

AB 617 Community Air Monitoring Plan Overview of 14 Elements

Monitoring and Laboratory Division
California Air Resources Board

Community Air Protection Program

Program Elements



Path to a Community Emissions Reduction Plan (CERP)

Camino hacia un plan comunitario de reducción de emisiones (CERP)

Community Selection
(Feb 2022) / Selección de la
comunidad (febrero de 2022)

Convene Community Steering
Committee / Convocar al Comité
Directivo de la Comunidad

Air Quality 101 / Calidad del
aire 101

1 year or more
1 año o mas

Shared Understanding
Entendimiento compartido

Select Strategies
Seleccionar estrategias

CERP
CERP

Data
Datos

Prioritize Issues
Priorizar problemas

How We Work Together
Cómo trabajamos juntos

Process / Path
Proceso / Ruta



Criteria for Community Air Monitoring

14 Elements

for developing community air monitoring plans

APPENDIX E. STATEWIDE AIR MONITORING PLAN

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COMMUNITY AIR PROTECTION PROGRAM

E-1

What is the reason for conducting community air monitoring?

How will monitoring be conducted?

How will the data be used to take action?

<https://ww2.arb.ca.gov/resources/documents/final-draft-blueprint-appendix-e>

14 Air Monitoring Planning Elements

What is the reason for conducting air monitoring?

- Form community partnerships
- State the community-specific purpose
- Identify scope of actions
- Define air monitoring objectives
- Establish roles and responsibilities

How will monitoring be conducted?

- Define data quality objectives
- Select monitoring methods and equipment
- Determine monitoring areas
- Develop quality control procedures
- Describe data management
- Provide work plan for conducting field measurements

How will data be used to take action?

- Specify process for evaluating effectiveness
- Analyze and interpret data
- Communicate results to support action

Actionable Air Monitoring Data

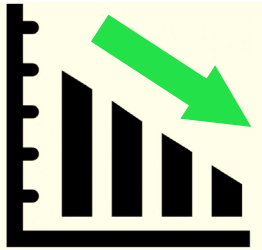
Datos procesables de monitoreo del aire



Inform personal choices, e.g. when to exercise / Informar las elecciones personales, por ejemplo, cuándo hacer ejercicio



Evaluate source impacts / Evaluar los impactos de la fuente



Track the impact of strategies to reduce emissions / Seguimiento del impacto de las estrategias para reducir las emisiones

