Westmorland, and Calipatria). Along with the nine main committee members, nine alternate committee members were initially determined to be included as backups if any main committee members are unable to attend meetings. Candidates interested in applying to the Steering Committee must have a stake in the community by either living, working, or having a business in the cities of Brawley, Calipatria, or Westmorland. The North End Phase 1 Steering Committee differs from the South County committee in that there are no co-chairs. Instead, the intent is that city representatives oversee agenda management.

The District discussed the applications received during the application period over the course of several meetings held in the months of July, August and September, 2023. The District Air Pollution Control Officer then reviewed each application and worked with ICAPCD staff to determine which applicants were eligible and most aligned with the spirit and objectives of the CAPP Blueprint.

Since its formation, the Steering Committee has been involved with all aspects of both this Plan and the CERP. In the formation of this Plan, Steering Committee activities have included and will continue to include participant recruitment, identification of key objectives, monitoring site selection, and evaluation and dissemination of results. Additionally, the Steering Committee is intended to serve as a communication channel with other Community members to gather input from concerned citizens and facilitate ongoing discussion about the CAPP.

The Steering Committee consists of nine members (three members from each city) with six alternates that are Community representatives. Some of these Community representatives are affiliated with various organizations around the Brawley, Westmorland, and Calipatria area, including local government, businesses, and non-profit organizations. They were selected to participate in the Steering Committee based on their potential to act as leaders and contribute technical expertise during planning. A table with the names and affiliations of each member can be found in the AB 617 Steering Committee Charter. In the event that any Steering Committee members are unable to perform their duties, the alternates listed in the table are expected to step in.

In 2023, staff from ICAPCD developed and proposed a draft AB 617 Steering Committee Charter ("Charter") for consideration by the Steering Committee. The Charter was then submitted to the ICAPCD Governing Board, which is comprised of members of the Imperial County Board of Supervisors. Formally approved by the Imperial County Board of Supervisors on October 17, 2023, the Charter establishes the authority and purpose of the Steering Committee along with its bylaws and the intended structure and schedule for regular Steering Committee meetings.[8] The draft Charter was discussed and formally approved by the Steering Committee around this time.

The Steering Committee is responsible for supporting active community involvement and collaboration in the development of the CAPP by providing a forum for identifying community issues and potential solutions with all relevant parties. Topics of discussion can include approaches for community engagement and outreach, identifying sources contributing to the Community's air quality challenges, strategies for developing and implementing the community air monitoring and emissions reduction programs, targets and strategies, and metrics to track progress. The Charter specifies that these meetings be held at least once per month, unless there is a lack of agenda topics, in which case a vote may be held to cancel the following month's meeting. Special meetings may also be held as required. A summary of the Steering Committee meetings conducted to date is available in Appendix A. A copy of the Charter is presented as Appendix B.

2.3 Outreach Overview

As part of the commitment to community engagement and outreach, ICAPCD staff operates a website dedicated to AB 617 activity in Imperial County.[9] The site offers background information on AB 617 and has pages for information on meetings and events (including notes and recordings from past meetings), contact information, and links to important resources such as the CARB home page and websites for local air monitoring networks. Additionally, District staff have maintained that they will be available as resources to anyone who has questions or is looking to gather more information about CAPP implementation in Imperial County. Information regarding the dedicated District contact person for this Plan is provided below.

[8] ICAPCD. 2023. AB 617 Community Steering Committee Charter. October 17 Available at: https://imperial.granicus.com/MetaViewer.php?view_id=2&clip_id=2454&meta_id=410977. Accessed: October 2024.

[9] ICAPCD. 2024. AB 617 Imperial County. Available at: https://www.icab617community.org/. Accessed: October 2024.

Dedicated ICAPCD Contact Person

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The Steering Committee meetings are open to the public. They are advertised via email notifications, as well as flyers posted to the County's website. For those individuals who are unable to attend the meetings but would still like to view them in real time, the Committee livestreams meetings on Facebook as feasible. To enhance public understanding and participation, a professional interpretation service is available at each meeting to provide translation services. In addition, at each meeting ICAPCD staff will serve as the facilitator for the Community and encourage public and Steering Committee engagement. At each meeting, a specific agenda item is included to allow for the public to issue comments. These comments are either addressed during the meeting or included as a discussion point for future meetings. For agenda items requiring more direct input from the Steering Committee or members of the public in attendance, electronic polling is utilized. Presentation materials from meetings are available at the District's AB 617 website.[10]

Community input received during the Steering Committee meetings has demonstrated the value that collaborating with members of the Community on both the CAMP and the CERP provides to the overall CAPP. Going forward, the Steering Committee will continue to engage with the public through monthly meetings. The flyer notification system has worked well thus far for spreading the word about meetings and promoting attendance, so it will continue to be utilized.

Additionally, the ICAPCD has an established social media presence that they utilize to promote community engagement in matters related to air quality and the AB 617 plans. The District operates multiple social media pages on Facebook,[11] Instagram,[12] and X (formerly known as Twitter)[13] where regular posts are made. These posts are intended to notify the public about important items such as high wind advisories, times when burning is and is not permitted, and daily air quality reports that provide summaries of ambient pollutant measurements recorded at regulatory monitoring stations around the County. Advertisements for upcoming Steering Committee meetings and photos and videos from past meetings are also uploaded onto these social media pages.

[10] ICAPCD. 2024. AB 617 Imperial County. Available at: https://www.icab617community.org/. Accessed: October 2024.
[11] Facebook. July 2024. ICAPCD. Available at: https://www.latest.facebook.com/Countyair/. Accessed: October 2024.
[12] Instagram. July 2024. ICAPCD. Available at: https://www.instagram.com/county_air/. Accessed: October 2024.
[13] X. July 2024. ICAPCD. Available at: https://x.com/county_air. Accessed: October 2024.

3 Element 2 – State the Community-Specific Purpose for Air Monitoring

3.1 Element 2 Overview

While the common goal of the CAPP at large is to improve air quality in specific communities throughout California, not all regions are facing the same issues. Thus, the CAPP Blueprint specifies that community air monitoring plans must clearly define the purpose for conducting monitoring in the given community. Background information on the community's particular pollutants of concern, known or expected locations of pollution, and potential sources should be provided as support for the decision to conduct air monitoring in the community. Additionally, the Blueprint specifies that if existing community air monitoring data are available, the monitoring plan should document the scope of the monitoring and explain how additional monitoring will expand or complement these existing programs. Alternative approaches beyond existing monitoring programs should also be evaluated for their potential to benefit the monitoring plan.

As described in the sections below, the North End Phase 1 Community is characterized with impaired air quality and the broader region has been designated as a federal nonattainment area for multiple National Ambient Air Quality Standards (NAAQS). Emissions from both sides of the international border have been shown to contribute to the air quality burden in the Community. The Emission Reduction Program, being developed concurrently with this Plan, will look to improve current conditions by identifying emission reduction strategies focused on sources on the United States side of the border. It will also identify strategies for reducing human exposure to air pollution, which will be effective regardless of where emissions originate. Monitoring can be a useful tool in tracking emission reductions as well as informing a community of its current exposure to air pollution. While both regulatory and community monitoring exists within the Community, this Plan seeks to leverage and build upon that monitoring to meet the needs of the Community. Ultimately, the community-specific purpose for air monitoring is defined by the Community's desire to track the progress of the Emission Reduction Program, identify and characterize sources and hotspots, and provide education, and higher resolution real-time air quality data that is easy to understand and access.

3.2 Air Quality Issues Facing the Community

3.2.1 Federal Attainment Status

As shown in Table 3.1 below, the Community is located within a region that is nonattainment for the 8-hour ozone (O_3) and 24-hour and annual fine particulate matter ($PM_{2.5}$) NAAQS. The NAAQS are standards established by the United States Environmental Protection Agency (USEPA) that are designed to be protective of human health and welfare. These standards are periodically revised to accurately reflect the latest scientific knowledge. When air quality in an area deteriorates to the point where a NAAQS is exceeded, regulatory mechanisms are triggered which typically require the area to create a State Implementation Plan (SIP) to address the underlying issues. These extensive documents usually take several months to years to develop and include many facets such as analyses of monitoring data, emissions modeling, emissions inventory development, control measures review, and even implementation of new control

measures. Since 2017, the District has developed and approved SIPs for PM_{10},[14] $PM_{2.5}$,[15] and O_3.[16] While beneficial, these plans are designed to address air quality issues at the regional level for Imperial County. In contrast, this CAMP prepared in accordance with AB 617 expands upon previous efforts in the SIPs while specifically focusing on the North End Phase 1 Community.

Table 3.1. National Ambient Air Quality Standards and Attainment Status for North End Phase 1 Community

Pollutant	Averaging Period	Federal Standard[a]	Attainment Status
Ozone (O_3)	8-hour	0.070 ppm	Nonattainment
Respirable Particulate Matter (PM_{10})	24-hour	150 µg/m^3	Maintenance/Attainment
Fine Particulate Matter ($PM_{2.5}$)	24-hour	35 µg/m^3	Nonattainment
	Annual	9 µg/m^3 (2024)[b]	--
	Annual	12 µg/m^3 (2012)	Nonattainment
	Annual	15 µg/m^3 (2006)[c]	Nonattainment
Carbon Monoxide (CO)	1-hour	35 ppm	Unclassified/Attainment
	8-hour	9 ppm	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	1-hour	0.100 ppm	Unclassified/Attainment
	Annual	0.053 ppm	Unclassified/Attainment
Lead (Pb)	Rolling 3-month average	0.15 µg/m^3[d]	Unclassified/Attainment
Sulfur Dioxide (SO_2)	1-hour	0.075 ppm	Unclassified/Attainment
	3-hour	0.5 ppm[e]	Unclassified/Attainment

Notes:

[a] Federal standard levels obtained from the USEPA NAAQS Table. Note that some federal standards include a level (such as the concentrations shown in the Table) and a form (often a statistical form or based on excluding a certain number of exceedances of the standard level over a given number of years). Exceedances of the standard level are not necessarily violations or exceedances of the standard. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed: October 2024.

[b] On February 7, 2024, USEPA promulgated revisions to the level of the primary annual $PM_{2.5}$ NAAQS to 9 ug/m^3. Area designations will take place within two years (2026).

[14] ICAPCD. 2018. Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less Than 10 Microns in Diameter. Available at: https://www.arb.ca.gov/planning/sip/planarea/imperial/sip.pdf. Accessed: October 2024.

[15] ICAPCD. 2018. 2018 State Implementation Plan for the Imperial County 12 ug/m3 Annual $PM_{2.5}$ Standard. Available at: https://www.arb.ca.gov/planning/sip/planarea/imperial/final_2018_ic_pm25_sip.pdf. Accessed: October 2024.

[16] ICAPCD. 2017. Imperial County 2017 State Implementation Plan for the 2008 8-hour Ozone Standard. Available at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/OzoneSIP.pdf. Accessed: October 2024.

Table 3.1. National Ambient Air Quality Standards and Attainment Status for North End Phase 1 Community

[c] This is a secondary standard.

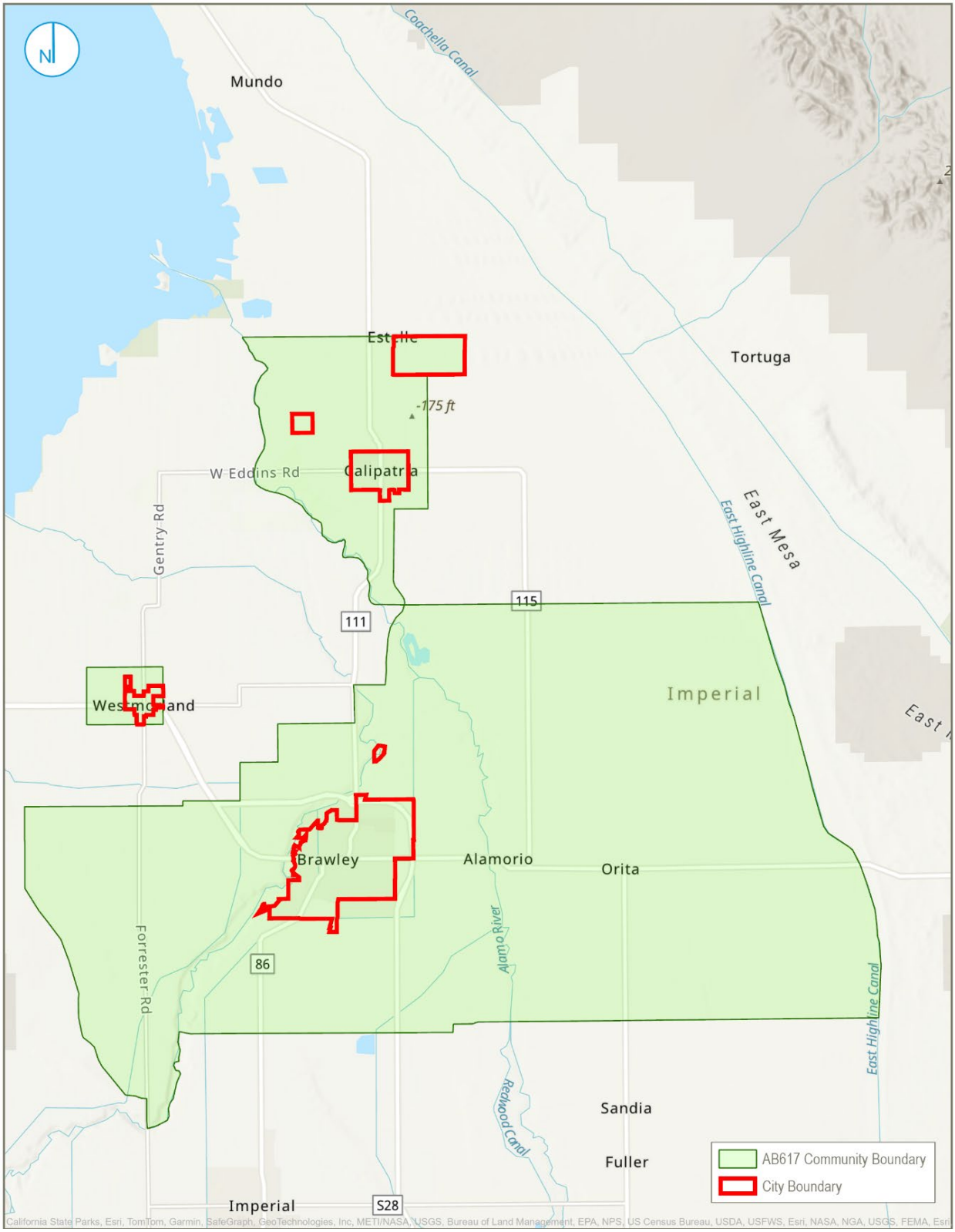
[d] Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[e] The 1971 SO_2 standards (0.14 ppm as a 24-hour average and 0.03 ppm as an annual average) remain in effect until one year after an area is designated for the 2010 standards, except that in areas designated nonattainment for the 1971 standards or not meeting the requirements of a SIP call under the previous SO_2 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

3.2.2 Additional Community Information

Imperial County is located in a primarily desert region of southern California and shares an international border with Mexico. The Imperial Valley runs approximately north-to-south through the center of the County and extends into Mexico. The portion of the valley just south of the Salton Sea contains the Community (see Figure 3.1).

