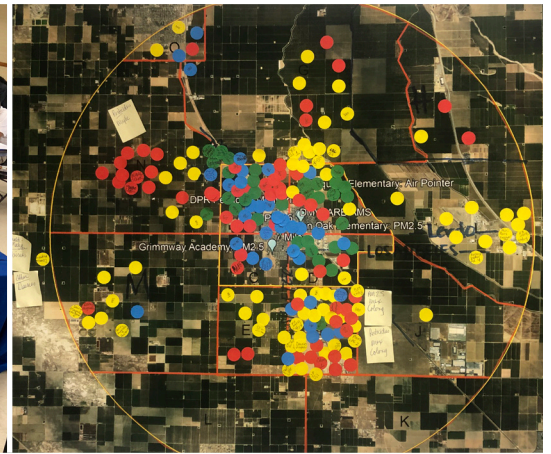


Community Emissions Reduction Program

Shafter 2020 Annual Report

November 19, 2020



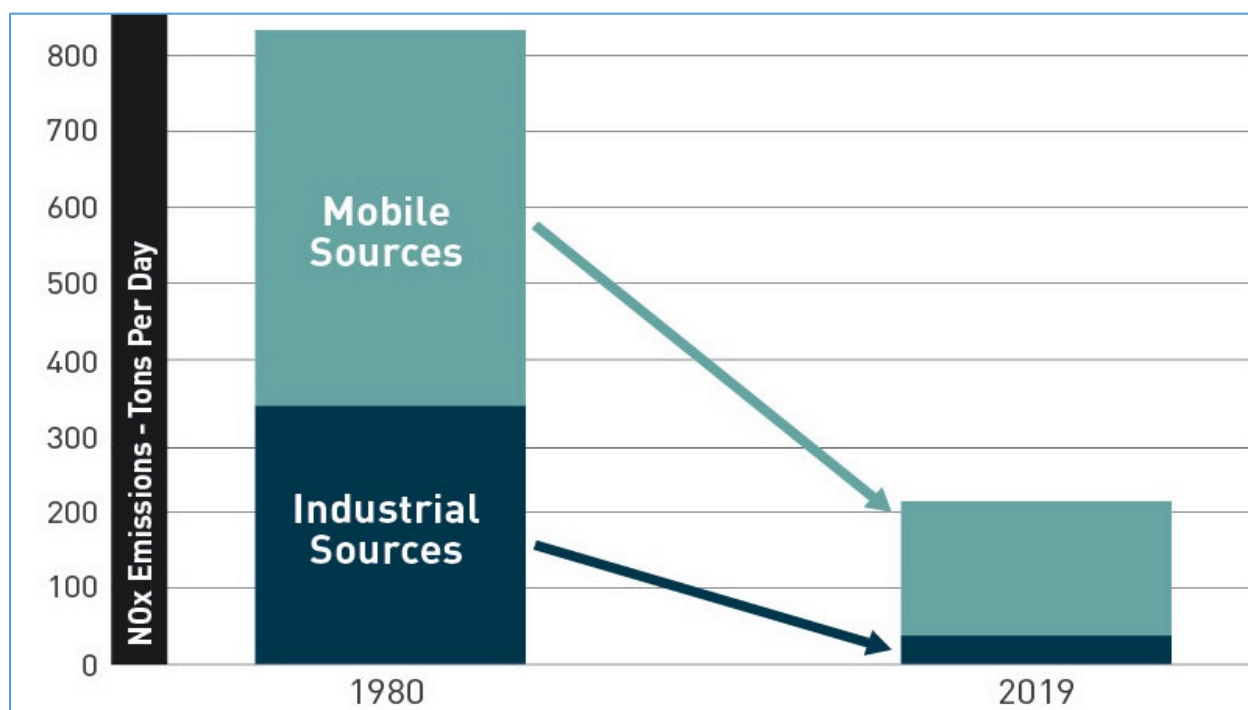
San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

Executive Summary

The air quality challenges that the communities in the San Joaquin Valley face are unmatched by any other region in the nation. The San Joaquin Valley, due to its unique geography, topography, and meteorology, continues to face challenges in meeting the latest federal health-based air quality standards. Since 1992, the San Joaquin Valley Air Pollution Control District (District) has implemented nearly 650 rules and regulations to control air pollution in the Valley Air Basin. Numerous plans to improve Valley air quality and attain state and federal air quality standards have detailed a wide-range of strategies, including regulatory measures, extensive incentive investment to promote clean-air technologies in Valley communities, and other first-of-their kind measures. As a result of the District's stringent and comprehensive air quality management strategy, along with significant investments made by Valley businesses and residents, PM_{2.5} and ozone levels are now at historically low levels, and the Valley continues to be in attainment of the PM₁₀ federal air quality standard.