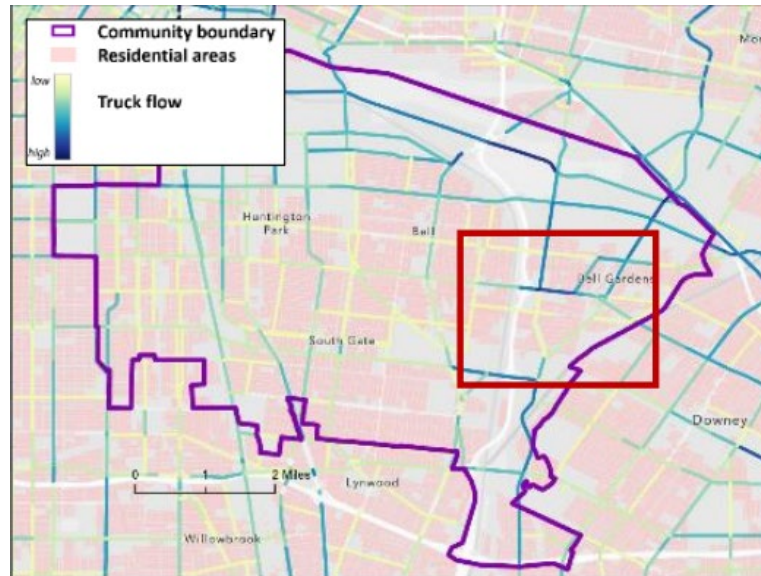
6



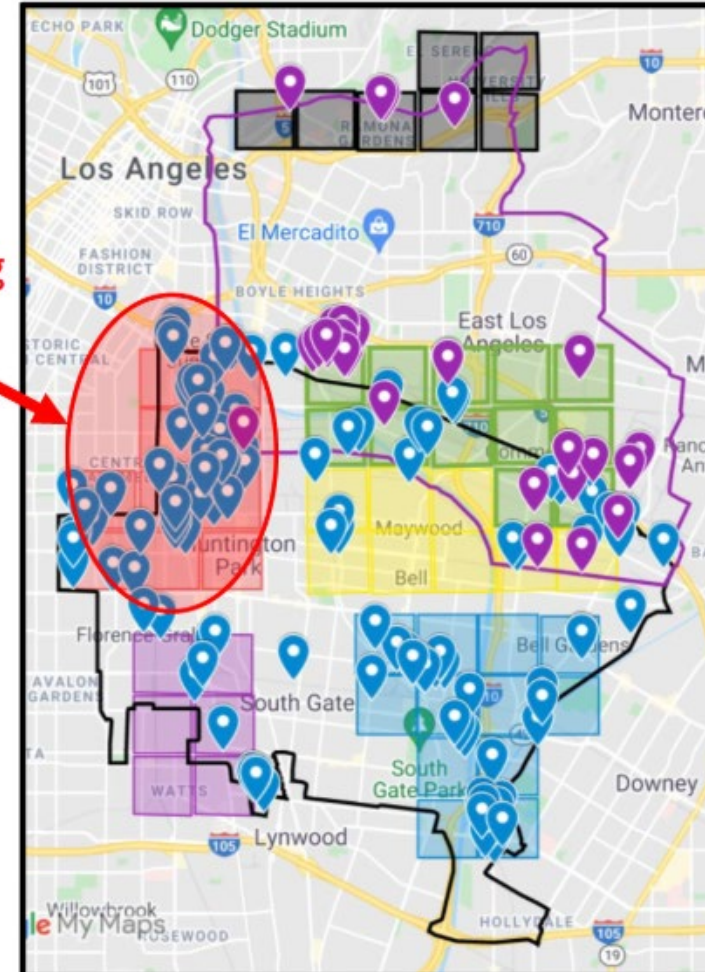
Support enforcement activities, new rules and regulations / Apoyar las actividades de aplicación de ley, nuevas reglas y regulaciones

CAMP Example – Southeast LA

- Community-specific purpose
- Mobile monitoring of metal facilities and high truck flow areas



