

California Air Resources Board
Community Air Protection Program

Portside Environmental Justice Neighborhoods Community Emissions Reduction Program Staff Report

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Staff Recommendation

Staff recommends that the California Air Resources Board (CARB or Board) approve the Portside Environmental Justice Neighborhoods community emissions reduction program developed pursuant to Assembly Bill (AB) 617¹ and direct CARB staff to work with the San Diego Air Pollution Control District (SDAPCD or District) and the Portside Community Steering Committee to take additional actions to strengthen implementation.

Background

CARB established the Community Air Protection Program (Program) to implement AB 617, which requires new community-focused action to reduce air pollution. On September 27, 2018, the Board approved the *Community Air Protection Blueprint*² (Blueprint), which, among other things, establishes criteria for developing and implementing community emissions reduction programs, contained in the Blueprint *Appendix C*, and summarized in the *Checklist for Community Emissions Reduction Program Evaluation*³. At the same meeting, the Board also approved 10 initial communities to develop and implement community emissions reductions programs, community air monitoring plans or both – the Portside Environmental Justice Neighborhoods (Portside Community) in the SDAPCD was selected for a community air monitoring plan. On December 13, 2019, the Board selected three additional new communities, including the Portside Community to transition to the development of a community emissions reduction program.

The District worked with a community steering committee to develop the *Community Emissions Reduction Plan for the Portside Environmental Justice Neighborhoods* (Plan or CERP)⁴ to reduce exposure to air pollution in the community in two phases.

On November 18, 2020, the San Diego Air Pollution Control Board (SDAPCB or District) adopted Phase I of the Plan, which contains a set of early-action strategies to provide expedited benefits to the Portside Community. Examples of these early actions include developing a plan to quantify the cumulative health risks, identifying the steering committee's incentives priorities, and developing a program to provide air purifiers and monitors for Portside residents. The District has provided the steering committee regular updates on the implementation status of the Phase I actions.

The development of Phase II actions focused on the strategies that required further refinement through collaboration with implementing agencies, such as the Cities of San Diego and

¹ Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017.

² The Blueprint is available at: <https://ww2.arb.ca.gov/capp-blueprint>.

³ The Checklist for the Community Emissions Reduction Program Evaluation begins on page C-41.

⁴ To review the Plan and associated documents, visit <https://www.sdapcd.org/content/sdc/apcd/en/community-air-protection-program--ab-617-/portside-cerp.html>.

National City, Port of San Diego, U.S. Navy, San Diego Association of Governments, San Diego Gas and Electric, and the California Department of Transportation. The Plan has support from the community steering committee and at the June 15, 2021, steering committee meeting the members voted to approve the Plan by a vote of 22-2. On July 16, 2021, the SDAPCD Governing Board adopted the *Community Emissions Reduction Plan for the Portside Environmental Justice Neighborhoods - Phase II*. The CARB Board will be acting on both adopted documents as a single Plan.

This report summarizes the results of CARB staff's review and evaluation of the Plan to determine if it meets the criteria established in AB 617⁵ and the Blueprint, reflects community priorities, and is likely to reduce emissions and exposure to air pollution in the community.

Community Emissions Reduction Plan Overview

In accordance with the Blueprint, SDAPCD convened a community steering committee to develop the Plan. The steering committee is made up of 26 primary members, 13 of which are residents, and held 17 meetings between January 2020 and June 2021. Additionally, the District hosted four public meetings to discuss the CERP with the broader public.

The Plan focuses on reducing emissions and exposure to oxides of nitrogen (NOx), reactive organic gases (ROG), fine particulate matter (PM_{2.5}), and diesel particulate matter (diesel PM or DPM) from sources such as: heavy-duty trucks and passenger vehicles; working waterfront equipment and activities; and incompatible land uses in the Portside Community. The District estimates a reduction of 330 tons from NOx or ROG, or 16.5 tons of PM_{2.5} from AB 617 Community Air Protection Incentives funded projects such as off-road equipment, on-road trucks, and marine vessels in the region⁶. Additionally, CARB statewide measures will directly benefit the Portside Community, the estimated reductions are⁷:

- NOx by 157 tons in 2025 and by 210 tons in 2030;
- ROG by 28 tons in 2025 and by 88 tons in 2030;
- PM_{2.5} by 2.06 tons in 2025 and by 4.68 tons in 2030;
- DPM by 2.12 tons in 2025 and by 2.79 tons in 2030.