Emissions from stationary sources have been reduced by 85%, cancer risk from exposure to air pollutants has been reduced by 95%, population exposure to elevated PM_{2.5} levels have been reduced by 85%, and population exposure to elevated ozone levels have been reduced by 90%.

Figure 1 NO_x Emission Reductions Since 1980



Despite these regional air quality improvements, significant concern has been expressed by the California legislature about potential localized impacts of air pollution in disadvantaged communities throughout the state. In answer to that concern, Assembly Bill (AB) 617, signed into law in July 2017, initiated a state-wide effort to monitor and reduce air pollution, and improve public health, in communities that experience disproportionate burdens from exposure to air pollutants through new community-focused and community-driven actions.

The community of Shafter was prioritized by the Air District and subsequently selected by the California Air Resources Board (CARB) as one of two first-year communities in the San Joaquin Valley to receive clean air resources newly available under AB 617, based on a technical analysis of several pollution and socioeconomic criteria. AB 617 provides mechanisms and resources to implement community-specific air quality monitoring networks; to develop, implement, and track emission reduction programs; to improve availability of data and other technical information; and to invest substantial funding in the community through voluntary incentive funding measures. Importantly, these measures are guided by advice and knowledge of local community members, through their input and involvement on Steering Committees for each AB 617-selected community. Air pollution emission reduction and exposure reduction measures implemented under AB 617 programs will further advance ongoing state and District efforts to reduce regional and community exposure to air pollutants.

The Shafter Community Emission Reduction Program (CERP) and Community Air Monitoring Plan (CAMP) were developed by the Community Steering Committee (CSC), San Joaquin Valley Air Pollution Control District (District), and the California Air Resources Board (CARB), with the support of local agency partners within the Shafter community. Since CERP adoption by the District Governing Board in September 2019, the District has continued to meet with the Shafter CSC to prioritize and implement the community-developed clean air measures and solicit feedback on how to continue enhancing the CERP. The District has also invested significant staff time researching, developing, procuring, and deploying new air monitoring equipment for the community air monitoring network within the Shafter community based on the community-developed CAMP, regularly informing the committee about community air monitoring results and efforts.

The Shafter CERP, which was ultimately approved by CARB in February 2020, commits to a wide range of incentive-based, regulatory, enforcement, mitigation, and outreach strategies prioritized by the Shafter CSC to provide for further reductions, increase awareness of the community's air quality challenges, and work to identify resources available to help the public reduce emissions and avoid exposure to air pollution. Through the adopted CERP, the District working with the CSC, CARB, agency partners, local businesses, and other community partners will look to invest over \$38 million in emission reduction grants for a variety of clean air projects in the Shafter area. As included in the CERP, these measures will reduce 265 tons of PM_{2.5}, 1,718 tons of NO_x, and significant air toxics emissions in the community, particularly with respect to diesel particulate matter from mobile sources, the main contributor to community air toxics health risk.

The following provides details of the progress made in each program area for AB 617 implementation the Shafter Community over the course of time since the September 17, 2020 adoption by the District Governing Board.

I. Background and Purpose

AB 617 and the CARB Community Air Protection Blueprint require air districts to prepare annual progress reports summarizing the results of implementing CERPs. This report summarizes the progress of CERP implementation in 2018-designated AB 617 communities in the San Joaquin Valley Air Basin from September 6, 2019 to June 30, 2020. Additionally, the report covers information on incentive funds distributed in the communities from July 26, 2017 to June 30, 2020. The report is based on the guidelines set forth in the CARB Community Air Protection Blueprint and includes the following:

- Community overview
- Community engagement
- Technical Assessment
- Community air monitoring
- An overview of the CERP framework
- Status of CERP actions, goals and strategies
- Metrics for tracking progress
- A qualitative assessment of CERP progress
- A summary of key plan adjustments



