

**San Joaquin Valley Air Pollution Control District
AB 617 Community Emission Reduction Program**

**Road and Sidewalk Improvements Program
Emission Reduction Program Plan
June 2022**

Shafter Community

PROJECT IDENTIFICATION

SHAFTER CERP RD.2 ROAD PAVING AND SIDEWALK INSTALLATIONS

This is a Community Identified Project included and prioritized in the California Air Resources Board (CARB) and District adopted Community Emission Reduction Programs (CERP). Road Paving Emission Reduction Program is part of [California Climate Investments](#), a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.

The measure will reduce dust from paved and unpaved roads in the community through road paving improvements, as well as reduce motor vehicle emissions by improving walkability of the community through sidewalk improvement and construction. Paving of unpaved reduces PM emissions from fugitive windblown and activity-related dust in the region.

COMMUNITY SUPPORT

This measure received support from the Shafter Community Steering Committee (CSC) and was included in the respective adopted Community Emission Reduction Programs. This plan was developed and modeled after existing plans and resources for similar projects within the state of California and includes feedback received from the CSC to create a plan to address the unique needs of the community. Information about the Steering Committees is included below:

- (1) Name(s) of the community group(s):**
Shafter Steering Committee [Map](#)
- (2) Purpose of community group(s)**
AB617 Community Engagement and Public Input
- (3) Total number of members in the community group(s)**
Shafter – 27 members
- (4) Date(s) of formation/establishment**
Shafter – December 2018
- (5) A description of the decision-making process must be included.**
Shafter Steering Committee [Charter](#)

(6) Community Support Demonstration Shafter [CERP](#)

MECHANISM FOR INFORMING COMMUNITY

This measure has been discussed at Community Steering Committee meetings in addition to the outreach activities conducted to inform residents of the program and requirements for participation. The outreach conducted has and will continue to be the following:

- Social media
- Mailers
- Print ads
- Press releases and press events
- Events, town halls, webinars, etc.
- Other ideas as brought up by committee

Additionally, the District and CSC have jointly developed a tool to track progress of each measure adopted within the CERP. This tracker is updated monthly and includes updates such as number and types of projects contracted, funding allocated, project-associated benefits to the community, and other information specific to each measure. The tracker is shared directly with CSC members ahead of each regularly scheduled CSC meeting and is available on the community webpage in both English and Spanish.

PARTICIPANT REQUIREMENTS

The District has identified an eligible public entity for this program. To be considered a Grantee for this program, the public entity must meet or partner with a subcontractor(s) that meet the following requirements:

- Grantee must be the owner of the area to be paved or have authority to pave the area.
- Grantee must maintain the paved area during the entire contract period, 10 years.
- Grantee must make the project available for inspection if requested by SJVAPCD and/or CARB staff during the entire contract period, 10 years.
- Grantee is responsible for obtaining any permits required to do the project.
- If Grantee holds an operating permit or other type of permit for the project site, copies of permits shall be provided to District as part of application.
- The Grantee or their sponsor must have the financial capacity to complete, operate, and maintain the project.

Routine maintenance and rehabilitation projects are not eligible for funding. Grantee may not claim emission reduction credits from the project during the contract period.

PROJECT SELECTION PROCESS

District will award project(s) that are located within the Shafter AB 617 boundaries and provide road paving and/or sidewalk improvements that reduces dust and emission reductions. Grantees must meet all the criteria listed in this plan and agree that paving projects will meet all local, state and federal statutes, rules and regulations.

FUNDING AMOUNTS

The approved funding for the Shafter community is \$2,775,000.

The following costs are eligible for funding as part of this CERP strategy:

- Supplies, equipment, and materials
- Labor and construction (including contracted services)
- Signs and interpretive aids communicating information about the project
- Up to 25% of the grant request may be budgeted for non-construction costs, including mobilization, permitting, design, traffic control, and administration.
- Up to 30% may be budgeted for contingency costs
- The grant amount will cover 100% of eligible costs

The following costs are ineligible to receive funding as part of this CERP strategy:

- Overhead (i.e., rent, utilities, office equipment/supplies)
- Maintenance activities

Projects eligible for funding must be located within the Shafter AB 617 boundary and meet eligibility requirements described in this plan.