Figure 3.1. North End Phase 1 Community



The population of Imperial County is approximately 179,000,[17] while the population in the Community is approximately 21% of that or 38,000. The principal industries in the County include management occupations, retail trade, transportation occupations, agriculture, and construction.[18] The Community can experience significant emissions from vehicular traffic, particularly near CA-Highways 78, 86, and 111 as well as dust emissions from unpaved roads. Rest areas in the Community are also a source of emissions from semi-truck idling. Agricultural activities such as burning, farm equipment operation, and pesticide use also contribute to air quality concerns. Furthermore, the receding shoreline of the Salton Sea causes mobilized particulate matter and toxic contaminants to become an air quality concern in the region due to wind-initiated transport of particulate matter from exposed playa.[19] Table 3.2 below summarizes the types of air pollutants generally associated with the sources discussed above.

Table 3.2. Examples of Key Emission Sources in Imperial County and Associated Pollutants

Emissions Source	Associated Pollutants
Agricultural Activities (tilling)	PM_{10}, $PM_{2.5}$
Agricultural Activities (burning)	$PM_{2.5}$
Concentrated Animal Feeding Operations	PM_{10}, $PM_{2.5}$, methane (CH_4), ammonia (NH_3), H_2S
Off-Road Equipment	Combustion By-products[a]
On-Road Vehicles (includes idling)	Combustion By-products[a]
Unpaved Roads	PM_{10}, $PM_{2.5}$
Industrial Energy Production	Combustion By-products[a]
Off-Highway Vehicles	PM_{10}, $PM_{2.5}$
Regional Wind Events	PM_{10}, $PM_{2.5}$
Salton Sea Playa	PM_{10}, $PM_{2.5}$, H_2S
Geothermal Energy Production	PM_{10}, $PM_{2.5}$, H_2S

Notes:

[a] Combustion by-products will vary by fuel type but will generally include carbon dioxide, carbon monoxide, sulfur dioxide, nitrogen oxides, particulate matter, and toxics.

[17] United States Census Bureau. 2023. QuickFacts Imperial County, California. Available at: https://www.census.gov/quickfacts/fact/table/imperialcountycalifornia/PST045222. Accessed: October 2024.

[18] United States Census Bureau. 2022. Table C24050: Industry by Occupation for the Civilian Employed Population 16 Years and Over. Available at: https://data.census.gov/table/ACSDT1Y2022.C24050?q=C24050:%20Industry%20by%20Occupation%20for%20the%20Civilian%20Employed%20Population%2016%20Years%20and%20Over&g=050XX00US06025. Accessed October 2024.

[19] Imperial County Air Pollution Control District. 2019. Available at: https://ww2.arb.ca.gov/sites/default/files/2019-11/2019%2010%2023%20ICAPCD%20CCV%20Northend%20Nomination.pdf. Accessed October 2024.

Due to measured concentrations of pollutants in the region, OEHHA's CalEnviroScreen 4.0 model[20] ranks portions of the Community in the 12th to 38th percentile for ozone exposure, in the 16th to 39th percentile for $PM_{2.5}$ exposure, as high as the 43rd percentile for diesel particulate matter exposure, and as high as the 99th percentile for asthma-affected populations. Both ozone and particulate matter have been documented to contribute to asthma and other lung-related diseases.[21] The California Health Interview Survey[22] provides data on the prevalence of both active and lifetime asthma in California. Active asthma prevalence is the proportion of people who have ever been diagnosed with asthma by a healthcare provider and report they still have asthma and/or had an episode or attack within the past 12 months. Lifetime asthma prevalence is the proportion of people who have ever been diagnosed with asthma by a healthcare provider. For 2022, Imperial County had an active asthma prevalence of 28.9% (ranked 28th out of 44 counties in California), and a lifetime prevalence of 19.5% (ranked 9th). The active prevalence rate is below the statewide average of 30.3%, while the lifetime prevalence rate is above the statewide average of 15.7%.

3.3 Community Input

During the third through seventh Steering Committee meetings, held between September 18, 2023 and January 29, 2024, members highlighted emission sources of concern such as generators, agricultural burning, geothermal fields, sewage facilities, landfills, and the Salton Sea. Pollutants and meteorological conditions of concern that members expressed interest in monitoring included $PM_{2.5}$, PM_{10}, ozone, volatile organic compounds (VOCs), hydrogen sulfide (H_2S), wind speed, and wind direction. During the fifth Steering Committee meeting, held on November 28, 2023, and onwards, members discussed suggestions for sensor locations.

During the ninth Steering Committee meeting, held on April 8, 2024, members discussed and selected the community boundaries with consideration of significant emission sources and their proximity to sensitive receptors such as schools. After this meeting, a survey was presented to the Steering Committee which asked multiple selection and ranking questions relevant to Element 2. These questions included the following:

- "What are your desired goals for the particulate matter (PM) monitoring?";
- "What area PM emission sources are you most concerned about?";
- "What point PM emission sources are you most concerned about?"; and
- "Which [of these] sensitive receptor locations would you like to place sensors at?".

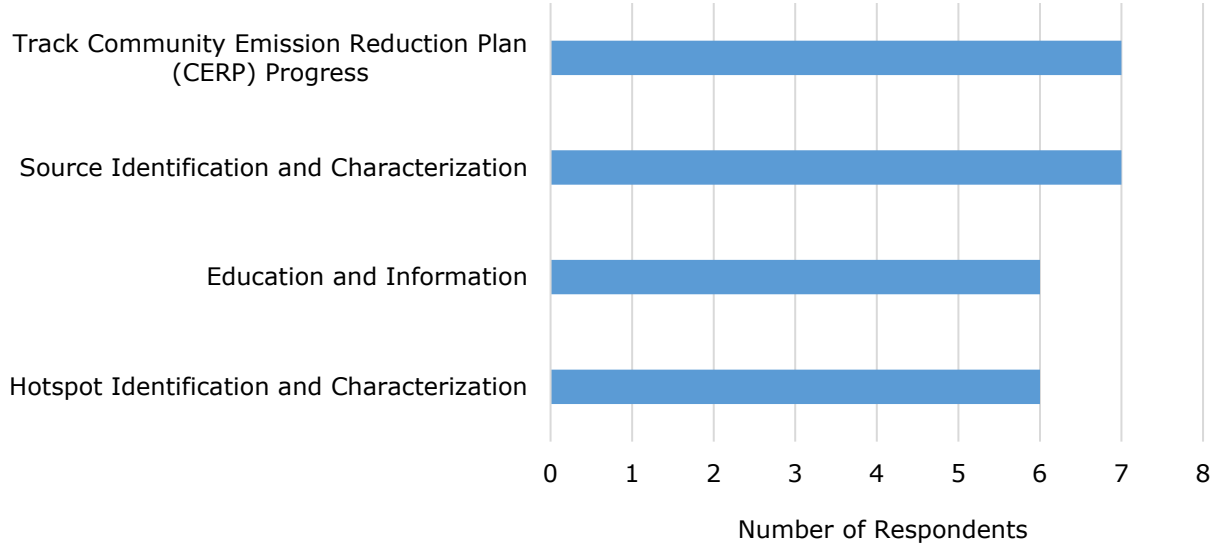
[20] Indicator percentiles obtained from CalEnviroScreen 4.0 for census tracts 6025010101, 6025010102, 6025010200, 6025010300, 6025010400, 6025010500, 6025010600, 6025010700. Available at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40. Accessed: October 2024

[21] USEPA. Asthma and Outdoor Air Pollution. Available at: https://www.airnow.gov/sites/default/files/2018-03/asthma-flyer.pdf. Accessed: October 2024.

[22] Additional information on the California Health Interview Survey can be found at: https://healthpolicy.ucla.edu/our-work/california-health-interview-survey-chis. Accessed: October 2024.

The results from this survey are reproduced in Figures 3.2 through 3.5 below and generally show that the tracking of CERP progress and source identification and characterization are the PM monitoring goals most desired by the Steering Committee.[23] The Steering Committee identified area PM emission sources of highest concern as fugitive windblown dust and farming operations. The Steering Committee also identified point PM emission sources of highest concern as agricultural services and beef feedlots. For the questions regarding area and point PM emission sources, several respondents provided write-in answers of geothermal emissions (which fall under power generation), fallow lands (which fall under farming operations), passing and idling semi-trucks and passenger vehicles, such as car pickup lines around schools (which are considered mobile PM emission sources), and VOC emissions (which are not PM emissions). As far as where potential sensors should be sited, schools, care facilities, and parks and outdoor athletic facilities were the most desired sensitive receptor locations.

Figure 3.2. What are your desired goals for the PM monitoring?



(Data obtained from Steering Committee responses between April 8 and May 3, 2024)

[23] One respondent provided a write-in answer of the gathering of data to promote regulatory changes for this question, which could potentially be viewed as overlapping with the two highest-ranked goals. The sensors could gather data to track programs developed as part of the CERP, and also gather data to identify sources that should be targeted for control strategies or regulatory changes like new laws and regulations.

Figure 3.3. What area PM emission sources are you most concerned about?

Area Particulate Matter (PM) Emission Source	Rank of Importance
Fugitive Windblown Dust	1
Farming Operations	2
Agricultural Burning	3
Unpaved Road Dust	4
Paved Road Dust	5
Other	6

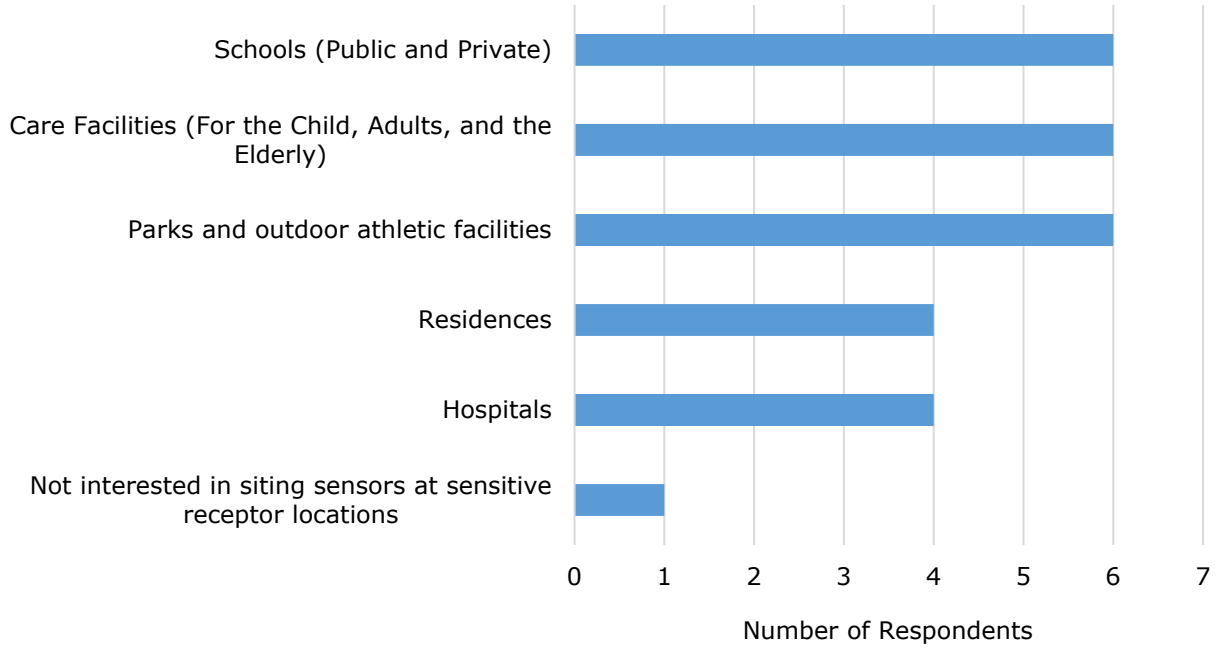
(Data obtained from Steering Committee responses between April 8 and May 3, 2024)

Figure 3.4. What point PM emission sources are you most concerned about?

Point Particulate Matter (PM) Emission Source	Rank of Importance
Agricultural Services	1
Beef Feedlots	2
Waste and Sanitation Services	3 (tied)
Power Generation	3 (tied)
Diesel Standby Generators	4
Mining	5
Other	6

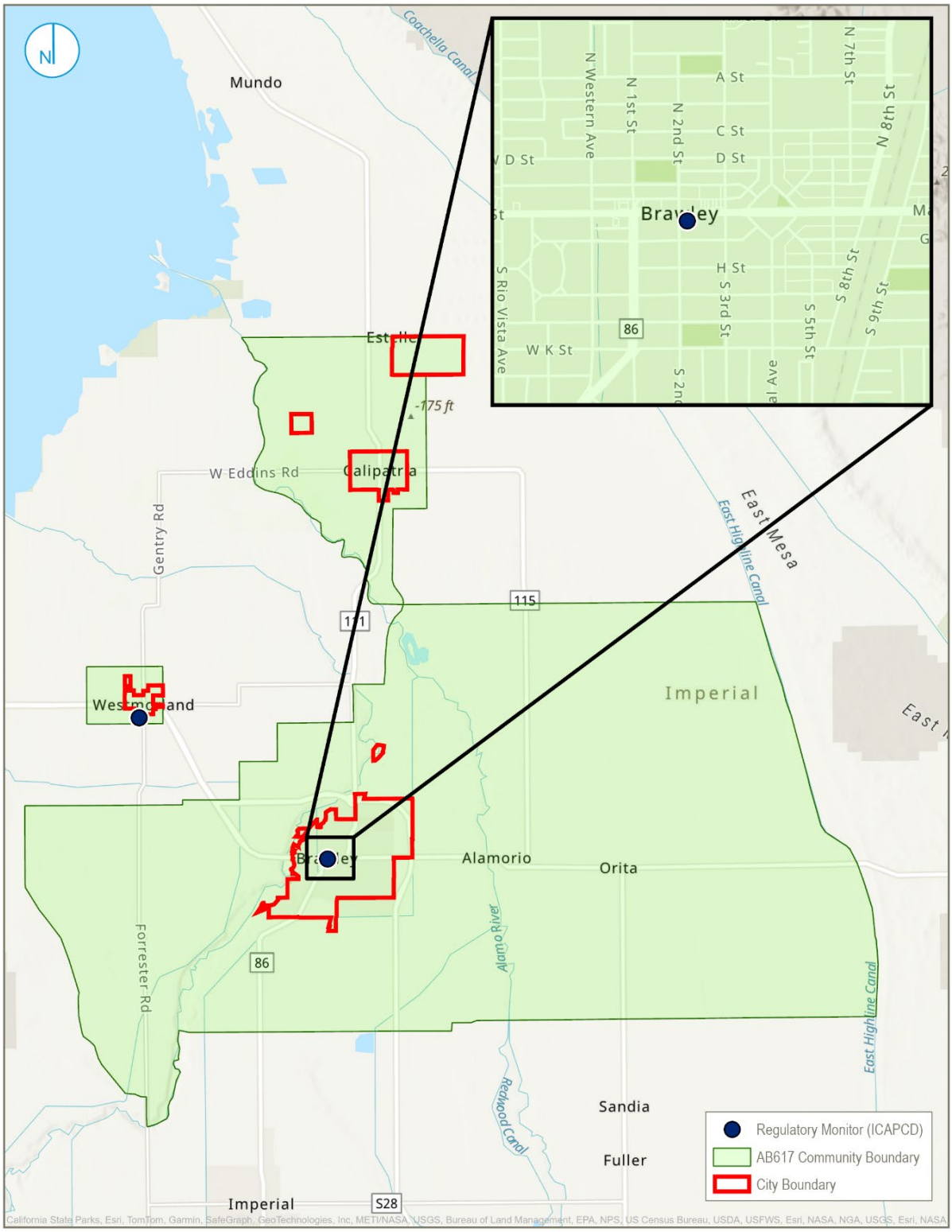
(Data obtained from Steering Committee responses between April 8 and May 3, 2024)

Figure 3.5. Which of these sensitive receptor locations would you like to place sensors at?