II. Community Overview

The rural community of Shafter, located in the southern end of the Central Valley in Kern County, has a current estimated population of approximately 19,000. The City of Shafter is surrounded by farmlands, including dairies and agricultural fields. This community is impacted by rural sources of emissions, largely outside of the community boundaries, including the agricultural and oil and gas production industries. In addition, major roadways in the community include Highway 43 and Lerdo Highway, both crossing directly through Shafter and contributing to mobile source emissions in the area. Locomotive emissions also influence the community as railroad tracks run parallel to Highway 43. Local area-wide sources such as gas stations, commercial cooking, and consumer products also contribute to the community's emissions levels.

Figure 2 identifies the community, as selected by the California Air Resources Board. Geographically, this community is bounded by Merced Avenue to the north, the Calloway canal and Cherry Ave. to the east, Orange Street to the south, and Scaroni Avenue to the west. This area does not encompass the entire boundaries of the City of Shafter but the core, along with the small community of Smith Corner to the south, as well as the nearby rural areas surrounding the area. The community includes a number of businesses, schools, and residential areas. The Shafter Steering Committee recommended that the District look beyond the geographic community boundary, at sources out to a 7-mile radius from the center of the City of Shafter for potential impacts to community, which resulted in the boundary as depicted in Figure 3.

Figure 2 Original Shafter AB 617 Boundary

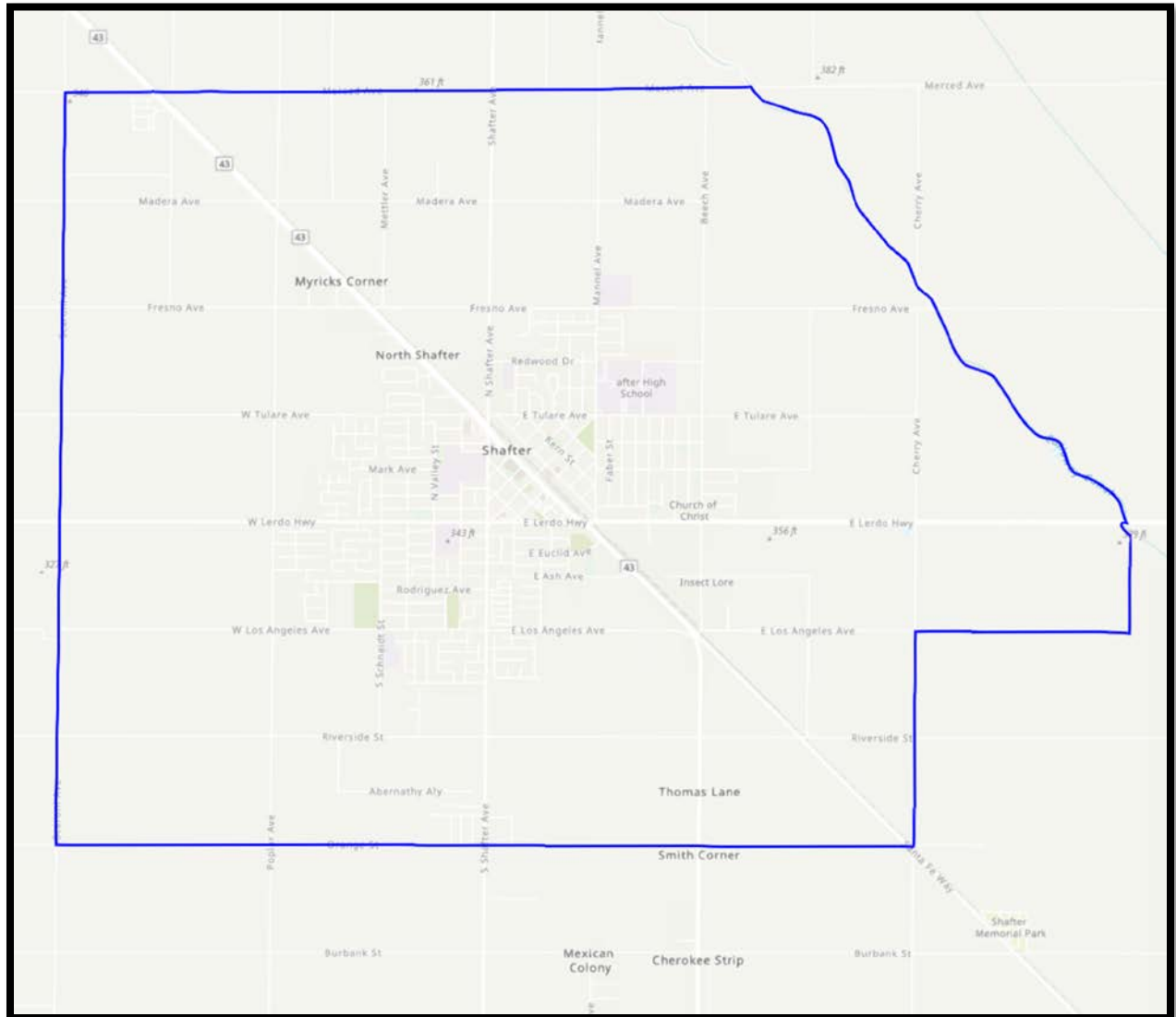
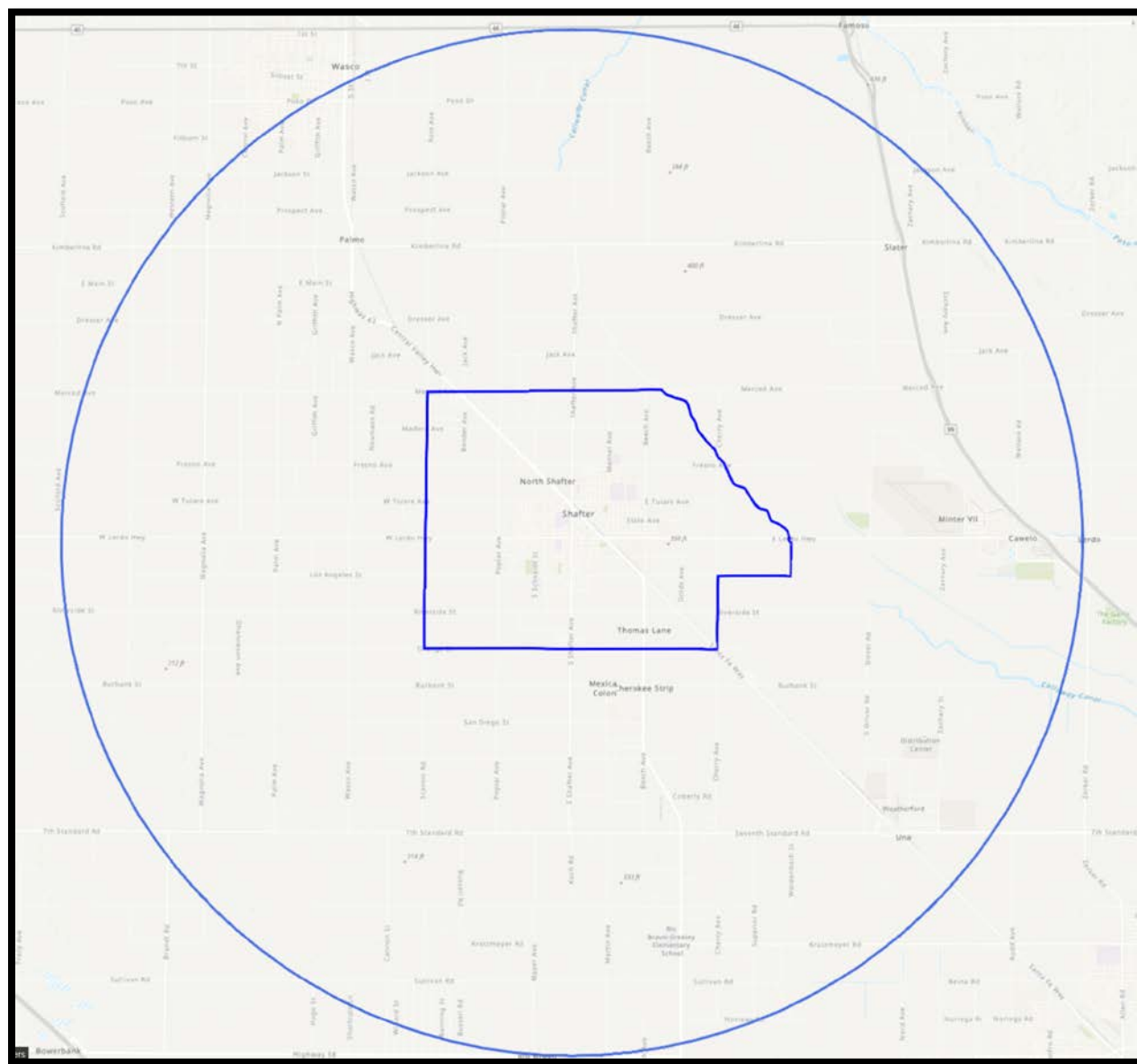


