

Comments/Responses to Draft Community Air Monitoring Plan for Stockton
November 17, 2020

Commenter: Margo Praus

I vote Yes to approve the CAMP and the map for air monitoring placement as indicated on pg. 15. I would like to hear of any concerns that other CSC voters might have. Maybe you could compile and email to the group.

Thank you for your review and input. The District will compile the comments and response and provide them to the CSC.

I don't see info about fugitive dust which has come up in our other discussions. Is it something that could be part of air monitoring?

Fugitive dust could be measured with PM10 analyzers, which could be operated within the proposed air monitoring van. Although the entire San Joaquin Valley has been determined to be in attainment of the federal health-based PM10 air quality standard (including the Stockton area), the air monitoring van can be used to respond to community requests and take measurements of PM10 in areas where localized fugitive dust could be a concern.

Are there any updates on a location for the main stable air monitor that is currently at Hazelton? pg 21 still indicates the proposed stable location around University Park area.

As the Stockton-Hazelton air monitoring site is operated by CARB, they have been working through a process to solicit feedback on where this site could move. CARB will continue to update the CSC on the status of this site move. Thank you for noting that the draft document shows the University Park area is a potential area for the site move, we will update the map on Page 21 accordingly.

I would like an update on the various possible monitoring locations for the network. Might the CSC assist in some way with contacting possibilities for placement? Are there any difficulties the District is having?

Once we have consensus from the Stockton CSC to move forward with our CAMP, we'll then begin thinking about specific locations for each area that will have a monitor placed. Specific recommendations from the committee on locations within each of these areas would be very helpful. Any assistance from the committee in getting permission and leases secured for these locations will be very much welcomed appreciated to ensure that air monitoring equipment is deployed as soon as possible. We'll continue to keep the committee updated as we find places that could work, and as we move through the leasing process.

Also a brief report on how the decision for Agilaire's software and monitoring systems came about. What other software possibilities were considered? Has this system had any concerns where it has been used before?

The Agilaire software is extensively used across California and the nation for the management of air monitoring data. The District has been using it for 5+ years for our regulatory network, and is already using it to manage our South Central Fresno and Shafter community air monitoring data. This system will be needed to ensure that the Stockton community has access to reliable real-time data.

The Appendix A maps for disease indicators all seem to be at least 7 years old. Is there more up to date info?

The maps from Appendix A were based on data from the CalEnviroScreen (CES) 3.0 tool. This statewide tool provided by the California Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency, is currently the best available resource. The OEHHA report on CES 3.0 (<https://oehha.ca.gov/media/downloads/calenviroscreen/report/ces3report.pdf>) provides some more background on the health studies used to develop the health indicators. As CES continues to be updated, more recent health studies will be likely be incorporated into this tool.

Commenter: Nate Knodt

This monitoring plan appears to be detailed, accurate, and an excellent reflection of the comments made by community participants at the meetings that I participated in. I like the Monitoring Location Map and have no suggestions, revisions or comments to provide you. I like the report and the map as they are described and displayed in this report.

Thank you for your comments and support.

Commenter: Ned Leiba

I believe the plan should be refocused to ensure that meaningful data is captured relevant to health effects of air pollution. We should focus specifically on air pollution that may relate to the incidence and severity of childhood asthma in the Stockton AB 617 area.

The purpose of the CAMP is to detect and measure pollutants that may have a variety of health effects, including asthma. The equipment is designed to detect a comprehensive suite of pollutants, including those that may relate to the incidence and severity of childhood asthma. As community-level air monitoring data is collected in Stockton, a valuable dataset will be built from which researchers and academic institutions could use to build correlations between Stockton air quality data and the incidences and severity of childhood asthma. The District will be updating the Stockton

CAMP document to include more information on the health-impacts, including asthma, from being exposed to high concentrations of the pollutants to be measured in the community air monitoring network.

Air monitoring devices should be established in closely located pairs to measure (1) outside air quality and (2) inside air quality. We need monitors inside structures where people reside, work and study. As a practical matter, I believe the air monitoring plan should have such paired outdoor and indoor monitors associated with the following schools: Washington, St. George, Edison, Hazelton, Spanos, and Huerta. I believe such tests should include the effect of advanced air filtration systems in some of the schools. Advanced air filtration systems are a highly ranked AB 617 incentive program, and accordingly, the CAMP should provide for monitors that help measure the benefits from the air filtration systems.

Thank you for your comments on indoor air quality. The District will work with the CSC on the implementation the air filtration measure through deploying paired outdoor and indoor monitors to assess the impact of outdoor air quality on indoor air quality and the effectiveness of advanced air filtration systems.

