SHAFTER COMMUNITY EMISSIONS REDUCTION PROGRAM

STRATEGY CRITERIA PRIORITIZATION EXERCISE

Emission reduction and exposure reduction strategies have several criteria that need to be evaluated, including the amount of emissions reduced or the effectiveness of an exposure reduction measure; considering these criteria can help to prioritize potential strategies that may be feasible for implementation in AB 617-selected communities.

Strategy Criteria	PM2.5 Emissions or Exposure Reduction	Toxic Air Contaminants Emissions or Exposure Reduction	Cost Effective Emissions or Exposure Reductions	Feasibility of Implementation	Scale of Impact on Community
Description	PM2.5 emissions reduction in community, or reduction of exposure to PM2.5 for sensitive receptors in close proximity to a source	Toxic emissions reduction in community, or reduction of exposure to toxics for sensitive receptors in close proximity to a source	\$\$ spent to implement per emissions reductions or mitigation (limiting exposure)	Measure of potential legal, jurisdictional, operational, or feasibility barriers that may prevent or limit a strategy, or impact strategy timing	How broadly could the strategy be implemented? Localized strategy/benefits or community-wide strategy?
	Most reductions and/or very effective in reducing exposure for sensitive receptor group	Most reductions and/or very effective in reducing exposure for sensitive receptor group	Best	Fewest barriers; Fastest implementation; Ready to go	Most widespread implementation/benefit to community and/or major benefit to sensitive receptors near target source
	Moderate reductions and/or somewhat effective in reducing exposure for sensitive receptor group	Moderate reductions and/or somewhat effective in reducing exposure for sensitive receptor group	Okay	Some barriers; ≥ 1 year to strategy implementation	Affects some members of community; project not scalable to provide benefits to entire community
	Minimal reductions and/or somewhat effective in reducing exposure for sensitive receptor group	Minimal reductions and/or somewhat effective in reducing exposure for sensitive receptor group	Least effective (very expensive and/or very few emissions/mitigation benefits)	Many barriers; ≥ 2 years to strategy implementation <i>if</i> able to implemented	Affects very few in community, and not near sensitive receptors

Measure #	Type of Measure	Implementing Agency	Strategy Description	PM2.5 Emissions or Exposure Reduction	Toxic Air Contaminants Emissions or Exposure Reduction	Cost Effective Emissions or Exposure Reductions	Feasibility of Implement ation	Scale of Impact on Community	Choose top priorities
40	Incentive	Valley Air District and PUC/IOU	Provide enhanced incentives (capital, rate structure) to replace existing diesel agricultural pump engines with electric pumps and related infrastructure, as feasible, or with Tier 4 engines if electrification is not feasible.						
41	Incentive	Valley Air District	Provide incentives to replace diesel agricultural equipment with the cleanest available equipment						
42	Incentive	Valley Air District	Provide incentives for low- dust technology nut harvesters to target the replacement of nut harvesting equipment with low dust technologies for farmland surrounding the City of Shafter						

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43	Incentive	Valley Air District	Provide enhanced incentive funding to promote alternatives practices and technologies to open burning of agricultural materials (including soil incorporation of woody waste)						
44	Incentive	Valley Air District	Provide incentives for electric dairy feed mixing equipment to target dairy operations near the community of Shafter				•		
45	Incentive	Valley Air District and CDFA	Support dairy operations near the City of Shafter in installing dairy digesters, which capture emissions of methane for productive use in pipeline injection and/or mobile fueling	0					
46	Incentive	Valley Air District	Provide incentives for the replacement of diesel dairy trucks with zero or near-zero emissions technologies						

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47	Incentive	Valley Air District and CDFA	Support dairy farms near Shafter with the implementation of alternative manure management strategies that help further reduce the emissions of VOCs, ammonia, and methane, through funding and educational outreach about programs available through state agencies.		•	0			
48	Incentive	Valley Air District	Work with local agricultural operations to offer incentives to promote increased implementation of conservation management practices that further reduce particulate matter emissions, including conservation tillage and other practices		0				
49	Partnership	CARB, DPR, Ag Commissioner	Evaluate additional opportunities to address pesticide concerns, including providing additional information regarding monitoring efforts and	0					