Figure 3 Original Shafter AB 617 Boundary and Community Recommended 7-Mile Radius Boundary



Based on a ranking of census tracts statewide, the Shafter community is impacted across a number of health indicators. Table 1 summarizes the average and highest percentile scores (based on statewide comparison) from CalEnviroScreen among the census tracts located within the community boundaries for a number of key indicators. As this summary indicates, the Shafter community includes high average percentiles among its census tracts for several indicators, with many averages exceeding the 70th percentile throughout California. Specifically, the average Overall CES Score for this community exceeds the 86th percentile for the state, while the average Cardiovascular Disease score exceeds the 85th percentile for the state. The Shafter community also includes census tracts that rank above the 90th percentile among all tracts across the state. Notably, this community includes tracts that rank above the 90th percentile for Poverty and Unemployment, with Unemployment ranking above the 98th percentile.

Sensitive receptors within the area include 8 schools, 8 licensed care facilities, and 3 medical facilities. The community is mostly low-income residents, with high levels of unemployment, linguistic isolation, and incidences of cardiovascular disease. This community includes census tracts with health indicators that exceed the 80th percentile in a number of the listed categories, indicating that this community includes areas impacted by environmental challenges.

Table 1 Summary of Health Indicators among Census Tracts in Shafter Community (Source: CalEnviroScreen 3.0)

Health Indicator	Average Percentile of Census Tracts in Community	Highest Percentile of all Census Tracts in Community
Overall CES Score	86.00	90.00
Asthma	52.00	52.00
Cardiovascular Disease	86.00	86.00
Low Birth Weight	54.33	64.00
Poverty	84.33	98.00
Unemployment	75.67	98.00
Population Characteristics	78.00	86.00
Pollution Burden	82.33	84.00
Diesel Particulate Matter	26.67	31.00
Traffic Density	8.33	10.00
Toxics Releases from Facilities	54.67	55.00

Due to the regional nature of air pollution, many of the air quality challenges facing communities in the San Joaquin Valley are due to topographical, geographical, and meteorological factors. Located at the southern end of the San Joaquin Valley, many areas of Kern County experience poor air quality episodes due to temperature inversions, periods of stagnation, and wind patterns that direct pollution from the more northern parts of the Valley to the southern portion of the air basin. Air pollution in the Shafter community is heavily influenced by these regional and geographical factors. The adopted Shafter CERP includes strategies for emissions reductions that address both urban sources and rural sources of emissions that contribute to the Shafter community's air quality challenges. These strategies focus on measures that will bring additional economic resources to the residents and businesses located in the community, as well as achieving significant local emissions reductions.

III. Community Engagement

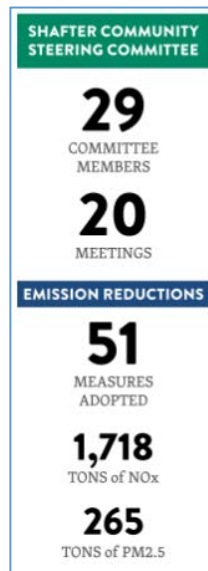
Since the District Governing Board's adoption of the Shafter CERP, the District has utilized meaningful bilingual community engagement to continue to guide implementation of CERP measure and community air monitoring within the community. Such engagement mechanisms include:

- Design and development of effective voluntary incentive-based emission reduction programs based on community input
- Continued prioritization and feedback on the sources and locations for expenditure of incentive dollars outlined in the CERP measures
- Continued development of tools and resources for engagement and processing of technical air quality information