We should seek to learn the relationship between outside and indoor air pollution, and the relationship to childhood asthma. The District indicated it wanted to facilitate health studies for our area that would involve randomized controlled tests of the effect of various pollutants and remedial measures.

This study is beyond the scope of the CAMP. However, the District will work with the CSC to assess potential opportunities.

We want to know the potentially toxic constituent such as organic carbon and elemental carbon (Black Carbon). It does not seem the draft CAMP provides for such monitoring of PM0.1 and I cannot determine if the potentially toxic components of PM2.5 will be separately detected and reported.

The District plans on conducting PM2.5 speciation analysis, which will provide for a summary of various toxic constituents, including organic carbon and elemental carbon. The Stockton CAMP does not propose to monitor ultra-fine PM, but rather focuses on criteria pollutants and toxics.

We need to know the specific costs of the various proposed air monitoring equipment; the cost to operate and maintain those devices. And we need to know the cost to remove, if necessary, those devices once studies are completed.

Based on the District's experience with implementation of community air monitoring networks in the communities of South Central Fresno and Shafter, the District is confident that there is sufficient funding to provide the necessary equipment and resources to ensure that the proposed community air monitoring network, fully based on CSC input, satisfies the needs of the community. This budget is dedicated for air

monitoring and will not impact funding for the implementation of the measures being developed for the Community Emissions Reduction Program.

Commenter: Jonathan Pruitt

The community investment in this plan isn't fully there and needs to be addressed. When comparing to Richmond's CAMP, they have a robust plan that includes community ownership and training. I understand they have more capacity with community partners helping with their own air monitoring and community engagement but I feel Stockton's CAMP could supplement some aspects to that. Due to the Stockton steering committee not provided the chance to hear about Richmond's CAMP, the steering committee wouldn't have imagined opportunities like community trainings, workforce development, and citizen science. It is cases like this where I feel the residents and community-based organizations are not given all the options that are out there.

The development of the CAMP was completely community driven and is a culmination of all the extensive collaborative work that the CSC has done with the District over the past few months, and is focused specifically on the community of Stockton to address its unique needs. The process started in May 2020 with an introduction of the concept of a CAMP. In June 2020, the District worked with the CSC to identify pollution sources of concern throughout the community. In July 2020, the District and the CSC reviewed and discussed maps showing impacts of various pollutions and health indicators, including asthma, throughout the community to identify areas needing air monitoring. Based on these discussions and assessments, and based on the direct recommendations from the CSC, the District developed a draft air monitoring network design that includes the general areas of the Stockton community where air monitoring equipment should be placed, type of pollutants to be monitored, and potential equipment types. This draft community air monitoring network design was reviewed with the CSC in August 2020, and based on the input received, the current draft Stockton CAMP was developed.

The Stockton CSC can continue to discuss how community-based organizations (CBOs) could do additional air monitoring work in Stockton to supplement the work that the District will be conducting. Grant opportunities are available with CARB to help fund CBOs to conduct this type of work. This Stockton CAMP document is focused on the air monitoring work that the District will be conducting in the community.

I want to echo Neb Leiba's comment on looking to pair indoor and outdoor air monitors in schools. The following schools are perfect examples because they are either near a stationary pollution source or a mobile pollution source (i.e. highways and freeways):

- Washington Elementary
- St. George Parish School
- Edison High School
- Spanos Elementary School
- King Elementary School

- Huerta Elementary School

Thank you for your comments on indoor air quality. The District will work with the CSC on the implementation the air filtration measure through deploying paired outdoor and indoor monitors to assess the impact of outdoor air quality on indoor air quality and the effectiveness of advanced air filtration systems.

When looking at XIV. Communicate Results to Support Action, there a few things I'd like to recommend to be added:

- 1) Is there another way to share the real time data that doesn't just involve going through a website? Is it possible that we can utilize the RAAN app and include the data from the different monitoring sites from there? This could potentially help residents have a one stop app to get all information instead of having to remember going to a website. It would also be helpful for residents to be able to view air quality data that is from a monitor close to them.

To make air quality data accessible and easy to use, the District is continually enhancing the way information is provided to the public. This includes the District's current effort in integrating the community air monitoring data with the existing regulatory air monitoring data in RAAN. Once completed, the public will be able to access real-time air quality data based on location that includes both community and regulatory air monitors in one seamless application through the District's RAAN web and mobile app. The Stockton CSC will be updated as this continues to be developed.