(Data obtained from Steering Committee responses between April 8 and May 3, 2024)

Figure 3.6. Locations of Existing Regulatory Monitors in the North End Phase 1 Community



3.4 Regulatory Monitoring

Existing regulatory monitors within the Community include the Westmorland monitoring station and the Brawley-Main Street #2 monitoring station. The Westmorland monitoring station was installed in 1994 and is maintained by ICAPCD. It is located at 570 Cook Street in Westmorland and is below sea level. The monitoring station is surrounded by residential and agricultural areas within 10 meters and 400 meters, respectively, and is the second northernmost station within the Imperial County monitoring network. The Westmorland monitoring station originally monitored for both O_3 and PM_{10}, but in November 2012, the station experienced an electrical fire and the O_3 monitor was placed out of commission until 2015. A Teledyne API Model T400 monitor is used for O_3 monitoring and a Met One BAM 1020 monitor is used for PM_{10} monitoring for the location sited with the objective to monitor population exposure for comparison to the NAAQS. Data is collected continuously at 1-hour intervals.

The Brawley-Main Street #2 monitoring station was installed in 2003 as a new station, replacing the old station that was installed in 1982, and is maintained by ICAPCD. It is located on top of the Imperial County courthouse located at 220 Main Street and is below sea level. This monitoring station is surrounded by commercial buildings and is the third northernmost station within the Imperial County monitoring network. The City of Brawley is surrounded by agricultural lands to the east, north, and west. The Brawley-Main Street #2 station monitors $PM_{2.5}$ and PM_{10}. A Met One BAM 1022 monitor is used for $PM_{2.5}$ monitoring for this location sited with the objective to monitor population exposure for comparison to the NAAQS. A Met One BAM 1020 monitor is used for PM_{10} monitoring for this location sited with the objective to measure the highest concentrations in the region for comparison to the NAAQS. Data is collected continuously at 1-hour intervals.

Data from the Westmorland and Brawley-Main Street #2 monitors are validated and used to determine the federal attainment status for Imperial County.[24] The Brawley-Main Street #2 monitoring station features a meteorological sensor that measures temperature, and the Westmorland monitoring station features a meteorological sensor that measures temperature, wind direction, and wind speed. Since these monitors are used for regulatory purposes, final data are not immediately available; however, preliminary O_3, $PM_{2.5}$, and PM_{10} data are made available to the public through www.imperialvalleyair.org.[25] Additionally, some pollutants are only monitored once every three days or once every six days

3.5 Expansion of Existing Monitoring Network

As discussed, there are currently two regulatory monitors in the Community footprint. The regulatory monitors are generally designed to track regional air quality and are used to determine the attainment status of Imperial County. They are subject to rigorous quality assurance/quality control (QA/QC) requirements and thus produce high-quality data.

[24] There are three additional regulatory monitoring stations in Imperial County that are located outside of the Community. These include the El Centro monitoring station, the Calexico-Ethel monitoring station, and the Niland monitoring station.

[25] Imperial Valley Air Quality. 2024. Current Conditions. Available at: https://www.imperialvalleyair.org/. Accessed: October 2024.

On the other hand, the community monitors to be installed within the community boundary will provide a neighborhood-level representation of air quality. These monitors are able to provide a stream of localized air quality data in the form of PM air concentration measurements recorded in real-time. Particulate levels can vary over small distances, so a higher density of monitors could help provide a more precise picture of the air quality conditions in the Community at any given time. Installing monitors at strategic locations would allow for the collection of a more robust data set that could be used to notify citizens of unhealthy air quality conditions when it is more likely to directly affect them. During the fourth, fifth, ninth, and tenth Steering Committee meetings, held between October 16, 2023 and April 15, 2024, attendees noted some of the areas where they would like to see more air monitors. These areas included geothermal facilities, gas stations where trucks stay overnight, fallow lands, beef feedlots and sensitive receptor locations like schools, care facilities, and parks and outdoor athletic facilities. During the seventh Steering Committee meeting, held on January 29, 2024, the first location for the AB 617 Community Monitors was approved. As of December 13, 2024, all 15 monitors have been installed.

The Steering Committee will at a later date consider ways in which additional monitoring could complement an expanded North End Phase 1 community monitoring network. More details on the specific air monitoring objectives are presented in Chapter 5.

3.6 Potential Alternative Strategies

As part of the Emission Reduction Program, ICAPCD and the Steering Committee are evaluating strategies separate from air quality monitoring that could be used to address some of the Community's priorities and concerns. These will include both emission reduction and exposure reduction strategies. For an update on the development of these strategies, refer to the documents from the July-September 2024 Steering Committee meetings.[26]

[26] ICAPCD. 2024. Upcoming Meetings. Available at: https://www.icab617community.org/brawley-westmorland-calipatria. Accessed: October 2024.

4 Element 3 – Identify Scope of Actions

4.1 Element 3 Overview

Before a monitoring program can be designed, the scope of actions that it will support must be determined so that it can be tailored to the specific initiatives to be pursued. Potential actions to consider could include the development of a real-time air quality notification system, identification of areas that are most heavily burdened by air pollution, and tracking medium- and long-term trends in air quality. Each of these actions could require different types of systems to implement and levels of data quality to collect, so pre-determining which will be incorporated into the CAMP is essential for its design.

4.2 Community Input

At the public Steering Committee meetings conducted concurrent to the drafting of this Plan, discussions were held among members and other citizens of the Community regarding how to best implement the Monitoring Plan. Topics of discussion were carefully selected to generate community input that would be useful in preparing this Plan in accordance with the 14 elements of the CAPP Blueprint. Among these, Element 3 was explored during the third, fourth, and fifth Steering Committee meetings, held between September 18 and November 28, 2023. Members mentioned desired goals for monitoring, such as observing trends in wind direction and air quality, observing the effects of localized events like agricultural burning, providing information to nearby communities and schools, addressing odor issues, and using monitoring data to support the siting of CERP projects in specific areas. Following the seventh Steering Committee meeting, held on April 8, 2024, a survey was presented to the Steering Committee, who had until May 3, 2024 to answer the question: “What are your desired goals for the PM monitoring?”. The input collected from the Steering Committee during these discussions forms the basis of the scope of action for this Plan.

4.3 Scope of Actions

In response to the survey, Steering Committee members were allowed to select multiple goals and could provide write-in responses if they had other PM monitoring goals in mind. The most desired goals indicated by the greatest number of respondents were 1) tracking Community Emission Reduction Plan progress and 2) source identification and characterization. Education and information, as well as hotspot identification and characterization, were also desired by most respondents. One respondent provided a write-in response of the gathering of data to promote regulatory changes. Additionally, during Steering Committee meetings there have been ongoing discussions on which areas within the Community they believed to be hotspots and would be strategic locations for new monitoring stations.

4.3.1 Expansion of Existing Monitoring Network

As discussed in Section 3.4, one objective that was supported by the Steering Committee and Community members present at the meeting was to add more air monitors to complement the existing regulatory monitoring network. Installation of additional monitors at strategic locations would allow for the collection of a more robust data set that could be used to notify citizens of unhealthy air quality conditions when it is more likely to directly affect them and could also be

used to identify the most heavily burdened areas of the Community. The Steering Committee will be considering ways in which additional monitoring could complement an expanded community monitoring network at a later time. The initial discussions will begin in the first half of 2025 and implementation would take place in 2026.

4.3.2 Notification Systems

The topic of utilizing real-time air monitoring data to notify the Community when pollutant levels are unhealthy (e.g., through text messages or emails) are being evaluated as of the fifteenth Steering Committee meeting held on September 23, 2024 and will be established in quarter 2 of 2025.

4.3.3 Education and Outreach

While not explicitly related to air monitoring, members of the Community expressed interest in including education and outreach activities in the scope of action for the Plan. Suggested topics for public education included:

- Interpreting air quality data;
- How poor air quality can impact health; and
- Understanding the difference between community monitoring and regulatory monitoring and their associated indices.

There is a lot of complicated science and regulatory jargon involved with air quality monitoring and regulation, so making this information more digestible for the Community could broaden the impact of air monitoring. The goal of the Plan is ultimately to promote public health and welfare, so efforts must be made to ensure that members of the Community understand how to use the information generated for their own benefit. Specific strategies that are proposed to create education and outreach activities include the Air Justice at Schools Program, Project Air Community Education, and periodic trainings and workshops for the Community.

4.4 Other Supporting Actions

Other actions that will support the proposed objectives of this Plan include emission reduction and exposure reduction projects that are documented in the Emission Reduction Program. Examples of these projects include offering services to clean residential air ducts to reduce PM exposure, implementing parking lot paving projects to reduce fugitive dust emissions, and installing air filtration systems at schools to reduce student exposure to PM and $PM_{2.5}$. In addition, air quality data collected through an expanded monitoring network in the Community could be useful for developing and improving notification systems. However, additional uses for the data will also be explored in the coming years. For example, as more long-term data is collected, there will be opportunities for data analysis and trend identification using the community monitors. In addition, the potential role of additional monitoring and ways in which it can complement an expanded community monitoring network will continue to be evaluated.

5 Element 4 – Define Air Monitoring Objectives

5.1 Element 4 Overview

Related to the scope of actions described in Element 3, specific air monitoring objectives must also be determined ahead of Plan development, as they inform the technical needs for data collection and analysis. Having clearly defined goals simplifies the process for evaluating the progress of the Monitoring Plan and ensuring that the Community is on track to complete its goals by the specified deadlines. The CAPP Blueprint suggests objectives that community monitoring plans may want to incorporate, such as determining which specific areas are experiencing disproportionate burdens from air pollution, identifying specific sources and measuring or estimating their emissions, and making real-time air quality data available to the community. In addition to the air monitoring objectives, the Blueprint describes how monitoring plans should include objectives for collecting other types of data, such as meteorological data and tracking of pollutants not on the CAP or TAC lists. Finally, if there already exists a monitoring program in the community, plans should document their current scope and explain how new monitoring efforts will be employed to expand or complement them.

5.2 Air Monitoring Objectives for this Plan

As stated in Chapter 3 of this Plan, the community-specific purpose for air monitoring is defined by the Community's desire to track the progress of the Emission Reduction Program, identify and characterize sources, and provide education and higher resolution real-time air quality data that is easy to understand and access. For the Community, the pollutants of concern are particulate matter (PM_{10} and $PM_{2.5}$) and ozone. In recent years, these pollutants have exceeded their respective NAAQS in Imperial County, triggering the requirement to prepare SIPs. While the efforts laid out in the SIPs have begun addressing the issue at a regional level, implementation of this Plan will push the efforts further while focusing on improving air quality in the Community specifically. To accomplish this, the Plan establishes the following main air monitoring objectives: to utilize the data collected by the community monitors to track trends in the progress of emission reduction projects; to implement sufficient monitoring to be able to provide real-time air quality data to the Community that is easy to understand and covers a greater area with increased resolution compared to the current monitoring networks; and to identify and characterize sources and hotspots. Discussions about additional complementary monitoring will start taking place in early 2025, and implementation of complementary monitoring is planned for 2026.

It is important to note that the air monitoring objectives of the Plan focus only on PM pollution. The existing community monitors in the Corridor only monitor PM_{10} and $PM_{2.5}$ concentrations and the newly installed AB 617 Community Monitors will monitor PM_{10}, $PM_{2.5}$, and $PM_{1.0}$. The regulatory monitors track a broader suite of pollutants, including ozone. However, the reason that ozone will not be monitored as part of the Plan despite it being a known issue in Imperial County is because of the nature of ozone formation. Ground-level ozone in the atmosphere is formed over time by the reaction of precursor pollutants rather than being directly emitted by sources. The complex chemical reactions that form ozone occur on a regional scale, widely dispersed from wherever the precursors were originally emitted. In contrast, particulate matter (specifically $PM_{2.5}$) in the atmosphere is the result of both regional and localized emissions. Thus, targeted emissions reductions on a local scale can reduce particulate exposure in overburdened areas in a way that

reductions of ozone precursor emissions cannot. For this reason, the air monitoring objectives of the Plan focus on PM.

5.2.1 Monitoring Design

The existing regulatory monitors have been designed and sited according to the requirements outlined in Title 40 Part 58 of the Code of Federal Regulations (CFR). As a result, no change to the design of the regulatory monitors is being proposed as part of this Plan. The AB 617 Community Monitors would be programmed to measure and record PM_{10}, $PM_{2.5}$, and extremely fine particulates with a diameter smaller than one micron (µm) (PM_1) levels. Using telemetry technology, the data collected at each monitor would be transmitted to a database for recordkeeping and analysis. The goal would be to maintain these monitoring efforts for at least two years and could be indefinitely so long there remains interest and support among members of the Community. More detailed information on the Plan's monitoring methods and equipment can be found in Chapter 8.

5.2.2 Locations for New Monitors

As mentioned above, the existing regulatory monitors have been designed and sited according to the requirements outlined in 40 CFR Part 58. As a result, no change to the location of the regulatory monitors is being proposed and these regulatory monitors will solely be used for collocation studies with the AB 617 Community Monitors as part of this Plan. In regards to the AB 617 Community Monitors, on several occasions the Steering Committee was consulted for their input on possible monitor locations. Based on the input received, Steering Committee members seemed to prioritize location selection based on two main factors: proximity to potential pollutant hotspots and proximity to sensitive receptors. Eventually, locations were selected for the installation of new monitors. More details on these specific locations are provided in Chapter 9 of this Plan.