To ensure successful implementation of AB 617, residents, businesses, non-profits, agencies, and other stakeholders within Shafter have been fully engaged in both English and Spanish. The District has ensured that the CSC meetings continue to facilitate inclusive and balanced public engagement by providing:

- Monthly agenda-setting meetings with District, stakeholders, community co-hosts, CARB, and a third-party facilitator to collectively set expectations and plan for upcoming CSC meetings
- Real-time interpretation services in all necessary languages, and timely document translation
- Expert presentations from partner agencies such as CARB, California Department of Pesticide Regulation (DPR), California Public Utilities Commission (CPUC), and Office of Environmental Health Hazard Assessment (OEHHA)
- A comprehensive and dedicated bilingual website with tools to view real-time air quality monitoring data and maps of emissions
- Neutral meeting facilitation to ensure meetings are inclusive and neutral by bringing out different points of view and preventing individuals from monopolizing discussions
- Weekly phone calls and text exchanges with our Spanish speaking CDC members to ensure they are engaged in the process
- Through March 2020:
 - Monthly evening meetings at convenient locations in the community
 - Child activity areas and dinner for all attendees
 - All meeting materials in hardcopy and via a comprehensive website in all necessary languages
- Since April 2020:
 - Monthly evening meetings via Zoom, with technical assistance provided to residents and stakeholders upon request
 - Continued real-time interpretation services through two Spanish interpreters at each meeting
 - Meeting materials posted ahead of meeting, and sent in hardcopy for Spanish-only speakers to facilitate more productive virtual meeting environments

The District has been working with CSC to implement effective strategies, including engaging with Valley residents, businesses, agencies, and other stakeholders to identify and move forward with clean air



investments in the Shafter CERP. In addition, the District has taken steps over the past several months to better serve our Spanish speaking CSC members and encourage their active engagement in the meetings and CERP implementation process. Ensuring effective steering committees requires substantial investment of staffing and other resources to schedule, organize, and facilitate frequent after-hours public meetings with extensive related investigation and communications.

Figure 4 Real-time Interpretation at CSC Meetings



The District has also continued to conduct public workshops throughout the Valley as needed to solicit additional community input while using outreach and media events as opportunities to discuss AB617 and promote the various grant programs available. Additionally, District staff provides updates and seeks feedback from the Citizens Advisory Committee (CAC) and Environmental Justice Advisory Group (EJAG) as the implementation of AB 617 in the Valley continues to develop.

Involving the public in the CERP implementation process continues to be a priority of the CSC and the District. All CSC meetings are promoted on social media and live streamed on Facebook with the meeting videos archived on the Shafter community webpage: <http://community.valleyair.org/selected-communities/shafter/>.

