



San Ysidro & Otay Mesa

CAMP

Community Air
Monitoring Plan



San Diego
Air Pollution Control District

2023
Zine

WHAT IS A COMMUNITY AIR MONITORING PLAN (CAMP)?

In response to Assembly Bill 617, the California Air Resources Board (CARB) established the Community Air Protection Program (CAPP). The CAPP focuses on reducing exposure to air pollutants in the most impacted communities in the state. The San Diego County Air Pollution Control District (SDAPCD) nominated the International Border Community (IBC), which includes the communities of San Ysidro and Otay Mesa East in the City of San Diego to be included in this CARB-funded program due to the impacts of poor air quality on the community's health.

Community air monitoring conducted as part of AB 617 plays a key role in supporting actions to understand current air quality, reduce emissions and exposure to air pollution within heavily burdened communities, and measure the success of the community emissions reduction programs over time.



WHAT IS THE COMMUNITY STEERING COMMITTEE'S ROLE?

The IBCSC broadly serves as a liaison between APCD CARB, and the community. APCD relies on the International Border Community Steering Committee (IBCSC) to increase its understanding of the community, identifying its needs and concerns, informing potential air monitoring site locations, and connecting with relevant community and agency contacts. In addition, the IBCSC has been and will continue to be crucial for Community Emissions Reduction Program (CERP) co-development and be an important partner in CERP implementation, as well as serve an important role in distributing the most up-to-date information to members of the community. Finally, the IBCSC holds APCD accountable to successfully implementing and achieving CERP strategies and goals.

WHAT ARE THE COMMUNITY-IDENTIFIED AIR POLLUTION ISSUES?

Community members voiced concerns about the impacts of air pollution, particularly to sensitive populations such as children and elderly people. The IBCSC requested that special attention be paid to monitoring air quality near schools, parks, health centers, and senior centers. The following are the air pollution issues identified and prioritized by the International Border Community Steering Committee.

(See next section for community-identified priorities.)

VEHICLE TRAFFIC



1. Idling cars at the ports of entry.
2. Traffic circulation near or around Las Americas Premium Outlets, Dairy Mart Rd., Calle Primera, Willow Rd., Camino De La Plaza, East San Ysidro Blvd., and more.

HEAVY DUTY TRUCKS



1. Idling heavy duty diesel trucks at the port of entry.
2. Operations at Amazon warehouses, including current and proposed expansions.
3. Current and future impacts to residents in new housing developments near freeways and warehouses, especially along California State Route 905.

OTHER MOBILE SOURCES



1. Dust from Border Patrol ATVs and vehicles operating on the west side of San Ysidro.
2. Emissions from rail yard and freight trains moving through the heart of San Ysidro.
3. Pollution from both Brown Field Municipal Airport in Otay Mesa East and Aeropuerto Abelardo L. Rodriguez in Tijuana, Mexico.

CROSS-BORDER



1. Odor from the Tijuana River coming from untreated sewage in Tijuana, Mexico.
2. Trash and other items being burned in Tijuana, Mexico.
3. Industrial-related emissions from Tijuana, Mexico.

WHAT TYPE OF AIR POLLUTION WILL BE MONITORED? (next section)

PARTICULATE MATTER

SOURCES



Fires



Construction



Offroad
Vehicles



Road Dust

HEALTH IMPACTS



Asthma, Lung
Cancer, Lung
Disease



Cancer



Heart Disease

MONITORS



Continuous
Sensors

DIESEL PARTICULATE MATTER

SOURCES



Trucks



Trains



Buses



Generators

HEALTH IMPACTS



Asthma, Lung Cancer, Lung Disease



Bladder Cancer



Heart Disease



Irritation and inflammation of eyes, nose, and throat; Respiratory allergies

MONITORS



Black Carbon & Elemental Carbon

VOLATILE ORGANIC COMPOUNDS

SOURCES



Liquids used to dissolve other substances (solvents)



Industrial activity



Automobile engines



Electricity generation

HEALTH IMPACTS



Asthma



Cancer

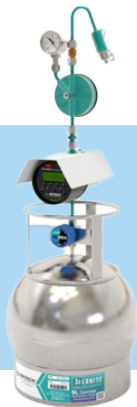


Irritation and inflammation of eyes, nose, and throat; Headaches and dizziness; Nausea



Liver, kidney, and central nervous system damage

MONITORS



Canister-Based Air Samples

AIRBORNE METALS

SOURCES



Industrial activity



Roadside dust;
tire wear;
break wear



Automobile engines



Scrapyards

HEALTH IMPACTS



Lung Cancer



Cancer



Heart Disease

MONITORS



Metals Sampling & Filters



ODOR-CAUSING AIR POLLUTION

SOURCES



Wastewater



Livestock



Trash Heaps



Industrial Activity

HEALTH IMPACTS



Headache;
nausea;
dizziness;
mental
health (i.e.,
depression)



Irritated throat,
Watery eyes, and
Nose irritation

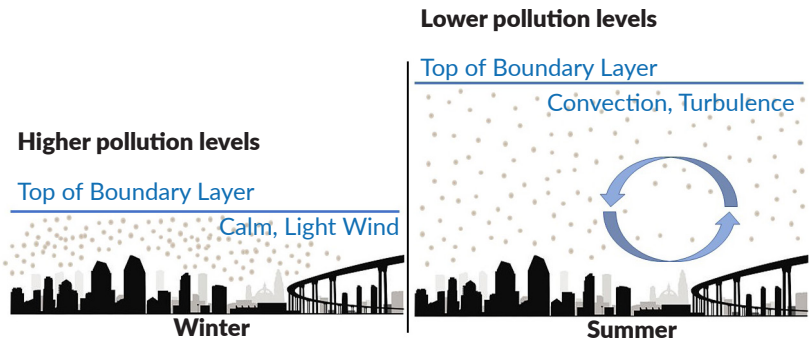
MONITORS



**Continuous
Sensors**

HOW DOES THE WEATHER IMPACT AIR QUALITY?

