

Chapter 6: Air Monitoring Summary

Air monitoring will be conducted in the San Bernardino, Muscoy community as part of the AB 617 program. Air monitoring can provide valuable information about sources of air pollution, types of pollutants, and air quality impacts in the community. Information that is collected from air monitoring can be used to implement and track air quality actions prioritized by the community that reduce local residents' exposure to harmful air pollutants.

Chapter 6 Highlights

- Community level air monitoring will provide new information about air pollution in the community
- Monitoring will be done in areas near the air quality concerns identified by the community
- Areas for monitoring reflect the community's air quality priorities
- Many types of monitoring equipment will be used, from advanced techniques to low-cost sensors

The Community Air Monitoring Plan (CAMP) for the San Bernardino, Muscoy community¹ was developed through close collaboration between the CSC and South Coast AQMD staff. The plan outlines the objectives and strategies for monitoring air pollution in the community based on the CSC's air quality priorities (Table 6-1). A detailed description for these priorities is available in the CAMP Appendix B².

¹ AB 617 Community Air Monitoring Plan (CAMP) for the San Bernardino, Muscoy Community: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/camps/sbm_camp.pdf?sfvrsn=6

² AB 617 Appendices for the Community Air Monitoring Plan (CAMP) for the San Bernardino, Muscoy Community: <http://www.aqmd.gov/docs/default-source/ab-617-ab-134/camps/appendix-a-and-b-sbm.pdf?sfvrsn=6>

Table 6-1. Air quality priorities for the San Bernardino, Muscoy community

Air Quality Priority ³	Potential Concerns
1-Truck Idling and Truck Traffic related to Warehousing	<ul style="list-style-type: none"> - Combustion emissions - Truck idling - Truck traffic
2-BNSF Railyard	<ul style="list-style-type: none"> - Trains - Railyards
3-Schools/Hospitals/Parks/Community	<ul style="list-style-type: none"> - Human exposure - Proximity to BNSF and Omnitrans
4-Warehousing	<ul style="list-style-type: none"> - New warehousing - Proximity to residences
5-Traffic on Freeways and Major Roadways	<ul style="list-style-type: none"> - Trucks - Impact on residents
6-Omnitrans Bus Yard	<ul style="list-style-type: none"> - Odors - Air toxic exposure - Routes used by Omnitrans
7- Cement Manufacturing	<ul style="list-style-type: none"> - Dust

The San Bernardino, Muscoy community covers a large geographical area that is affected by a variety of air pollution sources. Consequently, multiple air monitoring methods are necessary to address the community’s air quality priorities. These methods include mobile, fixed and low-cost sensor air monitoring. Mobile air monitoring can be conducted using real- or near real-time instruments to allow for wide scale community air pollution mapping, and provide more detailed information about air pollution levels at specific locations at specific times (i.e. higher spatial and temporal resolution). Fixed air monitoring can be strategically placed at specific locations near one or more air pollution sources of interest better characterize emissions in the community and assess residents’ exposure to air pollution. Mobile and fixed air monitoring can be further enhanced with information from air quality sensors that provide real- or near-real time air pollution information. A benefit of these sensors compared to other monitoring technologies is that they can be installed in more places in the community thereby providing more detailed real-time air quality information. However, low-cost sensors are not as accurate as traditional monitoring techniques, and only measure a limited number of pollutants.

Figure 6-1 identifies areas where air monitoring will occur within the San Bernardino, Muscoy community. The CSC prioritized these areas based on community air quality concerns and sources of air pollution. The monitoring areas and priorities can change based on the information gathered during monitoring, input from the community, and/or newly available data from different organizations. A discussion regarding air pollutants measurements and technologies that will be deployed in these areas is provided in the CAMP. The air monitoring strategies outlined in the CAMP may be updated based on

³ The CAMP refers to the air quality priorities using the grouping shown in Table 6-1, however, through the development of the CERP the CSC refined these priorities to more closely reflect community air quality concerns.

future community input, air monitoring results, and other information gathered through implementation of AB 617. Updates to air monitoring strategies will be presented to the CSC for input.

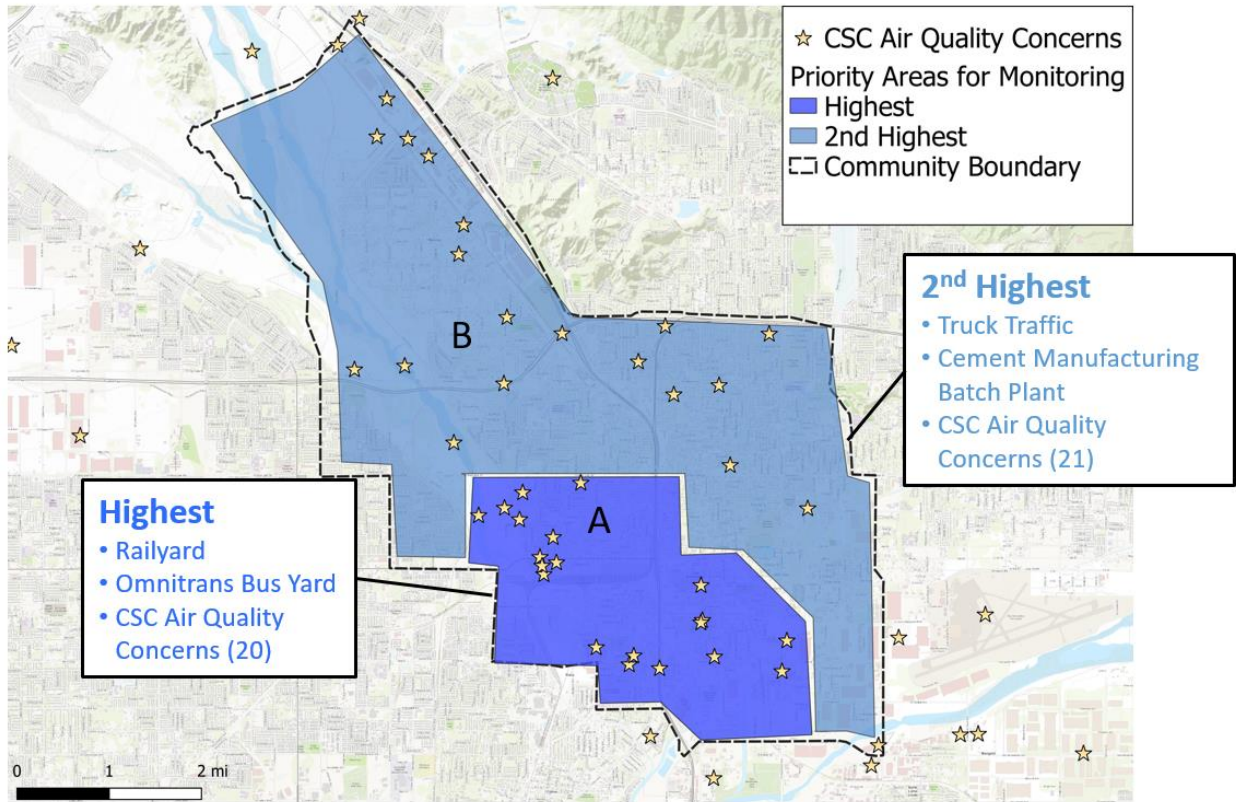


Figure 6-1. Proposed Monitoring Areas Prioritized Based on the Relative Density of Air Quality Concerns in the SBM Community