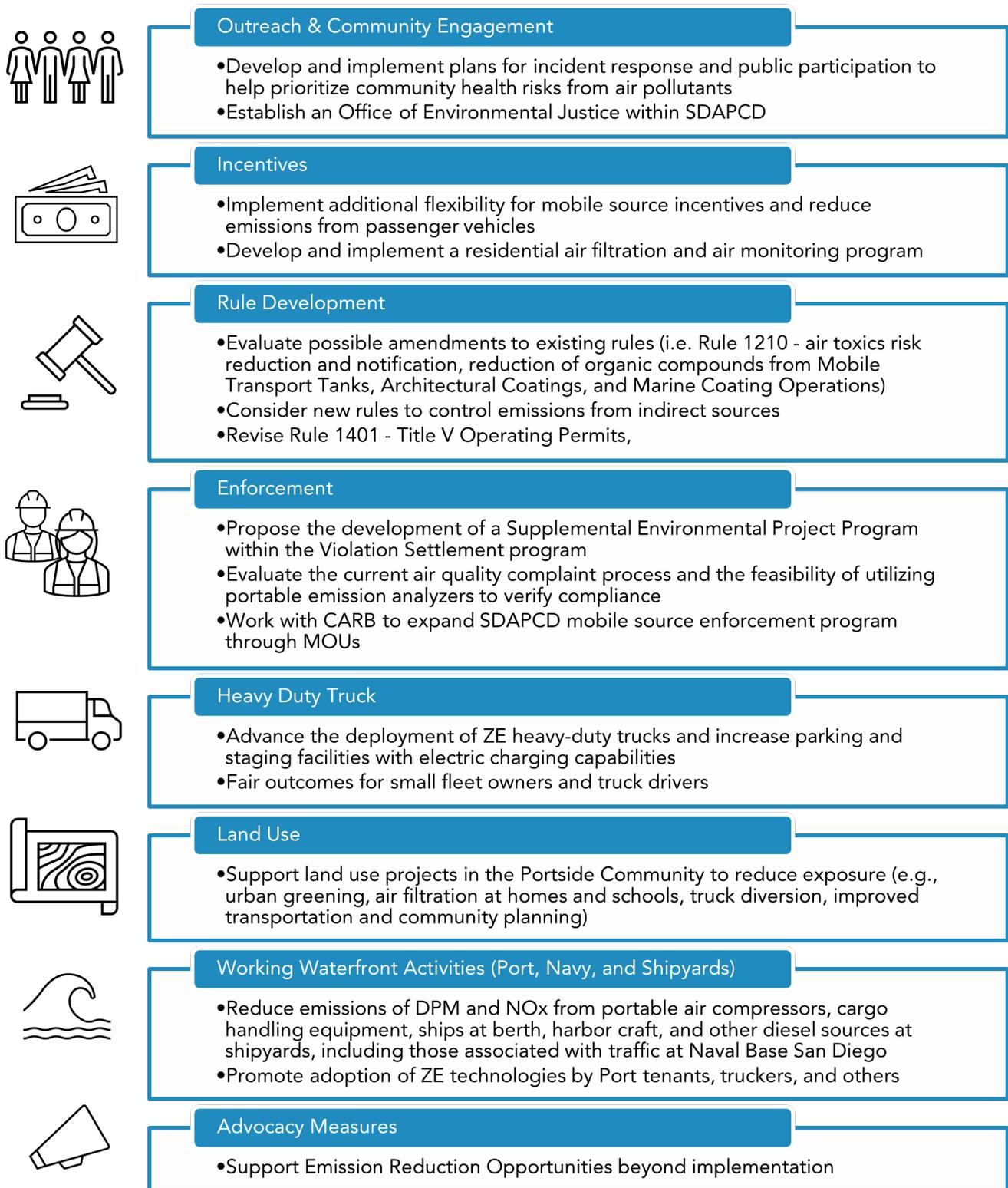
Figure 1 lists examples of the actions and strategies in the Plan to reduce emissions and exposure in eight categories. For the comprehensive list of strategies along with details, see Chapter 7 of the Plan.

⁵ California Health and Safety Code § 44391.2.