The two main factors that determine air pollution concentration at a given location are meteorology and source emissions, both of which vary over time. Source emissions, which include facility, mobile, and area emissions, are calculated by APCD and CARB. APCD will measure meteorological parameters such as wind speed, wind direction, and temperature at monitoring sites when possible or obtain meteorological data from nearby stations that can be considered representative. In addition to the small-scale effects that drive air pollution concentrations, a large-scale meteorological phenomenon increases air pollution concentrations during the colder conditions of winter. The image below illustrates this effect that controls the amount of air in our layer of the atmosphere.



WHERE WILL THE POTENTIAL MONITORING SITES BE LOCATED?

Monitoring locations are a crucial aspect of any air monitoring plan. Sites take many forms, including standalone trailers, chain link enclosures, a utility pole with a sensor or sampling canister mounted upon it, and more. Monitoring site locations depend on many factors, including, but not limited to:

1. **Community input** of key areas the community has identified as sites of concern due to proximity of sensitive populations and/or pollution sources.
2. **Suitability** includes, electrical power and/or network availability, ensuring there are no barriers or obstructions impacting the air monitor's ability to collect data; land availability of where to put the monitors and security.
3. **Available resources** such as SDAPCD staff to deploy, maintain, collect and analyze data available through air monitoring equipment.



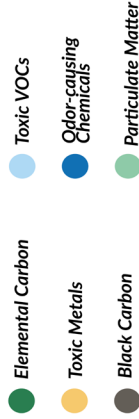
Potential Sites



Current Sites



Pollution Monitors



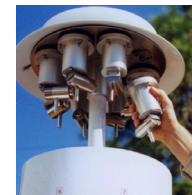
* Projected deployment of monitors in 2024

WHAT IS THE AIR MONITORING DATA PROCESS?

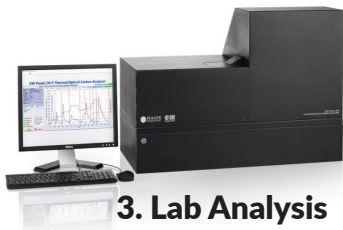


1. Instrument Calibration

- 1 sample every six days for integrated samples
- Continuous for Black Carbon



2. Sample Collection



3. Lab Analysis

Restart the Process

5. Share Data with the Community



4. QA/QC Data Analysis

WHAT ARE THE NEXT STEPS AND FUTURE ACTIONS?

Community Emissions Reduction Plan

While the CAMP focuses on monitoring air quality, the Community Emissions Reduction Plan (CERP), is a document that sets community goals to reduce air pollution emissions and identifies strategies to help achieve emission reduction goals. Similar information is provided in each document, and though the two plans are highly interrelated, they differ in one key area: while the CAMP specifies, broadly speaking, how and where pollution data will be gathered and disseminated, the CERP identifies strategies that, when implemented, can help reduce pollution levels at the source of emissions.

Exposure Reduction

Air monitoring data can also inform actions that can be taken to limit the exposure of community members to harmful pollution. For example, implementing trucking routes to prevent heavy diesel emitters from driving or idling near parks, schools, senior centers, and other locations where vulnerable community members might frequent. Additionally, APCD performs data analysis to pinpoint additional exposure trends, such as what times of day or year typically show the highest levels of pollution, how weather affects these levels, or identify potential hot spots.

Land Use

By having comprehensive information about air pollution in the community, land use jurisdictions can identify opportunities to modify land uses as part of land use plan updates. For example, air monitoring data can be used to support the identification of areas where land uses that act as buffers between residences and

major sources of pollution would be effective in reducing pollution exposure. Other land use strategies can include the development of more green spaces within a community or an expansion of the tree canopy in the community.

Rule Development

Air monitoring data can help air pollution regulators identify opportunities for adopting rules that can further reduce toxic air emissions from polluting sources. For example, spikes in levels of a particular contaminant could signal regulators to look for sources of contaminants and assess the effectiveness of existing rules or develop new ones.

Additional Monitoring

Data analysis can reveal hot spots, as well as potential gaps in the monitoring network. Furthermore, as the IBC continues to grow and add new industrial and commercial facilities, the monitoring network will need to adapt over time.

Ongoing Community Engagement

Ongoing communication will be essential to maintaining the program, both to evaluate past and present efforts and to identify future actions to reduce air pollution levels. Air pollution data will help identify steps that community residents can take in their day-to-day lives to reduce their exposure to harmful air pollutants. This data will also help assess the effectiveness of the CERP, which will identify strategies to reduce air pollution in the community.

HOW CAN YOU GET INVOLVED?

The International Border Community, its Steering Committee, and its residents are crucial to the success of this program.

If you would like more information on how you can become a Community Steering Committee Member or participate in community meetings, please email Monique Lopez at monique.lopez@sdapcd.org.



International Border Steering Committee Meetings are held every third Wednesday of the month from 5 pm - 7 pm. Visit SDAPCD's website for more information.



HOW CAN YOU REPORT AIR QUALITY CONCERNS?

Email

apcdcomp@sdapcd.org

Phone

(858) 586-2650

Phone App



- Odors
- Asbestos
- Dust
- Smoke
- Unpermitted Operations
- Truck Idling
- Gasoline Facilities
- Etc.



San Diego
Air Pollution Control District