

Community Air Protection Program

Shafter

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 Shafter community emissions reduction program developed pursuant to Assembly Bill (AB) 617¹ and direct CARB staff to work with the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Department of Pesticide Regulation (DPR) to take actions to strengthen implementation.

Background

CARB established the Community Air Protection Program to implement AB 617, which requires new community-focused action to reduce air pollution. On September 27, 2018, the Board selected Shafter to develop a community emissions reduction program as one of ten initial communities. The Board also approved the *Community Air Protection Blueprint* (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*² (Checklist).

CARB staff reviewed the *Shafter Community Emissions Reduction Program (Program)*³, adopted by the SJVAPCD Governing Board on September 19, 2019. This staff report summarizes the results of CARB staff's review and evaluation of the Program to determine if it meets the criteria established in AB 617⁴ and the Blueprint, reflects community priorities, and is likely to reduce exposure to air pollution in the community.

Program Overview

SJVAPCD convened a community steering committee and developed the Program in coordination and consultation with the steering committee. The steering committee has 29 members, of whom 19 are community residents, and has met 17 times between December 2018 and January 2020.

The Program focuses on reducing exposure to fine particulate matter (PM_{2.5}), toxic air contaminants (TAC), and oxides of nitrogen (NOx). Reduction strategies target a variety of sources including passenger cars, residential energy use, heavy-duty trucks, oil and gas systems, fugitive dust, and agricultural sources including pesticides. The steering committee and SJVAPCD identified 52 specific strategies that include community-centric investments, enhanced enforcement, increased outreach and training, cross-agency collaboration, and regulatory amendments.

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

² Begins page C-41.

³ To review the Program and associated documents, visit <http://community.valleyair.org/selected-communities/shafter>

⁴ California Health and Safety Code §44391.2.

The following are examples of emissions and exposure reduction strategies included in the Program:



Heavy Duty Trucks and Locomotives

- Incentives to replace diesel-powered trucks and older locomotives
- New CARB measures and enforcement strategies



Older/High Polluting Cars

- Incentives to replace passenger vehicles with battery electric or plug-in hybrid
- New CARB measures and enforcement strategies



Agricultural Sources

- Partner with DPR and CARB to reduce exposure to pesticides in the community
- Incentives to replace nut harvesting equipment with low-dust harvesting



Oil and Gas Operations

- Amend Rule 4311 (Flares) to require ultra-low NOx controls where feasible
- Evaluate feasibility of funding further reductions, e.g. electrifying pump jacks



Residential Wood Burning

- Incentives to replace wood burning devices with natural gas or electric
- Public education and enhanced enforcement



Fugitive Dust

- Road and sidewalk improvements to reduce dust
- Partnerships to identify opportunities to expand/improve street sweeping



Urban Sources

- Incentives for installing solar in the community
- Public education and enhanced enforcement to reduce illegal burning of waste

Summary of CARB's Evaluation

CARB staff's review of the Program follows the framework established in the Blueprint. In addition to the Program itself, staff also reviewed meeting materials, public comment letters, and responses to comments posted to SJVAPCD's website. During the Program development process, CARB staff attended every Shafter community steering committee meeting and met regularly with SJVAPCD staff. Finally, CARB also hosted a community meeting in Shafter on November 4th, in coordination with SJVAPCD, to solicit additional community input to the CARB staff recommendations.

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 organize a community steering committee, develop a process for operation of the steering committee, establish the technical foundation for understanding the community's air quality status, and develop the strategies to reduce air pollution emissions and exposure.

To ensure that the Program successfully delivers on the identified strategies, there are elements of the Program that need additional clarification and detail as the Program moves from the short time frame provided for development into the implementation phase. While each of the initial communities and their community emissions reduction programs have now been approved by the air districts, the need to focus on strengthening the programs during implementation is a theme that applies to all communities, not just Shafter.

Therefore, CARB staff is recommending approval of the Program with additional Board direction to CARB staff, SJVAPCD, and the community steering committee to begin Program implementation immediately, while taking specific steps to strengthen implementation of the Program. These recommendations draw directly from the core principles of the Board-approved Blueprint.

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

- Key strengths of the Program, which highlights areas staff found particularly noteworthy;
- Coordination with other agencies in which there are combined authorities; and
- Recommended actions to strengthen implementation, including areas where additional discussion, information, clarification, and detail will help ensure the Program is successful and achieves emissions reductions in Shafter.

Key Strengths

CARB staff recognizes SJVAPCD and the community steering committee for their commitment to work together while meeting the ambitious deadlines required by AB 617. During CARB's community outreach, a majority of the committee members expressed support for the Program and emphasized the importance of full implementation. They also expressed appreciation for the discussion and education about air quality that occurred during the process, and that air quality issues are being locally addressed.

Of particular note in the Program is the focus of investments in local, community-centric projects such as a zero emission car share program, funding to leverage residential solar and appliance electrification, and local paving and vegetation projects. The identification of specific funding amounts and number of projects for each incentive measure allowed for an iterative process with the steering committee to determine community-based investments, and also provided clear metrics associated with these measures⁵. The Program also details

⁵ Table 6-1: Metrics Associated with Incentive Measures in Chapter 4, pages 180-184, <http://community.valleyair.org/media/1515/01-finalshaftercerp-9-19-19.pdf>

estimated emissions reductions for CARB and district measures that provide an aggregate emissions reduction target⁶.