⁶ For more information, see the District's Incentive Programs section starting on page 199 of the Plan. <https://www.sdapcd.org/content/sdc/apcd/en/community-air-protection-program--ab-617-/portside-cerp.html>

⁷ For more information, see Estimated Emission Reductions from CARB Measures section starting on page 211 of the Plan. <https://www.sdapcd.org/content/sdc/apcd/en/community-air-protection-program--ab-617-/portside-cerp.html>

Figure 1. Examples of Actions in the Portside Community Emissions Reduction Plan



Summary of CARB's Evaluation

CARB staff's review of the Plan follows the framework established in the Blueprint. In addition to the Plan itself, staff also reviewed steering committee meeting materials and a record of public comments and responses to those comments by SDAPCD, which are also included as attachments to the Plan. During the CERP development process, CARB staff attended every Portside Community steering committee meeting and met regularly with SDAPCD staff as well as with several steering committee members, as requested. Finally, CARB staff also hosted a virtual community workshop on August 24, 2021, to solicit additional community perspectives to help inform CARB staff's recommendations. Eight community steering committee members and alternates attended the workshop along with members of the public. The discussion focused on CARB's role in the development of the Plan, the Plan itself, and what was learned during the process that could benefit other communities. The most prominent messages from the steering committee members were that of appreciation for the collaborative nature of the steering committee, their commitment to the successful implementation of the CERP, and a desire have the technical information be more accessible for everyone.

State law gives communities and air districts 12 months to develop a community emissions reduction program following CARB community selection. One year is a very short amount of time to convene a community steering committee, develop a process for operation of the community steering committee, develop relationships within the steering committee and with regulatory agencies, establish the technical foundation for understanding the community's air quality status, and develop the strategies to reduce air pollution emissions and exposure. The Statewide stay-at-home orders further exacerbated the already short timeline.

During their May 2020 meeting, the community steering committee unanimously voted to approve a letter to CARB requesting an extension for the CERP development deadline. It laid out a plan for the San Diego Air Pollution Control Board to act on a set of Phase I strategies to be implemented without delay in November 2020 and finalize the CERP in May 2021. At their February 2021 meeting, the steering committee voted to request CARB to extend the May 2021 deadline by two months, recognizing the new SDAPCD Governing Board would benefit from additional time to get familiar with the SDAPCD programs before acting on the CERP. While AB 617 does not give CARB the authority to adjust the statutory 12-month deadline, CARB's response to both letters noted the progress made to date and outlined a path forward to meet AB 617's intent for fast action to clean up communities as well as recognize the request of the community steering committee and the District noting the considerable progress achieved through their partnership.⁸

The Plan meets the criteria established in AB 617 and the Blueprint, reflects the community's priorities, and is likely to reduce community emissions and exposure to air pollution. However,

⁸ Extension request letters and CARB responses: <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/communities/portside-environmental-justice>

to ensure that the Plan successfully delivers on the identified actions, there are elements of the Plan that need additional clarification and detail as the Plan moves from the short time frame provided for development into the implementation phase. As each of the selected communities' emissions reduction programs are approved by the air districts and CARB, the need to focus on strengthening the plans during implementation is a theme that applies to all communities.

CARB staff recommends approval of the Plan with additional Board direction to CARB staff, SDAPCD, and the community steering committee to begin Plan implementation immediately, while taking steps to strengthen implementation of the Plan. These recommendations draw directly from the core principles of the Board-adopted Blueprint.

Staff has organized the results of this review into two categories:

- Key strengths of the Plan, and the Plan development process, which highlight areas staff found particularly noteworthy; and
- Recommended actions for SDAPCD and CARB to strengthen implementation, including areas where additional discussion, information, clarification, and detail will help ensure the Plan is successful and achieves emissions reductions in the Portside Community, as well as commitments CARB will make based on feedback provided about CARB's role in the process to date.

Key Strengths

Community Participation

The key strengths of the Plan for the Portside Community highlighted below are a direct result of the community steering committee's commitment to working in partnership with SDAPCD and CARB. Prior to the stay-at-home orders enacted by the Governor in March 2020, the SDAPCD was able to hold monthly in-person community steering committee meetings in the evenings at Perkins Elementary school. When the steering committee meetings moved to a virtual environment, the Environmental Health Coalition, a local community-based environmental justice organization and member of the community steering committee, provided tablets and hot spots to community leaders to close the technology gap. SDAPCD also took measures that promoted on-going resident participation including Spanish interpretation at every steering committee meeting; holding meetings in the evenings; providing stipends; hiring a bilingual facilitation team; and providing a Spanish-language CERP.