5.3 Additional Data

Data gathered from other sources aside from the regulatory and AB 617 Community Monitors will be useful for implementing the Plan and assessing its progress. In particular, the Imperial County SIPs for $PM_{2.5}$ and PM_{10} provide a detailed insight into the particulate matter situation in the region, pre-AB 617. While not specific to the Community, the SIPs contain a trove of information related to current and historic levels of ambient PM, emissions inventories, and control measures for mitigating emissions. Data from the SIPs will provide a general baseline level for ambient concentrations of PM which can be compared against future measurements collected by the regulatory and AB 617 Community Monitors.

In addition to past data obtained from the SIPs, ongoing meteorological ("met") data collection will be useful for the Plan. As of now, the number of stations actively collecting met data around the Community is adequate for meeting the monitoring objectives. There are currently two stations collecting met data that are located within the North End Phase 1 Community, both associated with the regulatory monitors in Brawley and Westmorland. The Brawley station measures shelter temperature, and the Westmorland station measures temperature, barometric pressure, wind direction, and wind speed. While these two stations provide adequate geographical coverage for

supporting the air monitoring objectives of the Plan, the potential addition of more met stations may be evaluated in the future.

5.4 Evaluating Plan Progress

Progress of the Plan will be periodically assessed to ensure that its goals are being met in a timely manner. The Plan will be evaluated against a set of benchmarks selected to gauge its progress. The first major milestone is the completion of the written Monitoring Plan, i.e. this Plan. This Plan was drafted during the second half of 2024 and will be completed ahead of the February 23, 2025 goal date. The Plan lays out how the AB 617 Community Monitors will be designed, where they will be located, and how the data collected by them will be handled. The following benchmarks have been established for the AB 617 Community Monitors:

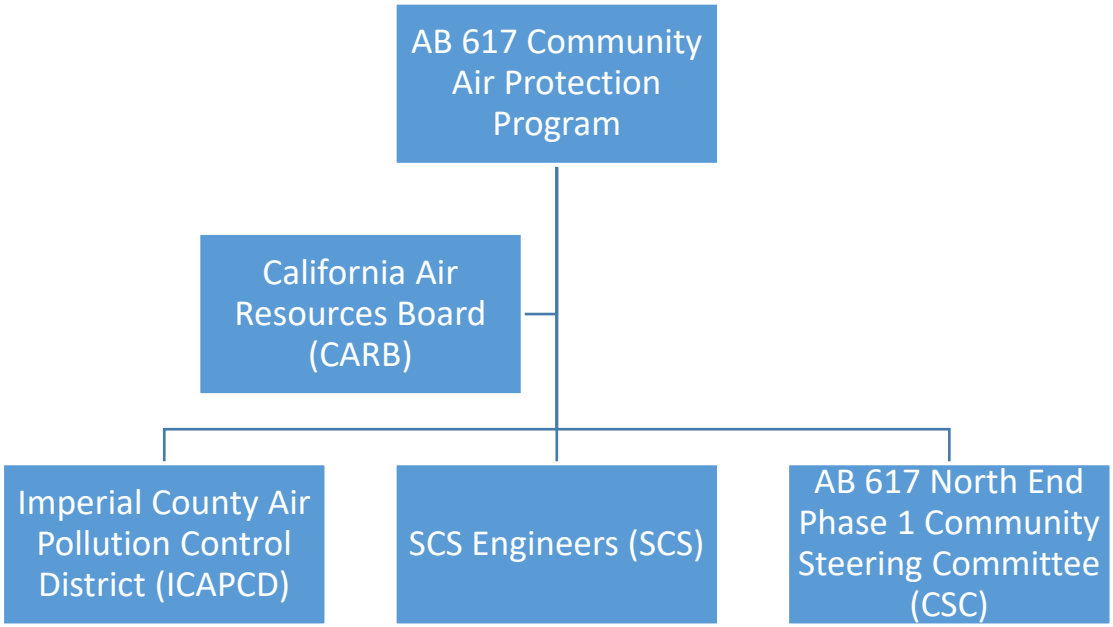
1. PM data from the AB 617 Community Monitors will be analyzed periodically to qualitatively track trends in the progress of emission reduction strategies under the Emission Reduction Program.
2. 50 percent and 75 percent of proposed AB 617 Community Monitors will be installed and transmitting data by July 2024 and November 2024, respectively.
3. By January 2025, 100 percent of proposed AB 617 Community Monitors will be installed and transmitting data.
4. After collecting data from the completely installed AB 617 Community Monitors for one year, the placement of monitors, the need for repeat collocation or calibration, and the need for further expansion of the network will be evaluated at a later date.

6 Element 5 – Establish Roles and Responsibilities

6.1 Element 5 Overview

Following the identification of monitoring objectives, the next step is to establish roles and responsibilities for all major aspects of the Monitoring Plan. The CAPP Blueprint describes how the Plan should specify the individual tasks, duties, and training that participants should complete as they work towards accomplishing air monitoring objectives. These responsibilities should be tailored to each role that individuals or groups take on. Completing this step is essential for ensuring that all aspects of the Monitoring Plan are assigned to willing and competent individuals so that their progress can be tracked as the overall group works towards development and implementation of the Monitoring Plan. To achieve the goal for this element of the Plan, an organizational chart was developed and is presented below in Figure 6.1.

Figure 6.1. North End Phase 1 Community Monitoring Organizational Chart



6.2 Parties Involved

Developing the Plan has been a collaborative effort with many different parties involved. Initially, CARB was the body to select the Community as an AB 617 Community following a nomination prepared by the local air district, ICAPCD. ICAPCD led the formation of the Community Steering Committee and authored the Plan. Support from contractors was also solicited as necessary, to assist with aspects of the development and implementation of the Plan requiring particular expertise. This included equipment vendors, software application developers, and environmental consultants. The following sections describe in further detail the roles and responsibilities of these groups.

6.2.1 Community Steering Committee Responsibilities

Based on the Steering Committee's charter, their role is to "support active community involvement and collaboration in the development of the Program by providing a forum for identifying community issues and potential solutions with all relevant parties". This was done mainly through the hosting of Steering Committee meetings, held at least once per month since the initial planning stages of the Plan in late 2023. The Charter also lists out a more specific set of responsibilities which include providing recommendations to the ICAPCD Governing Board for approaches for community engagement and outreach, Plan targets and strategies, and Plan enforcement, among others. Essentially, the Steering Committee was tasked with overseeing development of the Plan while continuing to engage not only with ICAPCD and SCS Engineers, but also with the Community members, to ensure that their concerns were heard and addressed by the Plan.

6.2.2 ICAPCD Responsibilities

From a technical standpoint, ICAPCD is the authority for air quality matters in Imperial County. Their knowledgeable and capable staff oversee the County's regulatory monitoring network and are responsible for preparing the County's SIPs, which are comprehensive plans for addressing air pollution in the region. Through decades of research, enforcement, and data collection, ICAPCD has developed extensive knowledge of the various pollution sources across Imperial County. A substantial part of SIP development is analyzing available control measures and determining how best to implement or enhance them to effect permanent emission reductions. When the time comes to begin instituting emission reduction strategies in the Community as part of AB 617, ICAPCD will be well positioned to assist and advise. They will be able to take advantage of their knowledge of control measures and how they might intersect with the various rules, laws, and control measures already implemented by federal, state, and their own District actions. It will be the responsibility of ICAPCD to support SCS Engineers and the Steering Committee with this knowledge toward the successful execution of the Plan. ICAPCD will collaborate with the environmental consultant Ramboll Americas Engineering Solutions (Ramboll) to assist with meeting presentations and materials to guide conversations around decision making.

6.2.3 SCS Engineers Responsibilities

The environmental engineering and contracting firm, SCS Engineers (SCS), will play an integral role in Plan implementation, particularly regarding community air monitoring. SCS has valuable experience with air quality monitoring, having operated air monitoring stations and reported data to state and local agencies for over 35 years. SCS holds strong relationships with equipment vendors and has personnel with extensive experience working in Imperial County. They understand the nuances of the air quality issues in Imperial County and the specific concerns that Community members have. The connections that SCS Engineers has made within the Community will be invaluable in conducting outreach and galvanizing involvement by Community members.

SCS will be responsible for the installation, maintenance, and operation of the AB 617 Community Monitors, including management of collected data. SCS will provide community air monitoring data to CARB's AQview platform to meet the AB 617 requirement. SCS will provide a final report

to ICAPCD summarizing the methods and data attained on the project. Following acceptance of this report, SCS will present the project to the community.

6.2.4 Community Involvement

Community-based action is a central tenant of AB 617. Keeping this in mind, the Steering Committee made sure Community members had the opportunity to be involved in Plan development every step of the way. In fact, the Steering Committee members were selected with the expectation that they would communicate with and voice the sentiments of their fellow Community members. In addition, Community members were invited to every public Steering Committee meeting and encouraged to voice their opinions during public comment and workshop activities. In the end, this produced a monitoring plan that truly belonged to the Community, designed to address its personalized air quality needs.

7 Element 6 – Define Data Quality Objectives

7.1 Element 6 Overview

Obtaining quality data from an air monitoring network is essential to achieving the objectives defined in Element 4 of this Plan. The CAPP Blueprint describes the types of data quality indicators one may want to consider when developing an air monitoring network, including precision, bias, accuracy, sensitivity, completeness, and representativeness. Defining data quality objectives is essential for determining the appropriate technology to use for monitoring.

7.2 Data Quality Objectives for AB 617 Community Monitors

In establishing the data quality objectives for the AB 617 Community Monitors, one can look to the broader air monitoring objectives of this Plan. One of the objectives that pertains to the AB 617 Community Monitors is "to implement sufficient monitoring to be able to provide real-time air quality data to the Community that is easy to understand and covers a greater area with increased resolution…" In this role, the data collected from the AB 617 Community Monitors would serve to educate and inform the Community. The higher resolution network could also assist in the identification and characterization of hotspots. USEPA Guidance[27] provides example performance goals for air quality sensors used in these applications; these USEPA Guidance example goals for PM monitoring are summarized in Table 7.1 below.

Table 7.1. Data Quality Objectives for AB 617 Community Monitors

Application Area	Pollutants	Precision and Bias Error	Data Completeness
Education and Information	PM_{10}, $PM_{2.5}$	<50%	≥50%
Hotspot Identification and Characterization	PM_{10}, $PM_{2.5}$	<30%	≥75%

Table 7.2 below describes how the QuantAQ MODULAIR-PM units perform in comparison to these and other data quality indicators. Some of this information was obtained from the manufacturer, while some was obtained from field studies performed by the South Coast Air Quality Management District (SCAQMD) and publications from research-oriented deployments.

[27] USEPA. 2014. Air Sensor Guidebook. EPA 600/R-14/159. June. Available at: https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=519616. Accessed: October 2024.

Table 7.2. Data Quality Information for QuantAQ MODULAIR-PM Air Quality Sensors

Data Quality Indicator	Description
Precision	Field tests performed by the SCAQMD[a] have shown absolute intra-model variability was ~0.59, 0.62 and 1.77 µg/m^3 (relative intra-model variability of 3.7%, 3.2%, and 6.3%) of PM_1, $PM_{2.5}$ and PM_{10} respectively.
Bias	During the field deployment of MODULAIR-PM sensors, the observed bias has been found to be –10% when compared against Teledyne FEM[b] and –36% to +9% when compared to PM_1 specific analytical techniques (aerosol chemical speciation monitor, non-refractory, and scanning mobility particle sizer)[c].
Accuracy	When compared against high-accuracy Federal Reference Method (FRM) and FEM monitors, the QuantAQ units have shown R^2 (i.e., correlation) values of 0.87-0.94 for PM_1, 0.84-0.88 for PM2.5, and 0.46-0.78 for PM10.[a]
Sensitivity	Custom firmware allows the MODULAIR-PM units to measure particles at 24 different sizes ranges, from 0.35-0.46 µm to 37.0-40.0 µm.[d]
Completeness	A minimum data completeness level of 75% is sought when air quality monitoring data is used for analysis and comparison against air quality standards.
Representativeness	The high correlation observed between the QuantAQ MODULAIR-PM units and high-accuracy monitors[a] indicate that data collected from the MODULAIR-PM units are reasonably representative of real-time conditions.

Notes:

[a] SCAQMD. AQ-SPEC Field Evaluation of QuantAQ – MODULAIR-PM. Available at: https://www.aqmd.gov/docs/default-source/aq-spec/field-evaluations/quantaq-modulair-pm---field-evaluation.pdf?sfvrsn=15. Accessed: October 2024.

[b] Garima Raheja, James Nimo, Emmanuel K.-E. Appoh, Benjamin Essien, Maxwell Sunu, John Nyante, Mawuli Amegah, Reginald Quansah, Raphael E. Arku, Stefani L. Penn, Michael R. Giordano, Zhonghua Zheng, Darby Jack, Steven Chillrud, Kofi Amegah, R. Subramanian, Robert Pinder, Ebenezer Appah-Sampong, Esi Nerquaye Tetteh, Mathias A. Borketey, Allison Felix Hughes, and Daniel M. Westervelt. Low-Cost Sensor Performance Intercomparison, Correction Factor Development, and 2+ Years of Ambient $PM_{2.5}$ Monitoring in Accra, Ghana. *Environmental Science & Technology* **2023** *57* (29), 10708-10720. DOI: 10.1021/acs.est.2c09264.

Table 7.2. Data Quality Information for QuantAQ MODULAIR-PM Air Quality Sensors	
Data Quality Indicator	**Description**
[c] Laura Hyesung Yang, David H. Hagan, Jean C. Rivera-Rios, Makoto M. Kelp, Eben S. Cross, Yuyang Peng, Jennifer Kaiser, Leah R. Williams, Philip L. Croteau, John T. Jayne, and Nga Lee Ng. Investigating the Sources of Urban Air Pollution Using Low-Cost Air Quality Sensors at an Urban Atlanta Site. *Environmental Science & Technology* **2022** *56* (11), 7063-7073. DOI: 10.1021/acs.est.1c07005.	
[d] QuantAQ. September 20, 2023. MODULAIR-PM Product Manual. Available at: https://docs.quant-aq.com/modulair-pm. Accessed: October 2024.	

7.3 Data Quality Objectives for Complementary Monitoring

The data quality objectives for complementary monitoring will be discussed and decided upon by the Steering Committee when they decide on the types of complementary monitoring in the first half of 2025.

8 Element 7 – Select Monitoring Methods and Equipment

8.1 Element 7 Overview

After determining the data quality needs of the monitoring devices, the actual equipment and methods can be selected. Air monitoring methods refer to air monitoring equipment and how it is operated and applied. Air monitoring equipment is specifically the technology used for air monitoring.