The introduction and refinement of professional facilitation by SJVAPCD throughout the steering committee process contributed to this success. To respond to community steering committee concerns regarding accessibility for the monolingual Spanish-speaking members the SJVAPCD provided real-time interpretation services to facilitate community steering committee member and public participation. The SJVAPCD also livestreamed the community steering committee meetings via Facebook, and also provided high quality audio recordings of the meetings that are publicly available on SJVAPCD's Shafter Community website.⁷

CARB staff also recognizes the strong community-based leadership within this committee. These members worked directly with residents to educate, clarify, and build capacity within and outside of the regular meeting structure, which helped support a high level of resident engagement and participation.

Coordination with Other Agencies

Successful implementation of many of the strategies outlined in the Program will take focused coordination between multiple public agencies. In one of the first steering committee meetings, pesticides were identified as one of the top sources of concern by members of the committee and the public. The recommendations for pesticide related strategies provided by community steering committee members included:

- Ban all untarped applications of 1,3-D in Shafter
- Reduce the annual township cap for 1,3-D in Shafter
- Prohibit aerial spraying for all pesticide TACs
- Develop a notification system for pesticide applications
- Establish 24/7 1 mile buffer zones around sensitive receptor locations
- Evaluate the toxicity of all carcinogenic and reproductive pesticide TACs followed by identification of emission reduction and mitigation actions

DPR has regulatory authority over pesticides in their pesticidal use. Some pesticides are also classified as TACs and so can be regulated as a TAC, and as smog-forming compounds as they become waste gases outside of their pesticidal use; State law establishes a system of overlapping authorities between pesticide and air regulators to address these complex problems.

Pesticide applicators are also required to notify the County Agricultural Commissioner (CAC) prior to the use of restricted materials, while other pesticides are required to be reported after they have been applied. Restricted materials are pesticides deemed to have a higher potential to cause harm to public health, farm workers, domestic animals, honeybees, the

⁶ Table 4-3: Estimated Emissions Reductions for District Measures, pages 153-154, <http://community.valleyair.org/media/1515/01-finalshaftercerp-9-19-19.pdf>

⁷ <http://community.valleyair.org/selected-communities/south-central-fresno/steering-committee-meetings/>

environment, wildlife, or other crops compared to other pesticides. With certain exceptions, restricted materials may be purchased and used only by or under the supervision of a certified commercial or private applicator under a permit issued by the CAC.

Though not every regulator can act in every instance, what matters to communities is that the government as a whole act to protect them. This creates opportunities for cross-agency collaboration. DPR has been actively involved in the Shafter committee meetings and has committed to specific actions in the Program, including the development and implementation of a statewide regulation for 1,3-D, development of a pilot pesticide application notification system for Shafter, and outreach on the use of integrated pest management practices.

Recommended Actions to Strengthen Implementation

CARB staff recognizes that the Program is a culmination of an extensive amount of work in the first year of a new program. In future efforts, SJVAPCD and CARB staff should work with the community steering committee to refine issues relating to implementation during the Program development process as well as the periodic status reports required under AB 617. CARB staff also recommend that the SJVAPCD annually review the charter with the steering committee.

To support implementation moving forward, CARB staff has developed a set of recommended actions in three key areas: reduction strategies, pesticides, and technical enhancements. Progress in implementing these recommendations should be included in the annual progress report required by the AB 617 statute.

Reduction Strategies

The community steering committee had very productive discussions about the types and funding amounts for individual incentive measures, but also expressed the desire to continue to discuss potential adjustments to these incentive measure funding amounts. Recognizing that the Program will evolve as implementation is a five-year process, CARB staff recommends the SJVAPCD and CARB staff continue to work with the steering committee on any further adjustments needed to funding allocations, as well as on measure prioritization and the project selection process and criteria.

Therefore, to help clarify and enhance strategy development, staff recommend that CARB staff, SJVAPCD, and the community steering committee work together to undertake the following actions:

1. Include a process for making adjustments to incentive measure funding amounts based on ongoing discussions with the community steering committee, and continue engaging the committee on prioritization of incentive measures and project selection.
2. Develop and provide specific criteria for project funding amounts and project selection, and clarify in the "Metrics to Track Progress" the process for adjusting allocations when projects are undersubscribed or oversubscribed.
3. Continue to update the emissions reduction targets as new information becomes available for the regulatory and other strategies that do not yet have defined benefits.

Pesticides:

DPR has begun discussions on the development of the pilot notification system for Shafter, and has discussed initial statewide 1,3-D rulemaking proposals with the steering committee which includes consideration of requirements for tarping, buffer zones, and application caps. DPR and CARB recognize the importance of continuing to identify further actions to reduce pesticide emissions, therefore to further address pesticides in the Shafter community DPR and CARB will:

4. Consider the specific impacts of exposure to 1,3-D in the Shafter community to inform development of DPR's statewide rulemaking for 1,3-D.
5. Continue to work together to identify additional actions related to the pesticide concerns identified by community steering committee members.

Technical Enhancements

The steering committee has requested that SJVAPCD and CARB continue to work on enhancing the community-level inventory to support the committee's understanding of sources in the community and for tracking progress. Staff recommends SJVAPCD and CARB staff work together to undertake the following work as part of Program implementation:

6. Continue to collect and develop additional Shafter specific emissions information to build upon the current community-level inventory.