- 2) Including: "Shared to the public through social media, e-blasts, press releases, etc."

The District is currently already sharing air quality information, including alerts, through a variety of platforms, including social media, e-blasts, and press releases. The District will share community air monitoring information through these platforms as appropriate.

- 3) Look to find ways for City of Stockton, SJCOG, and San Joaquin County to share this data too through their social medias/websites.

The District will work with the City of Stockton, SJCOG, San Joaquin County, and other organizations to explore potential ways to share this data.

- 4) Distribution of multilingual factsheets.

The District will work with the Stockton CSC to develop multilingual factsheets as needed.

- 5) Training sessions familiarizing steering committee members with reports.

The District will provide trainings session to the steering committee members upon request as needed.

- 6) Looking at coordinating with other non-Valley Air District monitoring initiatives to ingest their data into reports.

The District will work with the Stockton CSC to address this as appropriate.

- 7) Looking at community workshops for the public to attend virtually or in-person (subject to state guidelines). We can look to providing a workshop every four months and a bigger Summit once every year.

The District will be providing community air monitoring updates and other presentations as needed through regular Stockton CSC meetings and other venues, which are open to the public.

Commenter: Cynthia Pinto-Cabrera

Overall the plan has some great components, however, the execution, the timeline, and the participation of the CSC remain very vague and unclear.

The development of the CAMP was completely community driven and is a culmination of all the extensive collaborative work that the CSC has done with the District over the past few months, and is focused specifically on the community of Stockton to address its unique needs. The process started in May 2020 with an introduction of the concept of a CAMP. In June 2020, the District worked with the CSC to identify pollution sources of concern throughout the community. In July 2020, the District and the CSC reviewed and discussed maps showing impacts of various pollutions and health indicators, including asthma, throughout the community to identify areas needing air monitoring. Based on these discussions and assessments, and based on the direct recommendations from the CSC, the District developed a draft air monitoring network design that includes the general areas of the Stockton community where air monitoring equipment should be placed, type of pollutants to be monitored, and potential equipment types. This draft community air monitoring network design was reviewed with the CSC in August 2020, and based on the input received, the current draft Stockton CAMP was developed.

The execution and timeline of the CAMP is highly dependent on a number of variables, including obtaining authorization to install air monitoring equipment at various locations and the associated logistics to implement the necessary infrastructure to support the air monitoring equipment. The District will continue to routinely update the CSC on the process and timeline.

Since this air monitoring network is indented to be community-driven, more clarity on the role that the CSC will be playing is needed. This should include the process for

moving monitors, the process for presenting information to the CSC, as well as the notification process for the community.

As this is a community driven program, the District will continue to provide routine air monitoring updates to the CSC and seek input as needed to ensure that the CSC is aware and can provide feedback for proposed changes to the air monitoring network. This will be clarified in the Stockton CAMP document.

Section VIII. Monitoring methods and equipment. "Community air monitoring network will be re-evaluated on a regular basis to determine changes needed". What does consultation with the CSC look like? Will, there be a subcommittee to assist the running, if so will they received adequate training for this equipment? Can the CSC determine the re-evaluation schedule and process?

The District will provide routine updates to the Stockton CSC and will seek input for any changes to the community air monitoring network. Operation and maintenance of the equipment outlined in the Stockton CAMP will be operated by the District. However, the District can provide an overview of how this equipment is maintained and operated if requested by the CSC. The Stockton CSC can continue to discuss how community-based organizations (CBOs) could do additional air monitoring work in Stockton to supplement the work that the District will be conducting. Grant opportunities are available with CARB to help fund CBOs to conduct this type of work.

Section X: Data Management. Data Review and Flagging process - I initially believed this section was for flagging violations for community members. While I do think it is important to flag readings due to malfunctions to ensure proper data. I believe it will also be important to add a section for flagging violations for CSC members and the Stockton Community. This section should include a timely procedure for notifying residents of any violations captured by the air monitors being used for this CAMP as well as a clear indication of what pollutants are being flagged.

Flags are intended to assist with data review and validation to ensure accurate data is made available to the public. Flags are applied to data when regular maintenance activities are performed, or when the equipment is malfunctioning. These flag notifications help ensure that District staff can quickly respond to equipment that may not be operating properly. During the data validation process, District staff then closely review this flagged data to ensure that accurate data is displayed for public viewing. The CAMP document will be updated to reflect this further information.

With respect to notifying the CSC when the air quality in Stockton violates the federal air quality standards, the air monitoring data will be graphed with references to relevant air quality standards in weekly and quarterly reports to help identify where exceedances occurred. In addition, the air monitoring data will be integrated with the District's Real-Time Air Advisory Network (RAAN) which will provide the necessary mechanisms to inform Valley residents.