Payments will be made on a reimbursement basis. The Grantee pays for services, products, and supplies, submits invoices and proof of payment, and is then reimbursed.

PROJECT LIFE

Entities that receive grants to fund eligible projects are expected to maintain their project for a minimum of 10 years. During this time, entities must conduct as-needed maintenance such as repairing any potholes and re-painting of lines and comply with other requirements described in the "Participant Eligibility" section of this CERP. Additionally, entities must make the project available for inspection if requested by the District and/or CARB staff during this same contract period.

REPORTING

The District will report program information in accordance with Community Air Protection program guidelines found at:

https://ww3.arb.ca.gov/msprog/cap/docs/cap_incentives_2019_guidelines.pdf.

All projects that receive funding under this program must comply with the requirements described in Section H of the CAP Incentives 2019 Guidelines.¹ This will involve the preparation of Semi-Annual and Yearly reports, which the District will prepare based on information collected from project participants.

Participants must ensure that project-related information is complete, correct, supported by documentation, and supplied to the District upon request for the preparation of reports.

EMISSION REDUCTIONS

A) Emission Reductions

Paving of a dirt surface significantly reduces windblown and activity-related fugitive dust emissions. This methodology utilizes CARB's Miscellaneous Process Methodology 7.10 - Unpaved Road Dust, Non-Farm Roads to estimate the baseline emissions from an unpaved surface.² Emissions reductions from fugitive windblown dust are conservatively not included. The emissions reductions associated with paving are then estimated using a control efficiency from the Western Regional Air Partnership (WRAP) Fugitive Dust Handbook.³ Baseline emissions are calculated using CARB's methodology for unpaved road dust, shown in Equation 1. If the unpaved surface is routinely controlled for dust (e.g., through daily watering), a control efficiency (CE) should be applied (see Table 1). Fraction of total PM that is particulate matter less than 10 microns in diameter (PM10) and particulate matter less than 2.5 microns in diameter (PM2.5) are 0.5943 and 0.0594, respectively.

$$1) \text{ Baseline Emissions} = 2 \frac{\text{lb PM}_{10}}{\text{VMT}} \times \frac{\text{VMT}}{\text{year}} \times (1 - \text{CE}) \times \text{PM fraction}$$

Control Measure ^[a]	Control Efficiency (CE)
Implement watering twice daily	55%

1 CARB. 2020. Community Air Protection Incentives 2019 Guidelines. October 14. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-10/cap_incentives_2019_guidelines_final_rev_10_14_2020_0.pdf. Accessed: January 2021

2 Calculation methodology and emission factor based on CARB Miscellaneous Process Methodology 7.10 - Unpaved Road Dust, Non-Farm Roads. Available at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/full7-10_2012.pdf. Accessed: January 2021.

3 Control efficiency based on Western Regional Air Partnership Fugitive Dust Handbook, Table 6-6. Control Efficiencies for Control Measures for Unpaved Roads. Available at: https://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf. Accessed: January 2021

Implement watering three times daily or greater	61%
Apply dust suppressants or gravel	84%
Notes: [a] Contact the District if a dust control measure not listed in this table is being implemented at the project site.	

Paved emissions are calculated by applying the WRAP control efficiency to the baseline emissions, as shown in Equation 2.

$$2.) \text{ Paved emissions} = \text{Baseline Emissions} \times (1 - 0.99)$$

Emission reductions due to paving are calculated as the difference between the paved and baselines emissions as shown in Equation 3.

$$3.) \text{ Emission Reductions} = \text{Baseline Emissions} - \text{Paved Emissions}$$

(B) Qualitative Benefits

Improvements to roads and sidewalks within the AB 617 community of Shafter will provide qualitative benefits and reduce particulate matter emissions. The reduction in emissions can improve the health and well-being of the residents, as paved roads and sidewalks provide access to cleaner transportation and encourages healthier alternatives, such as walking and biking.

In addition, unpaved areas, such as parking lots and sidewalks, often cannot be used by people with special needs due to the poor condition of the surface. Paving and improvements to these areas, will reduce health impacts and require less maintenance by replacing the need to temporarily apply water, gravel, or other materials.