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			development of enhanced notification, as feasible						

SHAFTER PRELIMINARY CERP STRATEGIES EXPOSURE REDUCTION STRATEGIES

Measure #	Type of Measure	Implementing Agency	Strategy Description	PM2.5 Emissions or Exposure Reduction	Toxic Air Contaminant s Emissions or Exposure Reduction	Cost Effective Emissions or Exposure Reductions	Feasibility of Implement ation	Scale of Impact on Community	Choose top priorities
25	Exposure Reduction	Valley Air District and local school district	Increase the number of schools enrolled in the District's Healthy Air Living School program to help reduce children's exposure to unhealthy air conditions						
24	Exposure Reduction	Valley Air District	Provide financial incentives for the purchase and installation of enhanced Air Filtration systems at schools in the community				•		
34	Exposure Reduction	Valley Air District, City, County, CDOT, and other local partners	Provide incentives for the installation of vegetative barriers around/near sources of concern to reduce particulate matter, odor, and other emissions, as feasible	•	•	•	•	•	
26	Exposure Reduction	CARB, CEC, PUC, IOUs, City, County, Valley Air District	Work with agency and local partners to investigate measures to reduce indoor emissions and exposure, including weatherization, energy efficiency, enhanced filtration, and other services						
29	Exposure Reduction	Valley Air District	Provide additional information to the community about real-time air quality conditions and appropriate measures the public should take to protect themselves during poor air quality episodes						

SHAFTER PRELIMINARY CERP STRATEGIES HEAVY DUTY TRUCKS & LOCOMOTIVES

Measure #	Type of Measure	Implementing Agency	Strategy Description	PM2.5 Emissions or Exposure Reduction	Toxic Air Contaminants Emissions or Exposure Reduction	Cost Effective Emissions or Exposure Reduction	Feasibility of Implementation	Scale of Impact on Community	Choose top priorities
6	Incentive	Valley Air District	Provide enhanced incentive funding for zero and near-zero emissions clean truck technologies that operate within the community						
7	Incentive	Valley Air District	Develop community- specific enhancements to incentive programs to support the deployment						
8	Regulatory	Valley Air District and CARB	Develop and/or work to implement measures that reduce idling of heavy duty trucks within the community						
9	Enforcement	CARB	Develop an enhanced enforcement program to identify and repair trucks and buses with faulty emission control systems	•	•		•	•	

SHAFTER PRELIMINARY CERP STRATEGIES HEAVY DUTY TRUCKS & LOCOMOTIVES

Measure #	Type of Measure	Implementing Agency	Strategy Description	PM2.5 Emissions or Exposure Reduction	Toxic Air Contaminants Emissions or Exposure Reduction	Cost Effective Emissions or Exposure Reduction	Feasibility of Implementation	Scale of Impact on Community	Choose top priorities
10	Regulatory	CARB	Amend warranty requirements and inspection program for trucks to add a lower inuse emissions performance level				0		
14	Incentive	Valley Air District	Provide enhanced incentive funding to replace high-polluting locomotives with clean engine technologies for trains that operate in or near the community						
15	Incentive	Valley Air District	Provide incentives for electric railyard switchers for train depots within the community			•			

SHAFTER PRELIMINARY CERP STRATEGIES OLDER/HIGH POLLUTING AUTOS

Measure #	Type of Measure	Implementing Agency	Strategy Description	PM2.5 Emissions or Exposure Reduction	Toxic Air Contaminants Emissions or Exposure Reduction	Cost Effective Emissions or Exposure Reduction	Feasibility of Implement ation	Scale of Impact on Community	Choose top priorities
1	Incentive	Valley Air District	Enhance outreach and access to financial incentives to remove older autos from the community through the District's Drive Clean in the San Joaquin program						
2	Incentive	Valley Air District	Host a local Tune-In Tune-Up event within the community to reduce emissions from older, high polluting cars	•		•	•		
3	Incentive	Valley Air District	Provide incentive funding to support the purchase of electric vehicles, charging infrastructure in the community	•	•	•	•		
4	Incentive	Valley Air District	Evaluate the feasibility of additional ride share programs and/or incentives for ride sharing in the community	•	•	•	•		
5	Incentive/ Workforce Developme nt	Valley Air District	Increase educational training for EV mechanics, and support the deployment of additional EV repair facilities in the community, as feasible	Indirect Benefit	Indirect Benefit	•			
11	Incentive	Valley Air District	Enhance outreach and access to incentives for the purchase of zero						