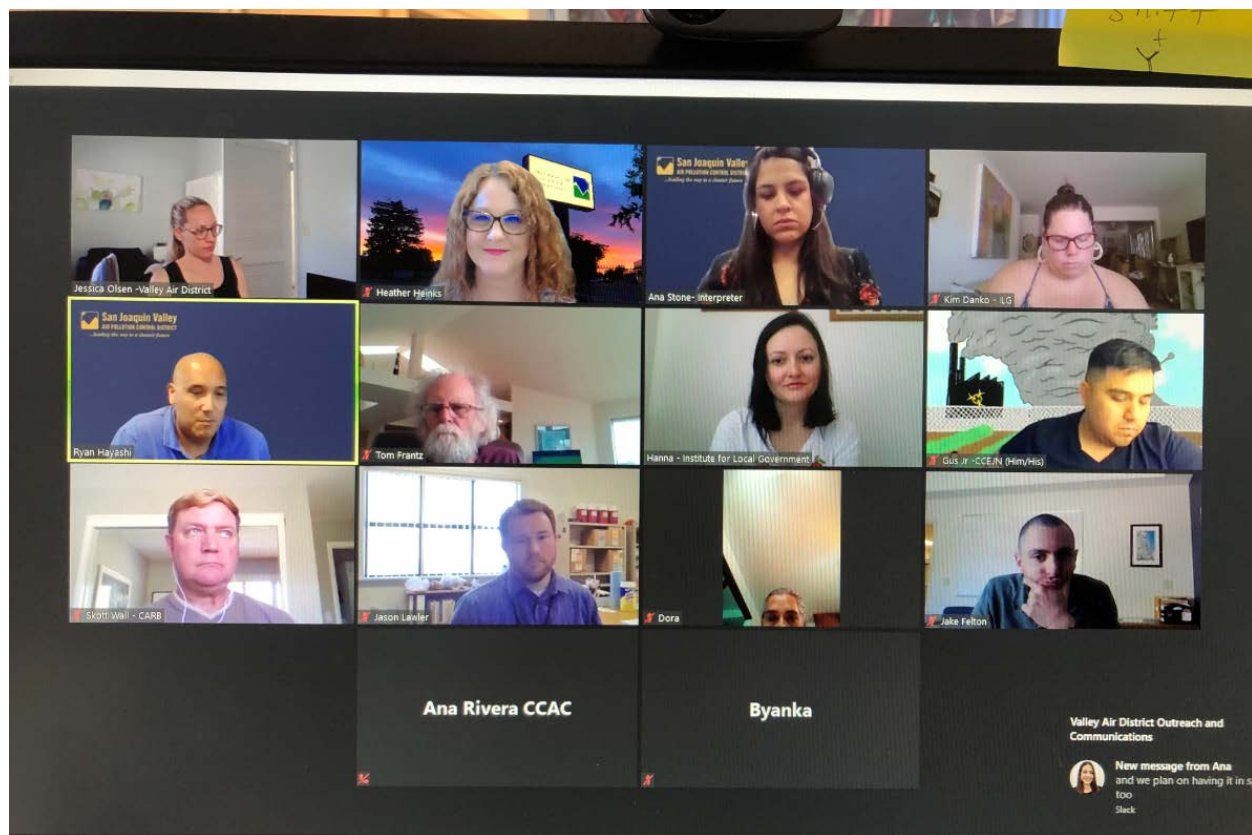
Response to COVID-19 State of Emergency

On March 19, 2020, responding to the growing threat of COVID-19 in the state, California Governor Newsom issued Executive Order N-33-20 directing all individuals living in the State of California to stay home except as needed to maintain continuity of operations of the federal critical infrastructure. The result of this order was that none of the existing CSCs could continue to meet in person.

To address this challenge and to continue moving forward with the important work of implementation of the Shafter CERP, District staff developed and sent an online survey to all CSC members to assess the members' ability and willingness to meet virtually. District staff followed up with phone calls to those members that could not complete the survey or who had indicated technological limitations or concerns on the survey to fully understand CSC members' ability to participate in virtual meetings. In addition, District staff, CARB, resident members of the CSC, Environmental Justice partners serving on the committee, and AB

617 meeting facilitators had multiple conference calls to discuss the challenges related to COVID-19, the results of the surveys and potential solutions based on CSC member feedback. Almost all CSC members indicated a strong desire to continue implementing AB 617 in all three of the selected communities and selected the use of the online meeting application, Zoom, to meet virtually.

Figure 5 Shafter CSC Meeting via Zoom



In May 2020, based on these discussions and the results of the surveys, the District held a virtual practice meeting via Zoom and via phone with the Shafter CSC. During the practice meeting, the District addressed issues such as Spanish interpretation needs and provided important instruction to CSC members on the use of Zoom and explained how the CSC and District would use the various available features to provide a high level of discussion and engagement, which were keys to success for the in-person meetings up through March. The District partnered with a key community advocate in Central California Environmental Justice Network (CCEJN) to provide funding for the procurement of technological resources and training for residents who were otherwise unable to participate in CSC meetings virtually. In May 2020, regular Steering Committee meetings began to be held once again with the Shafter Steering Committee, with all CSC members able to join the online environment.

Community Participation and Resident Stipends

CSCs meet regularly, requiring ongoing participation and a significant time commitment from community residents, business owners, and other stakeholders. In most cases, steering committee meetings occur in the evenings and may draw attendees away from their families and other obligations. Community-resident steering committee members are not paid and do not have expenses reimbursed to participate in the

process or attend these meetings. Providing stipends to help cover some time and expenses associated with attending meetings is an important way to support this critical participation and encourage sustained and meaningful community engagement throughout these processes. Towards that end, and in response to several residents and community advocates on the Shafter CSC, CARB recently developed new statewide guidance encouraging districts to work with steering committees in developing stipend programs for resident members of steering committees.