Starting
Point



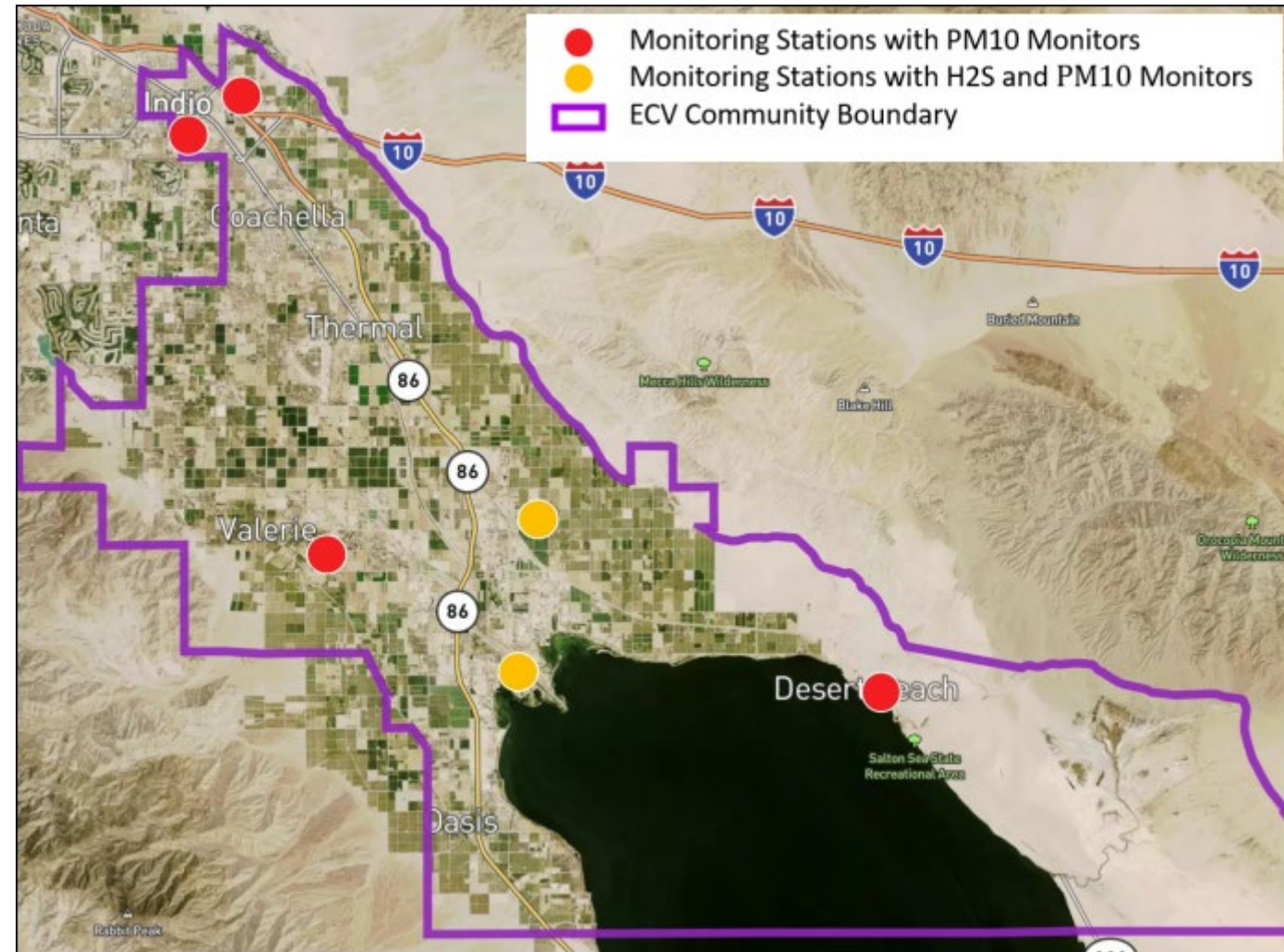
- SELA Metal Facilities
- SELA Boundary
- ELA Metal Facilities
- ELA Boundary
- Identified Clusters

This mobile platform can measure air toxic metals such as arsenic, lead, nickel, etc.