Establishing Subcommittees

Soon after the Portside Community was selected by the CARB Board to start developing their CERP, the community steering committee voted and approved four different subcommittees to help focus the development of strategies to reduce emissions from specific air pollution sources. As a result, many of the strategies to reduce emissions and exposure included in the

Plan represent the recommended actions from the subcommittees. The four subcommittees include:

- CERP subcommittee – to focus on the technical aspects of the CERP.
- Land Use subcommittee – to focus on land use issues in Portside Community.
- Port subcommittee – to identify strategies that can be incorporated into the CERP and the Maritime Clean Air Strategy Plan, created by the Port of San Diego.
- Trucks subcommittee – to formalize an existing ad hoc group focused on the technological and institutional challenges of electrification of heavy-duty truck fleets that serve the San Diego Port’s cargo terminals.

Land Use Strategies

Many of the steering committee members emphasized the importance of reducing exposure to residents by addressing long-standing incompatible land use challenges in the Portside Community. The Land Use subcommittee brought forth many strategies to reduce exposure to air pollution through improved community planning, transportation planning, increased community green space, indoor air filtration, enforcement of truck routes, and consideration for sensitive receptors within 500 feet of pollution sources. Many of the land use actions in the CERP are linked to existing land use and regional transportation plans. These strategies were included in the Phase I CERP and the District worked with the implementing agencies to solidify their commitments and role in implementation prior to the adoption of the Phase II CERP. The collaboration, creativity, and effort to include the extensive land use strategies are exemplary for other communities statewide.

Participatory Budgeting

The District has led participatory budgeting exercises for incentives during community steering committee meetings since late 2019 to inform the community’s priorities for incentive projects to be funded. In the latest prioritization exercise in May 2021, the community ranked potential project types as follows; air filtration at schools and homes; deployment of zero-emission technology through an electric truck pilot, port equipment, and truck staging and charging infrastructure; and urban greening. Action B1 to “Implement Additional Flexibility for Mobile Source Incentives” presents an important opportunity to collaborate with the steering committee in the development and prioritization of new types of incentives projects for mobile and stationary sources, including land-use projects. CARB staff recommends the District continue to practice participatory budgeting exercises to achieve the desired emission and exposure reductions locally through incentives while ensuring the community perspectives are at the center of all decisions for the development of Community-Identified Projects.⁹

⁹ More information on Community-Identified Projects at: <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives/stationary-source-and-community-identified>

Overall Goals for the CERP

The Plan includes 11 overarching goals¹⁰ that are meant to address the community's highest priorities. The goals were presented by Environmental Health Coalition and the District worked with the community steering committee to refine the goals and prioritize them in order of the highest potential emission reductions. Though the goals are aspirational in nature they are a representation of the vision the community has for the emissions reductions and the timelines by which those reductions would be achieved as part of that vision, such as:

- Significantly reducing ambient diesel PM by 80% from 2018 levels, by 2031;
- Using 100% ZEV Medium Duty and Heavy-Duty Trucks and ZEV infrastructure;
- Developing a cumulative cancer risk model to inform risk reduction goals; and
- Increasing green space and the tree canopy in the Portside Community.

Additionally, the District and steering committees' commitment to improving air quality beyond the 5-year implementation period is also exemplified in the Advocacy Measures outlined in Action H1 to help support emissions reduction opportunities over a longer term.

Recommended Actions to Strengthen Implementation

Staff recognizes that the Plan is the culmination of an extensive amount of work in a short timeframe. In future efforts, SDAPCD, CARB, and the community steering committee should work to refine issues related to implementation of the strategies, as well as the periodic status reports required under AB 617.

To support implementation, CARB staff has developed a set of recommended actions in three key areas: updating the community planning emissions inventory and community-level air monitoring. Progress in implementing these recommendations should be included in the annual progress reports submitted to CARB as required by the Blueprint. Additionally, based on the feedback provided during the August 24th workshop, CARB commits to providing technical information to support implementation.

Updating the Community Planning Emissions Inventory

CARB will continue to work with the District and community steering committee to improve the community emissions inventory and ensure a transparent process for providing inventory updates to the steering committee with sufficient time for steering committee review.

Early drafts of the Portside CERP emission inventory had a calculation error that resulted in an overestimate of hexavalent chromium emissions from dust-based sources. Once discovered,

¹⁰ More information on the Goals is found on Page 139 of the Plan.