RAAN is a free, state of the art system specifically designed to inform Valley residents about local air quality based on the following tools:

- *Online, 24/7 access to the most up-to-date hourly air quality information for your neighborhood*
- *Automated email or text notification whenever air quality is poor in your area*
- *Specific health guidelines for outdoor exercise based on 5 different air quality levels*

The near Port monitor has the potential to not capture or only partly capture the port emissions based on the wind patterns. The Edison high and Dorado monitors might capture some of the port emissions but how can we guarantee port emissions are captured? I would point to the Port of LA that has 3 monitors, 1) community-facing, 2) source determined station 3) coastal bounty station.

The air monitoring site proposed to be placed at Washington Elementary School near the port will be there for a sufficient amount of time to capture all daily and seasonal wind variations to provide a full understanding of potential air quality impacts in this nearby community. This air monitoring location near the Port of Stockton was identified based on recommendations and exercises with the Stockton CSC over this past year. The District's mobile air monitoring van is another resource that can be used to measure air quality in other areas of interest around the Port of Stockton area.

Commenter: Ann Rogan

Will the data collected in the CAMP be correlated to hospitalization rates? (or relevant proxy healthcare data). Recommend alignment that CAMP is aligned to stricter air quality standards (i.e., the World Health Organization's ambient outdoor air quality standards). Referenced here: <https://www.who.int/news-room/fact-sheets/detail/ambient-%28outdoor%29-air-quality-and-health>

According to the California Air Resources Board (CARB), the objectives for community air monitoring include identifying and characterizing areas experiencing disproportionate air pollution impacts in the community, identification of emissions sources and assessing their impact on air quality, assessing progress in improving community air quality, and providing real-time air quality information to inform community members of current conditions within the community. As community-level air monitoring data is collected in Stockton, a valuable data set will be built from which researchers and academic institutions will be able to use the data to build correlations between Stockton air quality data and health impacts, including hospitalization rates. In addition, the air quality data collected will be presented in context with relevant federal health-based air quality standards, and relevant Office of Environmental Health Hazard Assessment (OEHHA) reference exposure levels.

We noticed that black carbon (a short-lived climate pollutant) is being captured in the proposed system. What types of black carbon are being captured - elemental and combustion? In what concentrations? What proportion of funding is being used to monitor black carbon?

Various air monitoring platforms to be used for the Stockton CAMP, including the air monitoring van, compact multi-pollutant system, and air monitoring trailer, include black carbon analyzers that are capable of measuring black carbon at various wavelengths. The draft CAMP includes the use of PM2.5 speciation analyses to provide an estimate of elemental and organic carbons.

What would it take to monitor the other short-lived climate pollutants, like methane, tropospheric ozone and fluorinated gases?

Tropospheric ozone is already planned to be measured in the Stockton community air monitoring network. The canister sampling proposed in the draft CAMP that is planned to be conducted by the District, and the subsequent laboratory analysis, will be able to isolate several fluorinated gases and compounds with methane. It should be noted that AB 617 is intended to reduce criteria and toxic air pollutants that are known to have serious health impacts, such as PM2.5. Methane is not a criteria or a toxic air pollutant and is not a focus area for AB 617 work, however. Many of the criteria and toxic air pollution reduction measures currently being evaluated by the CSC may have a co-benefit in also reducing methane emissions.

For the current pollutants mentioned (PM2.5, ozone, black carbon, carbon monoxide, VOCs, nitrogen oxides, BTEX, hydrogen sulfide, toxic air contaminants), where is there any mention of the health effects associated with ambient exposure to each of these pollutants?

The District has updated Section V - Community Air Monitoring Objectives, in the draft Stockton CAMP document to include more information on the health-impacts from exposure to high concentrations of the pollutants to be measured in the community air monitoring network.

Has the CSC considered implementation structures where parts of the CAMP are operated or monitored by community-based organizations?

The Stockton CSC and District can continue to discuss how community-based organizations (CBOs) could do additional air monitoring work in Stockton to supplement the work outlined in the draft Stockton CAMP. To date, this work has been done through grants from CARB to CBOs to perform this monitoring and have been included in CAMPs due to having an established network at the time the CAMP was developed. With Stockton being recommended by the community as an air monitoring and CERP community, there is an understanding of significant air pollution burden in the community and a need to have equipment that can be used to develop long-term strategies to reduce pollution in the community.