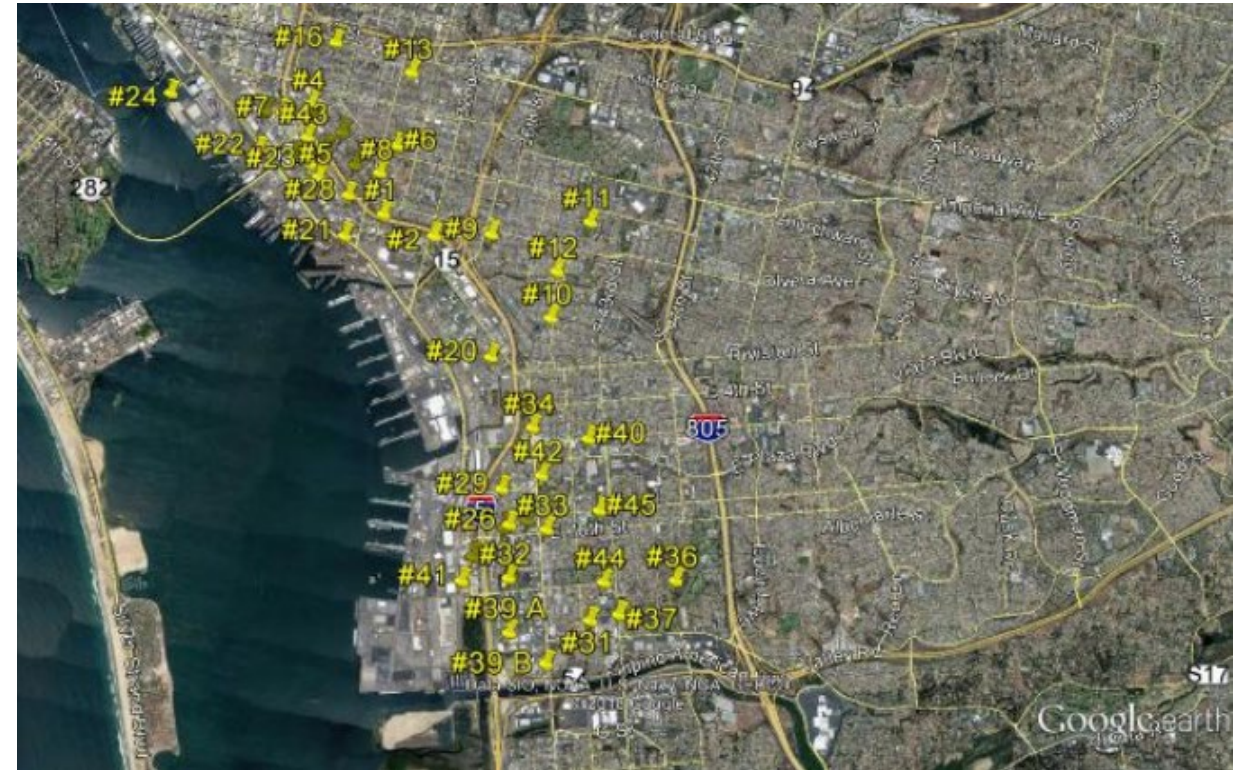
CAMP Example – Eastern Coachella Valley

- Define air monitoring objectives
- Stationary monitoring
- Community concerns
 - Dust from Salton Sea
 - Pesticides from farming operations



CAMP Example – Portside

- Determine monitoring areas
- Prioritized 14 sites from 40+ identified sites by steering committee



How to Use the 14 Elements

- The 14 elements are **guidelines** to help create actionable data from community monitoring
- Elements are **not prescriptive**
- Each community and plan are **unique**
 - Each group, agency, or individual is responsible to implement a monitoring plan that best benefits the community and community air quality goals

APPENDIX E – STATEWIDE AIR MONITORING PLAN

III. CHECKLIST FOR COMMUNITY AIR MONITORING EVALUATION

Table E-2 Checklist for Community Air Monitoring Evaluation

MONITORING PLAN ELEMENT 1: FORM COMMUNITY PARTNERSHIPS	
CRITERIA	✓
Identifies community steering committee members and their affiliation.	<input type="checkbox"/>
Documents community steering committee meeting information: <ul style="list-style-type: none">• Date of first meeting.• Date, time, number of attendees for all meetings that have been held.• Frequency of future meetings and expected attendees.	<input type="checkbox"/>
Details level of community involvement in planning and resources made available to accommodate community's desired level of involvement throughout implementation.	<input type="checkbox"/>
Provides link to air district webpage dedicated to community air monitoring and documents what will be posted on this webpage.	<input type="checkbox"/>
Identifies dedicated contact person to address questions on the community-specific air monitoring plan.	<input type="checkbox"/>

MONITORING PLAN ELEMENT 2: STATE THE COMMUNITY-SPECIFIC PURPOSE FOR AIR MONITORING	
CRITERIA	✓
Identifies the community-specific air monitoring need(s).	<input type="checkbox"/>
Provides background information on how the need was discovered.	<input type="checkbox"/>
Documents relevant information from previous, ongoing, and proposed air monitoring and identifies gaps that this community air monitoring will address.	<input type="checkbox"/>
Explores alternative approaches to investigating and addressing the air quality monitoring need(s).	<input type="checkbox"/>