8.2 Monitoring Methods and Equipment for AB 617 Community Monitors

The selected QuantAQ MODULAIR-PM units use multiple light-scattering optical particle counters to measure particulate matter counts. These units are enabled with wireless internet connectivity and count particles in 24 size bins that range from particles as small as 0.35-0.46 µm to particles as large as 37.0-40.0 µm.[28] The particle counts could then be converted to particle mass concentrations using calculated constants from the QuantAQ software and development, revised by correction process(es) determined during collocation. There are several limitations to QuantAQ MODULAIR-PM units and with existing air sensors across the application. For instance, they have a somewhat limited monitoring radius (i.e., 1 to 2 miles) and therefore are only suitable for localized air quality measurements. In addition, their lifespan in the field is estimated at two years, so new sensors will need to be periodically purchased as replacement units, and while the rated operating temperature range is from –20 to 60 °C, high temperature and humidity conditions are known to result in operation and measurement errors. QuantAQ is currently working on improvements to improve the sensors heat tolerance, and once developed there is potential to replace all the sensors to the new version. Lastly, as with other low-cost air quality sensors, the data quality obtained by the MODULAIR-PM units is less than what can be achieved by regulatory- or research-grade monitoring equipment. To support the monitors in providing high-quality data and high data recovery rates, radiative shielding is deployed as a shelter for the sensor, providing protection from extreme temperature and seasonal rain that may be experience.

The field operating procedures for the AB 617 Community Monitors is modeled after similar monitoring network deployments by SCS Engineers. A high-level description of these procedures is provided below:

- The AB 617 Community Monitors would be sited to guidelines established by the USEPA.[29,30]
- The AB 617 Community Monitors would be inspected and cleaned following manufacturer guidelines, with site visits planned at least twice monthly. Routine maintenance would be performed on the monitors. This entails inspecting the various components of the monitor (i.e., microcontroller, air quality sensor, fan operation, enclosure, and cables) for cleanliness

[28] QuantAQ. September 20, 2023. MODULAIR-PM Product Manual. Available at: https://docs.quant-aq.com/modulair-pm. Accessed: October 2024.
[29] USEPA. 2022. The Enhanced Air Sensor Guidebook. Available at: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=CEMM&dirEntryId=356426. Accessed: October 2024.
[30] Office of the Federal Register. 2014. Title 40 Protection of Environment, Appendix D to Part 58- Network Design Criteria for Ambient Air Monitoring. Available at: https://www.govinfo.gov/content/pkg/CFR-2014-title40-vol6/pdf/CFR-2014-title40-vol6-part58-appD.pdf. Accessed: October 2024.

and wear, making sure the electrical parts have power and are on the correct settings, ensuring the wireless internet has a strong connection, the radiative shielding is providing adequate coverage, and other routine checks. Specific procedures for the QuantAQ MODULAIR-PM are available from QuantAQ.[31] Reactive troubleshooting for any offline monitors would occur within 48 hours of technician availability or as soon as access is guaranteed to the monitor host site.

- Field logs would be used to document all activities conducted at the monitoring sites. At a minimum, the information collected would include: date of activity, activity type, activity outcome, and images of location/event.

Since QuantAQ MODULAIR-PM units use light-scattering technology, there are no filters or other samples to be analyzed in the laboratory. Therefore, there are no Standard Operating Procedures (SOPs) for the laboratory setting at this time.

Per SCS Engineers, the estimated cost for the installation, maintenance, and operation of the AB 617 Community Monitors is approximately $151,700. This cost includes all staff time, hardware, and associated maintenance and operations costs (e.g., replacement sensors, mileage, data management, etc.). The cost is estimated for the two years of implementation supported by CARB for the Community.

8.3 Monitoring Methods and Equipment for Complementary Monitoring

The monitoring methods and equipment for complementary monitoring will be discussed and decided upon by the Steering Committee in the first half of 2025.

[31] QuantAQ. September 20, 2023. MODULAIR-PM Product Manual: Maintenance and Service. Available at: https://docs.quant-aq.com/modulair-pm#block-0874ecfe21554f2c8261e8df94bcb343. Accessed: October 2024.

9 Element 8 – Determine Monitoring Areas

9.1 Element 8 Overview

Monitoring areas were selected based on public input, review of existing air monitoring data, locations of source emissions, and locations of sensitive populations. The Community has some existing air quality monitors that help to track air quality in the Community. The additional monitoring areas will provide a greater resolution of data that will cover more of the Community. The locations were chosen in order to obtain data that will allow Community members to make informed choices related to their exposure burden.

9.2 Location of Regulatory Monitors

The number of regulatory monitors in a given area is dictated by 40 CFR Part 58, Appendix D.[32] For PM_{10} and $PM_{2.5}$, the number of monitors is based on air quality conditions and population in a given metropolitan statistical area (MSA). Imperial County is part of the El Centro MSA, which has a 2020 census population of 179,702 and a PM_{10} design value concentration that is 406% of the NAAQS.[33] Therefore, the El Centro MSA is required to have one to two PM_{10} monitors. The $PM_{2.5}$ design value is 86% of the 24-hour NAAQS and 113% of the annual NAAQS. Therefore, the El Centro MSA is required to have at least one site that monitors 24-hour and annual $PM_{2.5}$. Currently, there are five regulatory monitors for PM_{10} and four regulatory monitors for $PM_{2.5}$ in Imperial County. As discussed previously, existing regulatory monitors within the Community include the Westmorland monitoring station, which monitors PM_{10}, and the Brawley-Main Street #2 monitoring station, which monitors both $PM_{2.5}$ and PM_{10}.

The Westmorland and Brawley-Main Street #2 monitoring stations were sited in accordance with 40 CFR Part 58, Appendix E,[34] which specifies horizontal and vertical placement, spacing from obstructions or emission sources, and other requirements. The Westmorland monitoring station is sited to the "middle scale", and the Brawley-Main Street #2 monitoring station is sited to the "neighborhood scale", which are appropriate for measuring typical concentrations in areas of high population density and determining the highest concentrations expected to occur in the area covered by the network.[35] The regulatory monitors will solely be used for collocation studies with the AB 617 monitors and no changes to the locations are being proposed as part of this Plan.

9.3 Location of AB 617 Community Monitors

The Community is unique in its air quality issues due to its proximity to the current shoreline of the Salton Sea. Due to the active and planned geothermal energy and lithium recovery developments along that southeast coast of the Salton Sea, monitoring areas that would support

[32] 40 CFR Part 58, Appendix D. Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-58/appendix-Appendix%20D%20to%20Part%2058. Accessed: October 2024.
[33] CARB. 2023. Annual Network Plan. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-08/2023%20Annual%20Network%20Plan.pdf. Accessed October 2024.
[34] 40 CFR Part 58, Appendix E. Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-58/appendix-Appendix%20E%20to%20Part%2058. Accessed: October 2024.
[35] In the middle scale of representativeness, measured concentrations are expected to be similar for areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometer. In the neighborhood scale of representativeness, measured concentrations are expected to be similar within some extended area of the city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers range.

evaluating emissions sources from these activities were suggested by the Steering Committee. Another area of interest is performing monitoring at schools within the Community, such as Westmorland Union Elementary School in Westmorland and Magnolia Union Elementary School in Brawley. In each city of Brawley, Westmorland, and Calipatria, the open lots that generate dust, nearby agricultural feedlots, and the proximity to freeway traffic provide additional emissions sources.

On the January 29th, 2024 Steering Committee meeting, the Committee voted and approved the first monitoring location. During subsequent meetings, potential monitoring sites were suggested and discussed by the Committee, using interactive maps with permitted facilities, existing monitors, and sensitive receptor locations, as well as the results of a survey on monitoring priorities. This survey identified area and point PM emission sources of concern and sensitive receptor priorities. In addition to Community input, the following logistical concerns were taken into consideration in the selection of monitoring sites:

1. The site needs to be a secure location where the monitor can be installed, at the appropriate height (i.e., a rooftop) per siting criteria guidelines.
2. The site needs to provide safe access, so that the monitor technician is not in danger when installing or maintaining the monitor (e.g., unobstructed area with stairway or elevator access to rooftop is preferred).
3. The site needs to support the physical installation of the monitor. The monitor must be affixed to a building via:

    a. A metal pole that would then be directly affixed to the building (such as to the side of the building); or
    b. A tripod that would then be bolted to the ground (preferred) or held down by sandbags (less ideal, as heavy winds can still tip this over).

4. The site needs to provide a safe alternating current (AC) power supply (such that installation of the monitors and use of power would not pose any safety concerns). For sites where power lines are not available, alternative power sources like solar panels and battery systems were acquired.
5. The site needs to provide internet access; use of the building's internet via Ethernet cable or Wi-Fi would be ideal. If this is not possible, the AB 617 Community Monitor would be fitted with a separate cellular hotspot.

Considering these factors and discussions, the Steering Committee held a series of votes at multiple meetings on priority locations for where they believe the AB 617 Community Monitors should be placed. Some of the approved sites were denied upon contacting the site host, requiring decisions on alternate sites. As of December 13, 2024, AB 617 Community Monitors have been installed at all of the 15 sites. The confirmed selections for AB 617 Community Monitor sites are provided in Table 9.1.

Table 9.1. Descriptions of Sites Selected for AB 617 Community Monitors	
Brawley Magnolia Union Elementary School	This location is at a maintenance building of Magnolia Elementary School. The area is surrounded by agricultural fields, is northwest of a beef feedlot and a compost facility, and is north of a hay facility.
Brawley Residence Calle del Sol	This location is at a private residence, adjacent to Jeffrey Thornton Park, and across the street from Pioneers Memorial Hospital. It is north of the State Route 86 freeway.
Brawley SDSU	This location is at the San Diego State University Imperial Valley campus, surrounded by agricultural fields, west of a solar farm, and east of a Pilot Travel Centers fueling station.
Brawley Superior Court	This location is at the Brawley Superior Court in downtown Brawley. It is south of Time Warner Cable, southwest of Pacific Bell and the City of Brawley Police Department, northwest of Geosyntec Consultants, and directly adjacent to businesses along Main Street.
Brawley S. Adams St.	This location is at a private residence along the southern border of Brawley residential development. It is one block east of Miguel Hidalgo Elementary School and Padilla Pace Middle School, and west of a soccer field. To the south are agricultural lots.
Brawley Wiest Lake	This location is at the southeast corner of Wiest Lake. It is south of three beef feedlots and southeast of a renewable dimethyl ether plant. It is surrounded by the Imperial Wildlife Area to the north, a railroad to the west, and agricultural fields to the east and south.
Brawley Fire Dept. Station 2	This location is at the Brawley Fire Department Station 2, southwest of the Brawley Municipal Airport. It is surrounded by industrial facilities to the south and residences to the west. It is around five blocks north of the Alyce Gereaux Park and JW Oakley Elementary School.
Westmorland Residence 7th Street	This location is at a private residence. It is located in the northwest area of Westmorland, with agricultural land to the west, north, and northeast. There is a Love's Travel Stop and undeveloped land to the south of the location.
Westmorland Elementary School	This location is at the south end of the Westmorland Elementary School baseball field at a bathroom, near the school playground and other sports fields, surrounded on the east and south by agricultural fields. It is to the southwest of a Cardlock Fuels fueling station.
Westmorland Residence E 1st Street	This location is at a private residence near the southeast border of Westmorland residential development. It is southeast of Westmorland City Hall and Westmorland City Park and east of Westmorland Water Treatment. It is surrounded by undeveloped lots and agricultural land beyond those undeveloped lots to the south and east.
Westmorland C Street	This location is at a private residence and is east of a Circle K gas station and west of a Cardlock Fuels fueling station. Westmorland Junior High School and

Table 9.1. Descriptions of Sites Selected for AB 617 Community Monitors	
	Westmorland Elementary School are located one block south. The location is also located along State Route 78, the major roadway through Westmorland, and is located near the eastern boundary of residential development, with agricultural land to the east.
Calipatria Hernandez Park	This location is at a private residence and is east of a hay facility and directly south of Hernandez Park, which is comprised of a dirt field. This location is at the north end of Calipatria development, with an agricultural warehouse and undeveloped lots in the immediate vicinity and agricultural land to the north and east.
Calipatria Water Treatment Plant	This location is at the Calipatria Wastewater Treatment Facility and is west of a beef feedlot. The location is outside of the Calipatria residential area and is near CalEnergy Operating Corporation's geothermal operations in the region to the west of Calipatria.
Calipatria Airport	This location is at a transfer station at the western edge of the Cliff Hatfield Memorial Airport. It is west of a Circle K gas station and the Golden State Water Company. The airport is directly north of the Calipatria Community Pool and larger recreation area which includes sports fields, Calipatria High School, Bill E. Young Middle School, and Fremont Primary School.
Calipatria, E Date Street	This location is at a private residence at the southeast edge of residential development in Calipatria. Immediately to the southeast is Golden State Water Company, with industrial or undeveloped areas beyond those.

10 Element 9 – Develop Quality Control Procedures

10.1 Element 9 Overview

Quality control procedures are essential to ensure that data quality objectives are being met and the resulting data is scientifically defensible. Technical quality control activities are routinely performed to measure or estimate the effect of errors and determine whether corrective action must be taken. The CAPP Blueprint includes reference materials, calibration, ongoing quality control measures, blanks, spikes, duplicates/collocation, and audits as options for quality control procedures. However, specific quality control procedures depend on the method used for monitoring.

10.2 Quality Control Procedures for AB 617 Community Monitors

Before deployment of the MODULAIR-PM sensors, SCS Engineers will perform 14 days of collocation for the AB 617 Community Monitors with the $PM_{2.5}$ and PM_{10} regulatory monitors located within the North End. This collocation period will be used to validate the performance of the sensors and determine sensor-specific correction algorithms for the reporting of validated monitoring data. The failure of a sensor during collocation or deployment would result in that sensor being replaced with a reserve, collocated sensor, with the failed sensor returned to the manufacturer for service and re-validation.

Site visits to the AB 617 Community Monitors would occur twice monthly; or approximately every 15 days. During each site visit the monitors would be examined for any developing issues, including evaluation of hardware and host site location. Noted hardware issues would be addressed as soon as possible to maintain data quality. Should the monitors develop issues outside of a site visit , a technician would address those issues as soon as possible, as availability of technicians and site host access allowed.

Additional reported air pollution events or emergencies regarding QuantAQ by Community members, will be included in QA/QC. During the July 15, 2024 Steering Committee meeting, SCS presented a call/text number to report these events and encouraged Community members to report any events that could influence local air pollution and the air monitors. SCS Engineers is also communicating with site hosts in order to identify any on-site impacts, such as residential cooking or other potentially PM-generating activities.

Finally, SCS Engineers' local Imperial County team would lead the quality assurance and quality control procedures for the new AB 617 Community Monitors. Irregular or extreme patterns in PM measurement, or events observed or reported by Community members, are identified for further review. The flagged data is then manually reviewed by the data team. The data team uses the sensor activity logs, meteorological data (temperature and humidity), reported events, and neighboring sensors (as available) to determine if there was a hardware malfunction or if technician staff were on site performing maintenance/troubleshooting on the monitors, occurrences that can affect the readings. Any potentially "bad" data is further reviewed and removed from the dataset at the discretion of the manual reviewer, following analysis and discussion by SCS Engineers. Further documentation on the QA/QC processes are currently in development by SCS Engineers and QuantAQ as the AB 617 Community Monitors are deployed and validated.