SHAFTER PRELIMINARY CERP STRATEGIES OLDER/HIGH POLLUTING AUTOS

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			or near-zero emissions school buses to operate within the community						
12	Incentive	Valley Air District and local transit operators	Develop incentive programs for zero or near-zero emissions transit buses within the community				•		
13	Incentive	Valley Air District	Provide incentives to local public agencies for the deployment of the cleanest available vehicles and equipment in public fleets (light duty vehicles, refuse fleet, off-road fleet, emergency vehicles, etc.)						
27	Outreach	Valley Air District, CARB, City and County	Install additional anti-idling signs near schools and other land uses that serve children and seniors					•	

SHAFTER PRELIMINARY CERP STRATEGIES INDUSTRIAL SOURCES

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35	Land Use	Valley Air District, planning organizations, local developers, other local partners	Support projects that reduce vehicle miles traveled in the community, including measures that promote active transport and increase the walkability of community neighborhoods	•	•	•		0	
36	Land Use	City and County	Build capacity for electric infrastructure and power storage, support development of fast-charging facilities, set aside land for green infrastructure, truck charging stations and better land use support for electric trucks	Indirect Benefit	Indirect Benefit				
37	Land Use	Valley Air District	Provide guidance during the CEQA process on how new projects may impact air quality in the community, and information on how air pollution impacts of a project can be reduced	Indirect Benefit	Indirect Benefit	0		0	
38	Incentive	Valley Air District	Provide incentives for stationary source facilities within the community to install advanced control technology beyond existing controls that would not otherwise be economically feasible to install, as feasible	NYQ	NYQ	NYQ		NYQ	

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39	Incentive	Valley Air District	Evaluate the feasibility of an incentive program for oil and gas operations near the City of Shafter to fund the installation of technologies that further reduce production-related emissions, including those from flaring activities	NYQ	NYQ	NYQ		NYQ	

^{*}NYQ = Not Yet Quantified, for measures that would need further evaluation of cost effectiveness, feasibility, and impact on the community

SHAFTER PRELIMINARY CERP STRATEGIES URBAN/RESIDENTIAL SOURCES

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16	Regulatory	Valley Air District	Implement enhanced District Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters) requirements (as included in District's 2018 PM2.5 Plan)						
17	Incentive	Valley Air District	Provide enhanced financial incentives to replace existing wood burning devices and pellet stoves with natural gas or electric technologies						
18	Outreach	Valley Air District	Conduct outreach in the community to educate residents about the importance of reducing wood burning and associated health impacts, and programs available to support the transition to natural gas and electric devices.						
20	Incentive	Air District and PUC	Provide incentives for local businesses and homeowners to install solar power and energy storage systems	0	0	0		0	

SHAFTER PRELIMINARY CERP STRATEGIES URBAN/RESIDENTIAL SOURCES

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21	Incentive	Valley Air District	Enhance outreach and access to incentive program for the replacement of residential lawn and garden equipment in the community through the District's Clean Green Yard Machines program						
22	Incentive	Valley Air District/CARB	Enhance outreach and access to incentive program for the replacement of commercial lawn and garden equipment in the community through the District's Clean Green Yard Machines program						
23	Incentive	Valley Air District	Provide incentives to further reduce smoke and other pollution from restaurants that use underfired charbroilers						
32	Partnership	Valley Air District and other local partners	Identify opportunities for increased urban greening and forestry in the community						

SHAFTER PRELIMINARY CERP STRATEGIES URBAN/RESIDENTIAL SOURCES

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19	Outreach	Valley Air District and City/County	Conduct expanded outreach and education to reduce illegal burning of residential waste					•	
33	Partnership	City and County	Consider paving roads and sidewalks within the community to help reduce dust pollution		0		•		