MONITORING PLAN ELEMENT 3: IDENTIFY SCOPE OF ACTIONS	
CRITERIA	✓
Defines action(s) that air monitoring aims to support.	<input type="checkbox"/>

COMMUNITY AIR PROTECTION PROGRAM

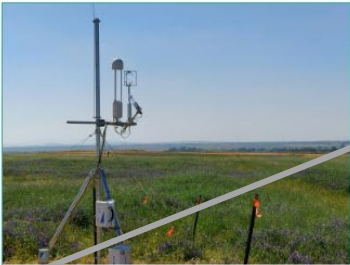
E-19

Please submit any written comments by September 24, 2018 to: <https://www.arb.ca.gov/eispub/comm/bclst.php>.


FEATURED



Existing Community Monitoring Systems



Outline of Measurement Technologies



Community Science Resources

Email Updates

Keep up to date with the latest information regarding the California Community Air Protection Program.


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Map

Click on the map below to jump to the community air monitoring section relevant to that district.



Technology Clearinghouse
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Measurement Technology	Cost*	Range of Manufacturers**	Expertise Level***	Air Monitoring Approach
Spectroscopy	\$ - \$\$\$\$	MMM-MMMM	2 - 3	<ul style="list-style-type: none">Air ToxicsFederal Reference or Equivalent Method (FRM/FEM)Fence-line MonitoringMobile MonitoringRemote Sensing (inc. Satellite)
Mass Spectrometry	\$\$\$ - \$\$\$\$	MM-MMM	3	<ul style="list-style-type: none">Air ToxicsFRM/FEMMobile MonitoringRemote Sensing
Chromatography	\$ - \$\$\$	MM	2-3	<ul style="list-style-type: none">Air ToxicsFence-line MonitoringFRM/FEMMobile MonitoringRemote Sensing
Gravimetric Analysis	\$	MMM	1-2	<ul style="list-style-type: none">FRM/FEM
Particle Counting	\$ - \$\$\$	M-MMMM	1-2	<ul style="list-style-type: none">FRM/FEMFence-line MonitoringMobile MonitoringRemote SensingSensors/Sensor Networks

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Measurement App

Community Assessment
Community Engagement
Data Portal
Emission Reduction Strategies
Technology Clearinghouse
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Species	Source Attribution	Health Research
Particulate Matter (PM)	Conductivity** Gravimetric** Ionization Mass Spectrometry** Particle Counting	Particle Counting Conductivity Spectroscopy
Toxic Volatile Organic Compounds (VOCs)	Mass spectrometry** Spectroscopy**	Mass spectrometry** Spectroscopy**
Toxic Metals (Includes Lead, Cr ⁶⁺)	Conductivity** Mass spectrometry** Spectroscopy**	Conductivity** Mass spectrometry** Spectroscopy**
Gaseous Criteria Pollutants Ozone (O ₃), Sulfur Oxides (SO _x), Nitrogen Oxides (NO _x)	Conductivity** Spectroscopy**	Conductivity** Spectroscopy**

<https://ww2.arb.ca.gov/capp-resource-center/community-air-monitoring>

Links to CAMP Examples



- Eastern Coachella Valley
 - https://www.aqmd.gov/docs/default-source/ab-617-ab-134/camps/ecv/ecv-camp_11-13-2020_draft.pdf?sfvrsn=4
- Portside
 - <https://www.sdapcd.org/content/dam/sdapcd/documents/capp/AB-617-Elements-Required-Criteria-San-Diego-June-2019.pdf>
- Southeast LA
 - https://www.aqmd.gov/docs/default-source/ab-617-ab-134/camps/sela/sela-camp_10-28-2020_draft.pdf?sfvrsn=4
- Statewide Air Monitoring Plan Checklist (See Appendix E)
 - https://ww2.arb.ca.gov/sites/default/files/2018-08/final_draft_community_air_protection_blueprint_august_2018_appendix_e.pdf