11 Element 10 – Describe Data Management

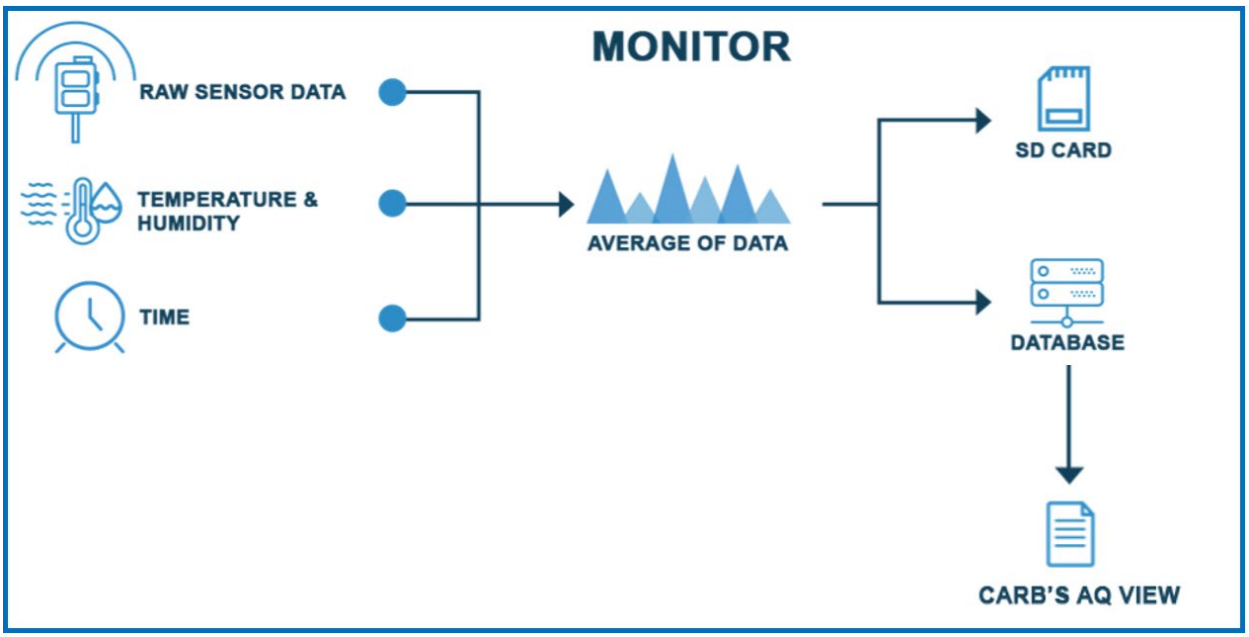
11.1 Element 10 Overview

Data management is essential to providing quality results. It begins with the collection of analytical results. In addition to capturing PM concentrations, additional descriptors such as instrument identifiers, measurement units, date stamps, and other parameters identifying important attributes of the data are collected. The second phase of data management is data storage. Data storage includes not only the data descriptors described above, but also data quality indicators, data qualifiers, ingest dates, and chains of custody. The parameters and values collected in the data acquisition and storage phases provide tools for the operator and system to conduct detailed reviews of the data. Data review and flagging procedures will be utilized to ensure that data quality is maintained.

11.2 Data Management for AB 617 Community Monitors

Data collection by the AB 617 North End Community Monitors will follow similar guidelines to those established for the AB 617 Calexico-El Centro-Heber corridor monitors and will ensure that all data fields required by CARB's AQview data portal will be fulfilled. Ultimately, the dataflow for the AB 617 Community Monitors would follow the flow presented in Figure 11.1 below.

Figure 11.1. AB 617 Community Monitor Data Flow



Data storage at the AB 617 Community Monitors would occur at two different locations. Data would be physically stored at the monitor on an µSD card and on a cloud server database. Data would not be altered during the QA/QC processes as every step of QA/QC would create a new version of the data file; resulting in four versions of the data file: two raw data files (µSD card and server database), one dataset flagged by QA/QC processes, and one post-QA/QC dataset which will be included in the monthly data packages submitted to the ICAPCD. This can be defined as two pre-processed datasets, one flagged dataset, and one processed dataset.

To meet the AQview requirements per AB 617, the data feed would also be directed to CARB through an API, the best available method. Data forwarded to CARB will include the raw datafeed as it is received by the QuantAQ server database

Data chain of custody would be as follows:

First, SCS Engineers would be responsible for the operation and maintenance of the AB 617 Community Monitors and would ensure the successful collection of data.

Data would be shared with QuantAQ (manufacturer), who would support the development of monitor-specific corrections. Both raw and processed data would be shared with ICAPCD to maintain on their own servers.

The AB 617 Community Monitors would be registered with the AQview portal using the following required fields:

- Data Provider (SCS Engineers)
- Site ID
- Monitor ID
- Start date
- Monitor manufacturer and model
- Monitor type
- Monitor program
- Monitor network
- Current firmware version
- Last calibration date/time
- Last service date/time
- Parameters:
  - Measurement technique
  - Measurement units
  - Reporting frequency
  - Upper detection limit
  - Lower detection limit
  - Detection range units
  - Display precision

12 Element 11 – Provide Work Plan for Conducting Field Measurements

12.1 Element 11 Overview

An effective work plan describes field procedures that will be followed by those conducting measurements. Field procedures describe individual tasks with enough detail that trained air district staff and community members can complete the tasks. The timeline established in the work plan determines the duration of the field measurements and denotes milestones for completing tasks. The work plan also describes communication and coordination steps that ensure field personnel know whom to contact for questions, and how work products are delivered, and includes safety procedures.

12.2 Field Procedures for AB 617 Community Monitors

Field procedures for the AB 617 Community Monitors are summarized in the SCS Engineers SOP and activity will be recorded in station and operator logbooks.[36] This will include communication between team members to consider on-site activity and records as needed to answer inquiries or provide supporting information during weekly sensor QA and data review.

Upon installation of the AB 617 Community Monitors, a record of the monitor host site will be established. Information collected will include: site point of contact, site availability, materials used, site peculiarities, wireless connection information, and any other details as needed.

The AB 617 Community Monitors will be equipped with a physical label that will include the contact information for technician staff to report any monitor or host site issues. Additionally, data collected by the monitors will be available to the public via the QuantAQ public dashboard.[37]

Upon the installation of the AB 617 Community Monitors, SCS Engineers will coordinate with the AQview team at CARB and ICAPCD to ensure the seamless transmission of data. The site visit procedures described under Element 9 will be followed to ensure all QA/QC requirements are met.

After data is collected from the AB 617 Community Monitors the 100% deployed sensor network, the placement of the monitors and the need for further expansion of the network will be evaluated, pending discussion with the CSC and District. Site locations are subject to change depending on the Steering Committee's concerns and recommendations.

Detailed field procedures for the installation process as well as regular maintenance and troubleshooting are provided in the Standard Operation Procedures MODULAIR-PM at the Imperial AB 617 North-End Community.[38] Simplified procedures are listed below:

[36] SCS Tracer Environmental. 2024. Standard Operation Procedures MODULAIR-PM at the Imperial AB 617 North-End Community. Not available publicly. Accessed: October 2024.
[37] QuantAQ. AB-617 North End Map. Available at: https://app.quant-aq.com/s/PBYEFY2YSN8Z362BMINI. Accessed October 2024.
[38] SCS Tracer Environmental. 2024. Standard Operation Procedures MODULAIR-PM at the Imperial AB 617 North-End Community. Not available publicly. Accessed: October 2024.

1. SCS Engineers conducts daily reviews of the sensor network operation, including the upload completion rate of each monitor in the network over the past 24 hours. SCS Engineers then conducts a manual review of a monitor's data feed if its upload completion rate is below 90 percent in a 24-hour period.
2. Twice monthly, SCS Engineers conducts routine maintenance of the monitors in the network following the monitoring SOPs.
3. On an as-needed basis, if a monitor is offline or manual review shows data incompleteness, then SCS Engineers sends a technician to the monitor site as soon as possible (i.e., within 48 hours unless special access is required) who troubleshoots the monitor following the monitoring SOPs.

12.3 Safety Procedures

Conducting any type of field work carries inherent risks associated with the specific tasks performed. This includes field work conducted for the purpose of air monitoring in the Community, which may present safety hazards such the potential for falls or electrical injury. Special precautions should be taken when performing duties related to the operation of the community and regulatory monitors, which may include installation, auditing, calibration, regular maintenance, and other activities. The following precautions should be taken to avoid hazards:

Slips, Trips, and Falls

All work performed on the community monitors should comply with California Code of Regulations, Title 8, Section 3273, Working Area.[39] Permanent floors and platforms should be maintained free of dangerous projections or obstructions (e.g., extension cords, power cables, boxes, debris), and reasonably free of oil, grease, and water. Elevated working areas that are 30 inches or more above the floor should be no less than 2 feet wide, and should have no less than 6.5 feet of clear headroom. Extra caution should be taken following wet weather.

Heat Illness Prevention

All work performed on the community monitors should comply with California Code of Regulations, Title 8, Section 3395, Heat Illness Prevention.[40] Prior to undertaking outdoor work, field technicians should monitor the weather to understand the risk level for heat illness. Field technicians should take an adequate amount of drinking water and use shaded areas as necessary to cool down. When the temperature reaches 95 degrees Fahrenheit or above, field technicians should take a minimum ten-minute preventative cool down rest period every two hours. Technicians should also consider the use of long-sleeve shirts, hats, and sunscreen to minimize exposure to the sun. Gloves should be used on warmer days to protect the hands from components of the equipment which are prone to heat retention.

[39] Department of Industrial Relations. California Code of Regulations §3273, Working Area. Available at: https://www.dir.ca.gov/title8/3273.html. Accessed: October 2024.
[40] Department of Industrial Relations. California Code of Regulations §3395, Heat Illness Prevention. Available at: https://www.dir.ca.gov/title8/3395.html. Accessed: October 2024.

Other Safety Measures

For sites with pets or wild animals nearby, technicians are instructed to follow the guidelines set by the monitoring host. If the host cannot restrain or grant safe access to the monitor, technicians should report the situation to SCS Engineers who will work with the host in developing a schedule for access or consider relocating the monitor.

Working at Heights

All field technicians using ladders should follow safe work practices and comply with California Code of Regulations, Title 8, Sections 3276 - 3278.[41,42,43] Prior to each use, ladders should be inspected to ensure they are free of cracks, splits, corrosion, and protrusions. Steps and rungs should be inspected to ensure they are free of oil or grease and firmly attached to the side rails. Ladders should be set up on flat surfaces, and always opened fully to ensure the spreader bars are locked. Ladders should not be used in high wind situations. Technicians should have safe access to place their ladders or use established roof access ladders.

For monitor siting, rooftops should be the priority choice so that technicians have a sturdy place to work when installing or performing maintenance. If rooftops are not available and a monitor is installed on another structure, that structure should be level and strong enough to support a ladder set up against it.

Working with Electrified Equipment

All field technicians should comply with California Code of Regulations, Title 8, Sections 2300 – 2989.1, Electrical Safety Orders.[44] Whenever electrical power is used, there is a danger of injury through electrical shock. All electrical equipment should be adequately insulated, grounded, or isolated to prevent bodily contact with any source of dangerous potentials. Damaged or malfunctioning items should be taken out of service until repaired by a qualified electrician. All equipment and handheld tools should have three-prong plugs and/or double insulation. Extension cords should not be used as permanent wiring and should be rated for the equipment power needs.

The AB 617 Community Monitors will rely on electrical power from the host site or a solar panel with battery storage. Electrical connections should be properly insulated and connected to a dedicated power source. The electrical connections should be installed by authorized personnel only. The connections should be inspected by SCS Engineers beforehand for any frayed wires or hanging debris. If SCS Engineers connects to the site, there should be enough slack from the monitor to the connection to allow for hindrance-free walkways around the monitor.

[41] Department of Industrial Relations. California Code of Regulations §3276, Portable Ladders. Available at: https://www.dir.ca.gov/title8/3276.html. Accessed: October 2024.
[42] Department of Industrial Relations. California Code of Regulations §3277, Fixed Ladders. Available at: https://www.dir.ca.gov/title8/3277.html. Accessed: October 2024.
[43] Department of Industrial Relations.California Code of Regulations §3278, Use of Fixed Ladders. Available at https://www.dir.ca.gov/title8/3278.html. Accessed: October 2024.
[44] Department of Industrial Relations. California Code of Regulations §2299 - 2989, Electrical Safety Orders. Available at: https://www.dir.ca.gov/title8/sub5.html. Accessed: October 2024.

13 Element 12 – Specify Process for Evaluating Effectiveness

13.1 Element 12 Overview

A process for evaluating effectiveness serves as a check to ensure that air monitoring objectives are being met in a timely fashion. Additionally, it is necessary to understand how the monitoring plan will be revised or corrected if air monitoring objectives or the timeline are not being met.

13.2 Evaluating Effectiveness – Community Monitors

As discussed in Chapter 5, the progress of the Plan will be assessed against some previously selected benchmarks. These benchmarks apply specifically to the AB 617 Community Monitors, each of which constitutes a way in which the monitors' effectiveness will be evaluated. These benchmarks are:

- 50 percent and 75 percent of proposed AB 617 Community Monitors will be installed and transmitting data by July 2024 and November 2024, respectively.
- By January 2025, 100 percent of AB 617 Community Monitors will be installed and transmitting data; and
- After collecting data from the completely installed AB 617 Community Monitors for one year, the placement of monitors, the need for repeat collocation or calibration, and the need for further expansion of the network will be evaluated at a later date.

Successfully meeting these benchmarks is one way to ensure that the community monitors are sufficiently operational in number, timing, and location.

Effectiveness of the monitors will also be evaluated by confirming that the data they produce is successfully collected and made available for analysis. Specifically, the data availability of the community monitors will be considered effective as long as they maintain an up-time rate of 90 percent and a data completeness rate of 75 percent. Finally, operation of the AB 617 Community Monitors and analysis of the data produced will be maintained for at least wo years and could be indefinitely so long as there remains interest and support among members of the Community.

14 Element 13 – Analyze and Interpret Data

14.1 Element 13 Overview

Data analysis and interpretation is crucial to ensure the objectives of the Community Monitoring Plan are being met. This section describes how data analysis will be conducted, including data preparation procedures, and how air monitoring results will be translated into actions. Thorough documentation of data preparation procedures and types of analyses that are conducted is pivotal to ensuring that conclusions drawn are accurate and defensible.

14.2 Data Analysis and Considerations for Community Monitors

Prior to being uploaded to public-facing data displays, the data collected by the AB 617 Community Monitors will be converted using a correction process designed to convert raw measured particle counts to particle mass concentrations and adjust the mass concentration based on the results from sensor collocation and validation testing. The correction, for sensors requiring its application, was determined during the QuantAQ MODULAIR-PM development and collocation testing against FEM and FRM data, and validated by comparing results post-calibration with $PM_{2.5}$ levels measured by collocated reference instruments. The correction also allows for the data to be used to calculate the USEPA air quality index and will be included in the final report submitted by SCS Engineers.