This document requires clarity and definition around a governance structure for current and future decision making pertaining to the CAMP. If a governing charter exists for 617 work, this should be linked to that. Is that available for review?

The charter to govern the activities of the Stockton CSC was reviewed approved by the CSC at the March 4, 2020 meeting. The charter is available for review at http://community.valleyair.org/media/1616/03042020_stockton-charter.pdf. Section I of the draft Stockton CAMP document has been updated to include provisions for discussion of and inclusion of changes into the CAMP in adherence to the CSC Charter.

In the current proposal, it appears as though a vendor has been identified. Would recommend greater transparency around the procurement process - and whether it's intended to be competitive? If not, why? That may have implications for cost-effectiveness. For any future vendor selection, who are the responsible parties for making vendor decisions around hardware procurement and associated activities?

Air monitoring equipment is very specialized and customized and there are a very limited vendors that provide the equipment. In the procurement of the equipment being used for Year 1 AB 617 communities in the San Joaquin Valley, the District used a competitive process and identified few vendors with the knowledge and experience to provide the types of equipment needed. The District worked with a number of potential vendors to understand their capabilities of providing specialized services to build the needed air monitoring assets. Through this analysis, the vendor with the most direct experience in providing these specialized assets was selected. Based on the successful delivery of the assets for Year 1, the District is working again with the same vendor to build air monitoring platforms to be used in the Stockton CAMP.

Based on the CSC conversations to date, have they outlined a preference as to whether they would prefer data to be community-owned vs community-accessible?

As discussed at previous CSC meetings, the Stockton CAMP is community-owned in that the CSC identified the sources of concern and the specific locations where air monitoring needs to be conducted. Additionally, the CSC will also be decision makers in that they will be directly involved in decision making based on the air monitoring information collected from the air monitoring network once deployed. The air monitoring data collected will be posted to a Stockton specific air monitoring page where the public can access and download data directly from the website. The District also plans on providing weekly summaries, and more comprehensive quarterly summary reports to the CSC and discuss the meaning and importance of the data collected and how this information can be used to help inform decisions being made by the CSCs. Towards this end, the District will work to compile and present the data in an understandable and user-friendly manner, taking ongoing suggestions from CSC.

Based on their SJ Air map, can the Central California Asthma Collaborative (CCAC) present their map and work to the CSC, to identify potential for collaboration in the CAMP? Need additional on the CCAC deployment strategy for Stockton.

Should it be requested by the Stockton CSC for CCAC to present at an upcoming steering committee meeting, the District will help facilitate this presentation.

What are the local workforce opportunities available through the CAMP system? Seems like there should be more of an emphasis here, given the potential to increase community engagement through the process and within the project boundary area.

The Stockton CSC and District can continue to discuss how community-based organizations (CBOs) could do additional air monitoring work in Stockton to supplement the work that the District will be conducting. Grant opportunities are available with CARB to help fund CBOs to conduct this type of work. The draft Stockton CAMP document is focused on the air monitoring work that the District will be conducting in the community.

We did not see mention of how the CAMP data will inform the future prioritization of CERP strategies. The CSC should ideally be able to shift prioritization of CERP based on real-time CAMP data that is gathered (because this relates to decision-making, this point links to governance structure).

Based on this feedback, the District updated Section V - Community Air Monitoring Objectives, to better explain how the information collected will be used to help with the CERP implementation process, including ongoing evaluation of CERP strategies.

There seems to be a budget missing from the CAMP proposal around the allocations for specific categories.

The draft Stockton CAMP includes the required elements in accordance with CARB's AB 617 Blueprint, as the CAMP is designed to be the tool that explains the reason for air monitoring, the scope of actions, air monitoring objectives, how monitoring will be conducted, data quality objectives, monitoring equipment to be used, data management, how data will be used to take action, how to analyze and interpret data, and how to communicate results to support action.

During the August CSC, the District had a discussion with the CSC about the need to move forward with the purchase of air monitoring equipment to support the draft CAMP including the trailer and multi-pollutant compact monitors, and that the District would be taking a Governing Board item to approve the purchase of this equipment later that month provided there were no concerns raised by the CSC.

https://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2020/August/final/10.pdf

The District has allocated necessary funding for the equipment and staffing to support the proposed draft Stockton CAMP, including the purchase of air monitoring equipment as stated above and the staffing necessary to complete the work outlined in the draft CAMP. Should the CSC elect to modify the draft Stockton CAMP, any changes that would result in reduced levels or type of air monitoring and staffing needs would be re-allocated to support the implementation of AB 617 programs throughout the Valley.