<https://www.sdapcd.org/content/sdc/apcd/en/community-air-protection-program--ab-617-/portside-cerp.html>

CARB staff quickly corrected this error and the current CERP inventory represents the best available inventory at the present time. The final, corrected version for dust-based emission categories is much lower than the early draft inventory, while estimates for stationary sources largely remained the same. As a result, the percent contribution of hexavalent chromium from stationary sources in a summary table (Table 6) from the early draft to the final corrected version increased dramatically.

The corrected estimations were presented in the final draft CERP by the District just days before the steering committee was set to vote to approve Phase II of the CERP on June 15, 2021. At that meeting, some steering committee members voiced frustration with how the corrected inventory was presented within a summary table (percentage allocations) and the last-minute presentation of corrections, with little time to comment or review. Concerned steering committee members also presented a comparison to the community-level emissions inventory data from other AB 617 communities in the South Coast Air Quality Management District (South Coast AQMD) that included emissions of hexavalent chromium from on-road vehicle brake-wear (a category for which emissions are not included in the Portside CERP inventory). The full steering committee discussed the emissions inventory and deliberated making changes before the Plan would go to the SDAPCD Governing Board for consideration, but ultimately the majority voted to keep the Plan and inventory as-is. The concerned steering committee members raised their same concerns during the Governing Board consideration and the Governing Board chose to adopt the Plan as written.

CARB staff recognized the concerns that were voiced and met multiple times with these steering committee members to answer questions, explain the emissions inventory and the corrections that were made in detail, and to discuss methodological differences from South Coast AQMD's community-scale emission inventories. South Coast AQMD staff also participated in one of the meetings.

While the corrected CERP inventory represents the best available estimates of emissions within the community at the current time, steering committee members, the District, and CARB all expressed support for updating it as relevant new information comes available and to improve the process for presenting the inventory updates and allowing sufficient time for review. For example, CARB has a research contract that might result in a methodology for estimating emissions from on-road vehicle brake-wear (a category for which data and methods are currently missing for the Portside CERP inventory) and additional updates to the community-scale emissions inventory for the Portside Community are expected as the District receives revisions to the emissions reported through their AB 2588 Air Toxics "Hot Spots" process.

Community-Level Monitoring Efforts

The Community Air Monitoring Plan (CAMP) was completed in June 2019 and the CARB Board selected the Portside Community to begin development of a community emissions reduction program in December 2019. The Portside Community is the first community to be initially selected for community air monitoring efforts and then transition to the development of a community emissions reduction program. The District has updated the community on the air monitoring efforts throughout the development of the CERP, however members of the community steering committee have voiced the need to get a better understanding of how the monitoring data is connected to and informing the CERP. CARB staff understands there have been various setbacks in monitoring equipment acquisition and siting and continued efforts are underway to add a monitoring station at the Naval base in San Diego and other locations in the Portside Community as indicated in the CAMP.

The CERP includes some provisions to incorporate learnings and monitoring from the CAMP that could be further developed. One example of air monitoring supporting CERP actions is found in Appendix C for the Incentives Strategies Action B2: Reduce Emissions from Passenger Vehicles where one metric is "Decrease in emissions at Portside monitoring sites." CARB staff recommends the District work with the steering committee to identify additional means for the CAMP to inform the CERP to achieve and track emissions and exposure reductions, as monitoring data becomes available. In accordance with community requests, CARB staff also recommends the District provide the necessary support and resources for the community steering committee to better understand the community-level air monitoring data collected through AB 617 efforts.

The suggestions outlined in this staff report will help to strengthen the Plan during the 5-year implementation period.

CARB Commitments

CARB has been working closely with the District to provide technical assistance in support of CERP strategies, including air quality modeling for use in estimating health risk from air toxics in the Portside Community in Action A3: Develop a Plan to Quantify and Prioritize the Community Health Risks from Air Pollutants. These technical support efforts have been well received by the community steering committee and have been key in establishing collaborative relationships with local government community steering committee members like the San Diego Association of Governments and the Port of San Diego around advancing mobile source data availability and use in regional and local air quality modeling efforts.

Given the recommended actions listed above and comments heard at the August 24th workshop, CARB staff should also be more proactive in offering expertise and accessible technical information to support and oversee implementation. Such information will be tailored to specific needs and offered timely and regularly. CARB staff will be proactive in supporting exchanges across AB 617 communities that are pursuing similar implementation strategies.