To ensure data quality, the data collected by the AB 617 Community Monitors will undergo the QA/QC processes described under Element 9. These processes are open to further development as more resources become available to the AB 617 Community Monitoring team. The current processes use an application to automatically flag data that is out of normal trends, such as exponential spikes or periods when the monitor reports a string of zeros. The data team then manually reviews the flagged events and considers notes from technician's field logs when doing so.

Various analyses will be performed on the data collected from AB 617 Community Monitors in order to satisfy the air monitoring objectives of this Plan. The potential analyses under consideration are to:

- Use unspeciated $PM_{2.5}$ data and geographic information system software to show the spatial distribution of $PM_{2.5}$ concentrations over time and identify spikes or concentration exceedances. This can provide information on potential hotspots (i.e., areas with higher concentrations of pollution) and inform efforts to direct future monitoring efforts;
- Use meteorological data in combination with $PM_{2.5}$ data to generate pollution roses. These pollution roses could illustrate how levels of pollutant concentrations measured at each location vary with wind speed and direction, which could provide information on potential sources of pollutants impacting the monitoring location;
- Compare $PM_{2.5}$ measurements between AB 617 Community Monitors and nearby regulatory monitors to verify continued accuracy of the monitors. This could also be used to develop correction factors;

- Use $PM_{2.5}$ and PM_{10} measurements to track trends in the progress in emissions reductions over time from strategies put in place by the Emission Reduction Program.

Ultimately, the Steering Committee will need to determine which methods and analyses will be utilized to extract useful information from the large amount of monitoring data that will be collected. As more AB 617 Community Monitors go live and begin collecting data, the Steering Committee can evaluate these options for feasibility and determine how best to proceed in order to accomplish the monitoring goals of the Plan.

15 Element 14 – Communicate Results to Support Action

15.1 Element 14 Overview

Air monitoring results must be clearly and effectively communicated in order to ensure that they result in effective action. Results of air monitoring will be discussed with Community members, decision makers, and organizations that are able to take action in ICAPCD. Ongoing monitoring activities, interim progress updates, and final results will be communicated to the above entities. Information will be made available on the District and CARB webpages.

15.2 Communicating Results of Community Monitoring

Regarding activity related directly to the Monitoring Plan and Emissions Reduction Program, stakeholders and other members of the Community can refer to the QuantAQ public dashboard[45] and the special website created for AB 617 and managed by the District.[46] This website is regularly updated by the District with new information related to AB 617 efforts, such as agendas and minutes from Steering Committee meetings. Visitors to the website also have the option to subscribe to the AB 617 mailing list to receive email updates when news becomes available.

Results of the community monitoring and data analysis will be made available to members of the Community in various ways. CARB has developed the AQview portal to store AB 617 monitoring data and make it available to the public. Upon the installation of the AB 617 Community Monitors, SCS Engineers will coordinate with the AQview team at CARB and ICAPCD to ensure the seamless transmission of community monitoring data. Also monthly, SCS Engineers will share the raw data with the District as a validated.csv file. In addition to the data being available on AQview and providing monthly validated .csv files, SCS Engineers will prepare quarterly summary reports that include site-specific details of any problems encountered and how they were addressed, an explanation of any corrective action necessary, and an invalidation report that documents specifically why and when for each data value that is invalid or missing for ICAPCD.

The results of the community monitoring and data analysis will also be made available to the public through a final report and presentation to the CSC and the Community. SCS Engineers will prepare both the report and presentation. The final report will be submitted within 30 days of the end of the CAMP monitoring program and it will include:

- A summary and timeline of air monitoring with background on the reasons for air monitoring.
- A discussion of how data were collected, validated, analyzed, and disseminated to address the purpose for air monitoring.
    - It will also include a narrative describing all significant events during the project: (Invalid data and the causes, instrument malfunctions, maintenance, etc.)

[45] QuantAQ. AB-617 North End Map. Available at: https://app.quant-aq.com/s/PBYEFY2YSN8Z362BMINI. Accessed October 2024.
[46] ICAPCD. AB 617 Imperial County – Brawley, Westmorland, Calipatria. Available at: https://www.icab617community.org/. Accessed: October 2024.

- Recommendations and next steps, including recommendations for ongoing air monitoring to track progress and verification of results achieved by the Emissions Reduction Program.
- A dissemination plan describing how the data will be disseminated and discussed with appropriate decision makers so that it may lead to the intended action.

The community presentation will include:

- An overview of the project and RFP;
- Project design and measurement parameters;
- Data summaries;
- Comparisons of measurements to known standards; and
- Conclusions, and recommendations for future monitoring.

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APPENDIX A
COMMUNITY MEETING SUMMARY

Appendix A. Community Meeting Summary Through 9/23/2024
Imperial County Year 5 Community Air Monitoring Plan
North End Phase 1 Community

Meeting Date	Meeting Time	Meeting Location	Meeting Type	Number of Active Attendees	Outreach Mechanisms	Topics Discussed[1]	Next Steps
7/26/2023	5:30-7:30pm	Brawley, California	Steering Committee Meeting (#1)	22	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- General AB 617 Program Overview - Community Air Grant Program - AB 617 Steering Committee Roles - Community Implementation Grant, funds distribution, and funds allocation - Status of the CSC (not yet formed) - Several applicants' introductions - Charter indicates the location of the meetings, and it will rotate between Brawley, Calipatria, and Westmorland	- Plan on the date for the next meeting - Subscription list on the website for committee meetings - Further development of CSC
8/14/2023	5:30-7:30pm	Westmorland, California	Steering Committee Meeting (#2)	15	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- CSC creation issues due to the rules in the Charter - AB 617 Public Meeting Code of Conduct - AB 617 CSC Charter - Development, implementation, and tracking metrics of the CERP and CAMP - Community-based projects and corresponding metrics - Implementation and incentives funding for community-based projects were approved - Clarification on Charter Sections - Possibility to create committee by next meeting - Discussion and voting on the number of members to serve on the CSC - CARB Blueprint updates and release for public comments in October 2023	- Steering committee formation - Briefing on Brown Act - Moving forward with Charter - Discussion with CARB for a presentation to launch the CERP
9/18/2023	5:30-7:30pm	Calipatria, California	Steering Committee Meeting (#3)	12	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- CSC applications still under review with an upcoming update in three to four weeks - CERP and CAMP timeline and how external (Ramboll) help is useful - Updates on the South End projects - Electrification of school buses and HVIP process for Brawley, discussion if North End could use South End projects as inspiration - CERP content on monitoring locations and enforcement policies - Discussion on monitors for PM_{10} & $PM_{2.5}$ monitoring and future toxic metal monitoring and AQview platform - Importance of information sharing between the three cities during the CSC meetings - ICAPCD Regulation 8 as a way to address dust concerns - Rule 310 Operational Development Fee	- Introduction of monitor locations and projects and strategies the South End is working on - Potential project ideas preparation for ICAPCD (sent to District via email)
10/16/2023	5:30-7:30pm	Brawley, California	Steering Committee Meeting (#4)	25	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Presentation of a roster of proposed CSC members, introductions from proposed members and ICAPCD personnel - Overview on AB 617 programs and regulated activities - Discussion on potential monitoring locations and the monitoring program - Discussion on equal funding distribution between the three cities - Discussion on agricultural burning - Discussion on feedlots as a potential emission/odor (certain VOCs) source and addressing it in the CERP and CAMP - Additional discussion on the monitoring program, things to consider, and how to use/access data	- State legislators meeting with North End Community - Discussion and identifications of potential emission sources in the Community
11/28/2023	5:30-7:30pm	Virtual meeting via Zoom with live interpreter	Steering Committee Meeting (#5, first meeting with an established CSC)	20	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Request for ICAPCD to introduce the CSC roster and the alternates for each member - Analysis of monitoring data in the Corridor of Brawley-Westmorland-Calipatria was presented - Discussion on natural and anthropogenic H_2S emissions and monitoring need by geothermal facilities and lithium facilities - Difference between regulatory monitors and air quality sensors - Discussion of the current county-level emissions inventory	- List of potential project creation and their discussion in CSC meetings

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Imperial County Year 5 Community Air Monitoring Plan
North End Phase 1 Community

Meeting Date	Meeting Time	Meeting Location	Meeting Type	Number of Active Attendees	Outreach Mechanisms	Topics Discussed[1]	Next Steps
1/22/2024	5:30-7:30pm	Westmorland, California	Steering Committee Meeting (#6)	21	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Motion to approve the CERP Extension Letter - CAMP Community Sensor Contractor discussion and Selection (includes monitor makes and models) - First sensor location discussion and selection, process for people to file anonymous suggestions on location - 2024 meeting calendar	- Discussion on SCS Engineering monitor type (specific sensor) - Additional discussion on three monitoring locations - Discussion on emissions from trucks and lithium and geothermal extractions (CAMP)
1/29/2024	5:30-7:30pm	Virtual meeting via Zoom	Steering Committee Meeting (#7)	21	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- AB 617 North End PM_{10} and $PM_{2.5}$ Community Sensors Discussion and Selection provided by SCS Engineering - Discussion on $PM_{1.0}$ as a potential community concern - Motion passed to purchase QuantAQ sensors - Discussion on first sensor location (CAMP) to be installed at a local residence - Additional discussion on things to consider related to sensor location (ex. sensitive receptors, avoiding grouping)	- Sensitive locations and sources - Wind anemometer and $PM_{1.0}$ presentations - Current sensor locations and most contaminant locations list
2/26/2024	5:30-7:30pm	Calipatria, California	Steering Committee Meeting (#8)	17	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- A reminder that AB 617 is focused on the community and how the community can create strategies to reduce emissions - Presentation of Technical Foundation for CERP Development and discussion - Community Air Protection Incentives - Boundary updates, and best practices for defining a boundary	- Other locations for monitor selection - Boundary selection - Discussion on four purchased sensors
3/18/2024	5:30-7:30pm	Tour around Brawley, Westmorland and Calipatria	Tour	--	--	- Community boundaries investigation - Brawley Emission Sources (8) - Calipatria Emission Sources (7) - Westmorland Emission Sources (6)	--
4/8/2024	5:30-7:30pm	Virtual meeting via Zoom	Steering Committee Meeting (#9)	21	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Tour debrief and discussion of Hernandez Park (Calipatria) being an area of concern - Presentation and discussion on Community Phase 1 Boundaries and Selection - Deliberation over the proposed boundary details for Westmorland, Calipatria, and Brawley - Motion passed to approve the boundaries that are now used in the CAMP and CERP	- Potential monitoring locations - CARB methodology and existing regulations for any sources will be added to future topics
4/15/2024	5:30-7:30pm	Virtual meeting via Zoom	Steering Committee Meeting (#10)	19	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Potential creation of a mission statement (not originally included in the Charter) - CAMP - PM Sensor Location Finalization Discussion and Selection - The monitoring locations were not approved and there was a push to reopen the survey where suggested locations could be submitted	- Further discussion on monitoring locations
5/20/2024	5:30-7:30pm	Westmorland, California	Steering Committee Meeting (#11)	15	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Presentation of AB 617 North End Phase 1 Community Input Survey Results - CAMP - PM Sensor Location Finalization Discussion and Selection - Approval of the first nine monitoring locations - Discussion of timeline related to budget and RFPs	- Five monitoring locations' decision and approval - Geothermal plant monitoring data

Appendix A. Community Meeting Summary Through 9/23/2024
Imperial County Year 5 Community Air Monitoring Plan
North End Phase 1 Community

Meeting Date	Meeting Time	Meeting Location	Meeting Type	Number of Active Attendees	Outreach Mechanisms	Topics Discussed[1]	Next Steps
6/17/2024	5:30-7:30pm	Brawley, California	Steering Committee Meeting (#12)	13	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Continued discussion on monitor locations and selection - CAMP: discussion and questions on the draft data report - CAP Guidelines and CERP Strategy Sample discussions: a few specific incentives mentioned involved agricultural burning - A decision was made to conduct a survey about CERP strategies at the July meeting - At the open discussion, a question was asked about how fires affect regulatory monitors. Clarification was provided that monitors will capture fires.	- Survey on which CERP strategies would be preferred by the Community - Monitoring locations and CAMP - Potential topics of interest including geothermal, feedlots, vehicles, and agricultural burning
7/15/2024	5:30-7:30pm	Brawley, California	Steering Committee Meeting (#13)	17	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Continued discussion on PM sensor location and selection - Presentation on Strategy Selection for CERP - Discussion on strategies and their implementation - Survey to determine which strategies are most important to the CSC	- Continuation of the survey on CERP strategies - Potential presentations on emissions data from fireworks, the Carl Moyer Program, and a presentation from Ramboll - CARB also to present at the meeting next month
8/19/2024	5:30-7:30pm	Virtual meeting via Zoom	Steering Committee Meeting (#14)	15	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Continued discussion on sensor selection, one open location in Brawley - Discussion of CERP strategies survey results and additional strategies. Those that garnered positive feedback include: paving projects, EV school buses, charging infrastructure, household filters, outreach, agricultural burning, and public transit - CARB mentioned that they would follow up with incentives team	- Continued discussion of strategies - Continued discussion on monitor locations
9/23/2024	5:30-7:30pm	Westmorland, California	Steering Committee Meeting (#15)	19	- Notice of meeting issued via internet and e-mail - Spanish interpretation available	- Public comment about a generator to be installed in the community and ensuring that people would be able to comment on the proposed project - Discussion of CERP strategies and funding for the strategies -Discussion of technical elements related to the CAMP including notifications to altert the community	-Presentation of CERP timeline, pending action items, and deadlines

Notes:

[1] Meeting materials, including presentations, are available at: https://www.icab617community.org/brawley-westmorland-calipatria. Accessed: October 2024.

Abbreviations:

AB - assembly bill
CAMP - Community Air Monitoring Plan
CAP - Community Air Protection
CARB - California Air Resources Board
CERP - Community Emissions Reduction Program
CSC - Community Steering Committee
EV - electric vehicle
H_2S - hydrogen sulfide
HVIP - Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
ICAPCD - Imperial County Air Pollution Control District
$PM_{1.0}$ - extremely fine particulates with a diameter smaller than one micron
PM_{10} - Respirable Particulate Matter
$PM_{2.5}$ - Fine Particulate Matter
RFP - Request for Proposal
VOC - volatile organic compound

APPENDIX B
AB 617 COMMUNITY
STEERING COMMITTEE CHARTER

AB 617 Imperial North-End Community Steering Committee Charter

ARTICLE I. AUTHORITY.

This Charter is adopted by Board of the Imperial County Air Pollution Control District, (Imperial County Board of Supervisors (BOS) convenes as "District Board") hereinafter referred to as "District Board," for the AB 617 Imperial North-End Community Steering Committee, hereinafter referred to as the "Committee," to establish rules, policies, and procedures for its proceedings. In coordination with the Imperial County Air Pollution Control District, hereinafter referred to as "District," the Committee was established by the District Board pursuant to Resolution No. _____, under the statutory authority of California Assembly Bill 617, hereinafter referred to as "AB 617." AB 617 is designed to implement a strategy to reduce emissions of toxic air contaminants and criteria pollutants in environmental justice communities affected by a high cumulative exposure burden, and provide education to these communities to increase awareness on air quality matters, which will lead to positive behavioral change that improves air quality.

The District is the responsible agency for administering AB 617 activities, including but not limited to the implementation of the Community Emissions Reduction Program and Community Air Monitoring Plan, hereinafter referred to as "Program(s)." As such, final decision-making authority regarding AB 617 activities shall reside with the District's Air Pollution Control Officer and/or the District Board, as required by law.

ARTICLE II. PURPOSE.

The purpose of the Committee is to support active community involvement and collaboration in the development of the Program(s) by providing a forum for identifying community issues and potential solutions with all relevant parties. The Committee is to also support the development of a Community Emissions Reduction Program and Community Air Monitoring Plan, to help establish new Program(s) and/or expand upon any existing Program(s).

The Committee shall be responsible for discussing and providing recommendations to the District Board regarding the development and implementation of the Program(s), including but not limited to:

1. Determination of the final boundaries of the community to be served under the Program(s);

2. Community profile and technical assessment;

3. Approaches for community engagement and outreach;

4. Mechanisms for engaging with other agencies;

5. Issues and sources contributing to the community's air pollution challenges;

6. Responsibility/authority of government agencies, non-profit entities, and other community members to address air pollution challenges;

7. Strategies for developing/implementing the Program(s);

8. Program(s) targets and strategies;

9. Program(s) Enforcement; and

10. Metrics to track Program(s) progress.

ARTICLE III. COMMITTEE MEMBERS.

3.1. Number and Appointment. The Committee shall consist of nine (9) voting members appointed by the District Board. The nine (9) members shall be appointed in accordance with the appointment and application process discussed below.

3.2. Qualifications. Each member of the Committee shall either reside, work, or own businesses within the Imperial North-End community (Brawley-Westmorland-Calipatria), as defined by the Community Air Protection (CAP) Program(s) and CAP Blueprint. Additionally, each member shall meet the qualifications of his or her position as set forth in Section 3.3 below.

3.3. Composition. The nine (9) voting members shall include:

1. Three (3) members from the city of Brawley, including individuals, community-based organizations, affected sources and local government bodies.

2. Three (3) members from the city of Westmorland, including individuals, community-based organizations, affected sources and local government bodies.

3. Three (3) members from the city of Calipatria, including individuals, community-based organizations, affected sources and local government bodies.

3.4. Alternates. Each Committee member specified in Section 3.3 may designate one (1) alternate from the pool of submitted applications, subject to approval by the District Board.

3.5. Committee Appointment and Application Process. The District Board shall appoint Committee members in the following manner:

1. Committee members shall be appointed in compliance with a standardized application process including but not limited to submitting an application form to

the District including information (as necessary) to demonstrate the applicant's interest in the community corridor pursuant to AB 617.

2. Applications for the appointment of Committee members shall be assembled by the District.

3. Persons applying in accordance with the above-mentioned process shall be recommended by District staff and appointed by a majority of the District Board in accordance with all applicable laws. Committee members serve at the pleasure of the District Board, and may be removed from office by a majority vote of the District Board.

3.6. Term of Appointment. Committee members shall be appointed for a term of two (2) years. Once the initial term is fulfilled, the Committee members shall make a succeeding application for a full two (2) year term in accordance with the above-mentioned application process. At the conclusion of any term, a Committee member may be reappointed by the District Board to a subsequent two (2) year term.

3.7. Resignation. A Committee member may resign effective on giving written notice to the District, unless the notice specifies a later date for his/her resignation to become effective. The District shall enter the notice in the proceedings of the Committee. The acceptance of a resignation shall not be necessary to make it effective.

3.8. Vacancies. Vacancies occurring on the Committee shall be automatically filled by the respective designated Alternate. In the case of the vacancy of an Alternate, the District Board shall appoint a replacement from the pool of submitted applications.

3.9. Attendance and Participation. Committee members are expected to attend all regular committee meetings. This includes in-person, teleconference and/or videoconference meetings. Please note that if both the primary and alternate members are in attendance at a meeting, only one member (either the primary or the alternate), may sit at the table during an in-person meeting, or be a panelist during a virtual meeting. Participation includes submitting agenda items to the District, giving updates on strategies and actions, being a thought partner, and asking clarifying questions. The intent is to have both the primary and alternate members attend each monthly meeting throughout the twelve (12) month calendar year. In-person meeting sign-in sheets or virtual meeting log-in and log-out times will be used to verify attendance. A Committee member must notify the District by email twenty-four (24) hours before the date of the official committee meeting with the reason for the absence (e.g., personal or family emergency, work conflict, etc.) to be considered an excused absence. An excused absence must bare genuine extenuating circumstances. A Committee member, both primaries and alternates, may be removed when the member has failed to attend three (3) cumulative meetings (without an approved leave of absence) regardless of an unexcused or excused absence. Final removal of a committee member due to attendance issues will be determined by the District.

A Committee member may request a leave of absence. A request for a leave of absence shall be made in writing within ten (10) days of the start of leave of absence to the District's Air Pollution Control Officer (APCO) at any point during a Committee member's term for reasons of health, work, or other temporary circumstance. The decision to approve the leave of absence rests with the District's APCO. A leave of absence shall not exceed three (3) months consecutively.

3.10 Stipend. Each Committee member shall receive a stipend of seventy-five dollars ($75) per Committee meeting attended (excluding any subcommittee meetings, working group meeting and workshops), subject to the availability of AB 617 funding. A Committee member shall not be entitled to a stipend if he or she is more than thirty (30) minutes late to a Committee meeting, or leaves more than thirty (30) minutes early.

ARTICLE IV. MEETING PROCEDURES.

4.1. Facilitator. The District will act as the professional and impartial facilitator to moderate and lead CSC meetings, Workshops, and Working Group meetings. Committee members will rotate monthly, with respect to the city the meeting is held at, to act as potential working group facilitators and be responsible for assisting the District in leading meetings and implementing the CERP and CAMP. The facilitator may assist the committee in reaching consensus on issues during the meetings. Additionally, the facilitator will help provide space for members to express their thought, including making extra efforts to encourage participation from less vocal members.

4.2. Leadership Committee Duties. The monthly rotating Committee leads will share responsibility for developing meeting agendas, meeting facilitation, and Committee membership engagement. Leads will serve as liaisons and guide standing committees and ad-hocs. Leads will work with the District to ensure that they are fulfilling their CERP and CAMP goals.

4.3. Accessibility/Accommodation. In-person Committee meetings and other events associated with the Committee must be held a facilities that can accommodate members covered by the Americans with Disabilities Act and language interpretation services will be provided in Spanish and other languages/accommodations as needed. For virtual meetings, the District will ensure that necessary services are provided to ensure that Committee members requiring accommodations under the Americans with Disabilities Act are being met.

4.4. Website. District's AB 617 Communities website page will be maintained by the District and updated regularly, in preparation for the next Committee meeting (upload material for discussion) and after each meeting, to include meeting recordings. The website will include news, meeting schedules, request for proposals, Committee rosters, agendas, and all other background and meeting materials.

4.5. Regular and Special Meetings. The Committee shall establish the time and place for its regular meetings. The date, hour, and location of regular meetings shall be fixed by

resolution of the Committee. The Committee shall hold at least one regular meeting each month of every calendar year. In the event of a lack of agenda topics, pending technical analysis, or any other reason; the Committee shall hold a vote to determine if the following scheduled monthly meeting is canceled. Special meetings and adjourned meetings may be held as required or permitted by law.

4.6. Notice. All meetings of the Committee, including, without limitation, regular, special and adjourned meetings, shall be called, noticed, held and conducted in accordance with the provisions of the Ralph M. Brown Act (commencing with Section 54950 of the California Government Code).

4.7. Quorum. A majority of current members of the Committee not on a leave of absence shall constitute a quorum. Vacant seats shall not count as "current members." Each member of the Committee shall be entitled to one (1) vote. A vote of the majority of the members present with at least a quorum in attendance shall be required to take action, and/or make a recommendation, except for adjournment of a meeting which shall require only a majority of those present, and as provided in Section 4.11. No proxy or absentee voting shall be permitted.

4.8. Special Meeting. Notice of any special meeting shall be made in compliance with the Ralph M. Brown Act (commencing with Section 54950 of the California Government Code).

4.9. Conduct of Business.

1. Items on the agenda will be considered in order unless facilitator announces a change in the order of consideration.

2. Unless an agenda item identifies a particular source for a report, such as the Committee members, the Committee members and/or its advisors shall first report on the item. The item will then be open to public comment.

3. Confidential information shall not be subject to disclosure at meetings of the Committee.

4.10. Resolutions and Motions. All official acts of the Committee shall be taken either by resolution or a motion, duly made, seconded and adopted by a vote of the Committee members. Any Committee member, may make motions and seconds.

4.11. Voting. All actions of the Committee shall be adopted by an affirmative vote of a majority of the Committee members present and eligible to vote, provided that at least a quorum of Committee members are present and eligible to vote. Any act of the Committee shall be accomplished by a roll call vote when such a vote is requested by any member in attendance.

4.12. Motions to Reconsider. A motion to reconsider the vote on an agenda item may not be made at the meeting at which the item was acted upon. Such motions may be made at the subsequent Committee meeting, if the agenda item was not a hearing required by law, and the Committee member making the motion voted on the prevailing side of the agenda item sought to be reconsidered. If the item was a hearing required by law, a motion to reconsider may not be made.

4.13. Disqualification from Voting. A Committee member shall be disqualified from voting on any contract or any other matter in which he/she has a financial interest, as required by law.

4.14. CERP and CAMP Modifications. The CERP and CAMP may be amended only by an approved motion or resolution of both of the Committee and the District Board after properly noticed meetings. The CERP and CAMP shall be reviewed on at least an annual basis. The amendments will be reviewed and considered by the Committee, District, CARB staff (as appropriate), and the District Board (as appropriate).

4.15. Minutes. The Clerk of the Committee shall prepare the minutes of each meeting of the Committee. The minutes shall be an accurate summary of the Committee's consideration of each item on the agenda, and an accurate record of each action taken by the Committee. At a subsequent meeting, the Clerk shall submit the minutes to the Committee for approval by a majority vote of the Committee members in attendance at the meeting covered by the minutes. Once approved, the District will keep the minutes with the proceedings of the Committee. The official Minutes, as approved by the Committee, recording any motions or actions taken by the Committee, shall be prepared and submitted to the District.

4.16. Public Records. All records of the Committee shall be kept and provided to the public in accordance with the provisions of the California Public Records Act (commencing with Section 6250 of the California Government Code).

4.17. Adjournment. The Committee may adjourn any meeting to a time and place specified in the resolution or motion of adjournment, notwithstanding less than a quorum may be present and voting. If no members of the Committee are present at regular or adjourned meeting, the District may declare the meeting adjourned to a stated time and place and shall cause written notice to be given in the same manner as provided for special meetings, unless such notice is waived as provided in Section 4.6 of these Bylaws for special meetings. A copy of the order or notice of adjournment shall be posted as required by applicable law.

ARTICLE V. REPORTS AND COMMUNICATIONS.

5.1. Reports. On or before January 31st of each year, the Committee shall submit an annual report to the District Board. A draft of the report shall be provided to and approved by the Committee before its submission to the District Board. The report shall highlight the activities, accomplishments, and future goals of the Committee.

5.2. Progress Reports. The District Board may request the Committee to submit progress reports and recommendations at any time. The Committee shall respond to such requests within a reasonable period of time. Progress reports and recommendations shall be provided to and approved by the Committee before its submission to the District Board.

5.3. Communications with the Public. Public participation in Committee meetings shall be allowed as follows:

1. An opportunity for members of the public to directly address the Committee on any item on the agenda of interest to the public shall be provided before or during the Committee's consideration of the item.

2. The agenda will provide for public comment on items not on the agenda which are within the subject matter jurisdiction of the Committee at the beginning of each regular meeting agenda. The total time for public comment on matters not on the agenda shall not exceed fifteen (15) minutes, and each speaker is limited to a maximum of three (3) minutes.

3. The Committee may establish reasonable limits on the total amount of time allotted for public testimony on an item. When further discussion is required, the Committee may vote to allow time in the agenda of the following meeting.

5.4. Robert's Rules of Order. To the extent that conduct of the meetings is not governed by this Charter or the Ralph M. Brown Act, the current edition of Robert's Rules of Order shall apply.

ARTICLE VI. SUBCOMMITTEES.

6.1. Appointment. The Committee may decide that an ad-hoc advisory subcommittees ("Subcommittees") needs to be formed to conduct further research or data gathering on a specific issue. In this case, the Committee will determine the scope of the subcommittee and will ask for volunteers among the Committee members to be on the subcommittee. Such Subcommittees must be composed of less than a quorum of voting Committee members. The Committee will conduct a vote to form a subcommittee, determine its scope of work, and define a timeframe for the subcommittee to report back to the Committee.

6.2. Authority. All Subcommittees are advisory only, and may be dissolved at any time upon a majority vote of the Committee.

6.3. Meetings. Meetings of Subcommittees shall be held at times and places determined by resolution of the Committee. A majority of those Committee members assigned to a Subcommittee shall constitute a quorum.

ARTICLE VII. ADVISORS.

7.1 Designation of Advisors. Advisors to the Committee shall include, but not be limited to:

1. Consultants. The Committee may request the services of consultants, advisors, and independent contractors as are deemed necessary and desirable in implementing and carrying out the purposes of the Committee. Such requests shall be granted at the discretion of the District Board and shall be subject to available funding.

2. General Counsel to the Committee. The Office of County Counsel of Imperial County shall serve as counsel to the Committee.

This Charter may be amended only by an approved motion or resolution of both of the Committee and the District Board after properly noticed meetings. This Charter shall be reviewed on at least an annual basis.

This Charter was approved by the Imperial County Air Pollution Control Board on January 28, 2025.

AB 617 North-End Community Steering Committe Members Roster

REPRESENTING	STATUS	NAME	PRESENT
Los Amigos de la Comunidad	**Member**	**Eric Reyes**	
	Alternate	**VACANT**	
Community Member	**Member**	**Miguel Hernandez**	
	Alternate	**VACANT**	
Community Member	**Member**	**VACANT**	
	Alternate	**Christian Torres**	
Community Member	**Member**	**Christian Froelich**	
	Alternate	**VACANT**	
Community Member	**Member**	**Hector Cervantes**	
	Alternate	**Michael Luellen**	
Controlled Thermal Resources	**Member**	**Sergio Cabanas**	
	Alternate	**VACANT**	
Community Member	**Member**	**Mario Lopez**	
	Alternate	**Yolanda Lopez**	
SCS Engineers	**Member**	**Sergio A. Valenzuela**	
	Alternate	**VACANT**	
IV Equity & Justice Coalition	**Member**	**Fernanda Vega**	
	Alternate	**VACANT**	