On August 20, 2020, the District's Governing Board responded to the community needs and approved District staff's recommendation to provide stipends to eligible resident steering committee members, effective retroactively for participation beginning on January 1, 2020. Under the stipend program developed by District staff in consultation with CSC stakeholders across all San Joaquin Valley AB 617 communities, residents who participate as CSC members, who do not receive compensation for their attendance at such meetings, may request a stipend to offset the cost of participating in each regular CSC meeting. Eligible residents may receive a \$75 stipend per CSC meeting when their attendance is verified on the meeting roll-call list or sign-in sheet and were present for at least 75% of the scheduled meeting (equivalent to missing up to 30 minutes of a scheduled 2 hour meeting). Residents will receive stipends for attending up to fifteen (15) CSC meetings in a calendar year, for a total cost of up to \$1,125 per year. The stipends for resident steering committee members would be subject to the availability of state AB 617 funding and approved allocation in the District's Budget on an annual basis.

Figure 6 Bilingual Resident Stipend Enrollment Form

INSTITUTE FOR LOCAL GOVERNMENT™ **San Joaquin Valley**
AIR POLLUTION CONTROL DISTRICT

AB 617 Community Air Protection Program
Resident Stipend Enrollment Form

Member Info

First and Last Name _____

Mailing Address _____ City _____ State _____ Zip Code _____

Please ensure your mailing address is correct as your stipend check will be sent to this address.

E-mail Address _____ Preferred Phone # _____ Is this a cell phone? ☐ Yes ☐ No

Preferred Contact Method (check one) ☐ Phone ☐ Text ☐ Email ☐ Mail

Notes: stipend payment will be via check sent to your mailing address (not about)

Verify

By signing below, I certify that the following information is true, accurate, and complete to the best of my knowledge:

- I am a resident of a AB 617 selected community and serve as a Resident member of the Community Steering Committee.
- I understand that I must be present for 75% of any regularly scheduled Community Steering Committee meeting (equivalent to participating in at least 1 hour and 30 minutes of a scheduled 2 hour meeting).
- I have read and agree with the information contained in the Resident Stipend Policy.
- I am not an employee of the Valley Air District or the Institute for Local Government.
- I give my consent to the Valley Air District to use the information on this Enrollment Form for the purpose of contacting me regarding matters related to the AB 617 Community Steering Committee and determining my stipend eligibility.

Signature _____ Date _____

Submit Submit application to the Institute for Local Government via e-mail at kjess@ivlg.org

INSTITUTE FOR LOCAL GOVERNMENT™ **San Joaquin Valley**
AIR POLLUTION CONTROL DISTRICT

Programa de Protección del Aire de la Comunidad AB617
Solicitud de Inscripción de Estipendio para Residentes

Información del Miembro

Nombre y Apellido _____

Dirección Postal _____ Ciudad _____ Estado _____ Código Postal _____

Por favor asegure su dirección sea correcta, porque sus cheques de estipendio serán enviados a esta dirección.

E-mail Address _____ Teléfono Preferido # _____ ¿Es este un teléfono celular? ☐ Si ☐ No

Método de contacto preferido (seleccione uno) ☐ Teléfono ☐ Texto ☐ Correo Electrónico ☐ Correo

Nota: el pago de estipendio será enviado mediante cheque a la dirección postal que usted proporcione.

Verificar

Al firmar a continuación, certifico que la siguiente información es verdadera, precisa y completa según mi mejor saber y entender:

- Soy residente de una comunidad seleccionada por AB 617 y sirvo como miembro residente del Comité Directivo de la Comunidad.
- Entiendo que debo estar presente en el 75% de cualquier reunión del Comité Directivo de la Comunidad programada regularmente (equivalente a participar en al menos 1 hora y 30 minutos de una reunión programada de 2 horas).
- He leído y estoy de acuerdo con la información contenida en la Política de estipendios para residentes.
- No soy empleado del Distrito del Aire de Valle o del Instituto for Local Government.
- Doy mi consentimiento al Distrito del Aire de Valle para utilizar la información en esta Solicitud de Inscripción con el fin de comunicarme conmigo con respecto a asuntos relacionados con el Comité Directivo de la Comunidad AB 617 y determinar mi elegibilidad para el estipendio.

Firma _____ Fecha _____

Enviar Envíe la solicitud al Institute for Local Government por correo electrónico a kjess@ivlg.org

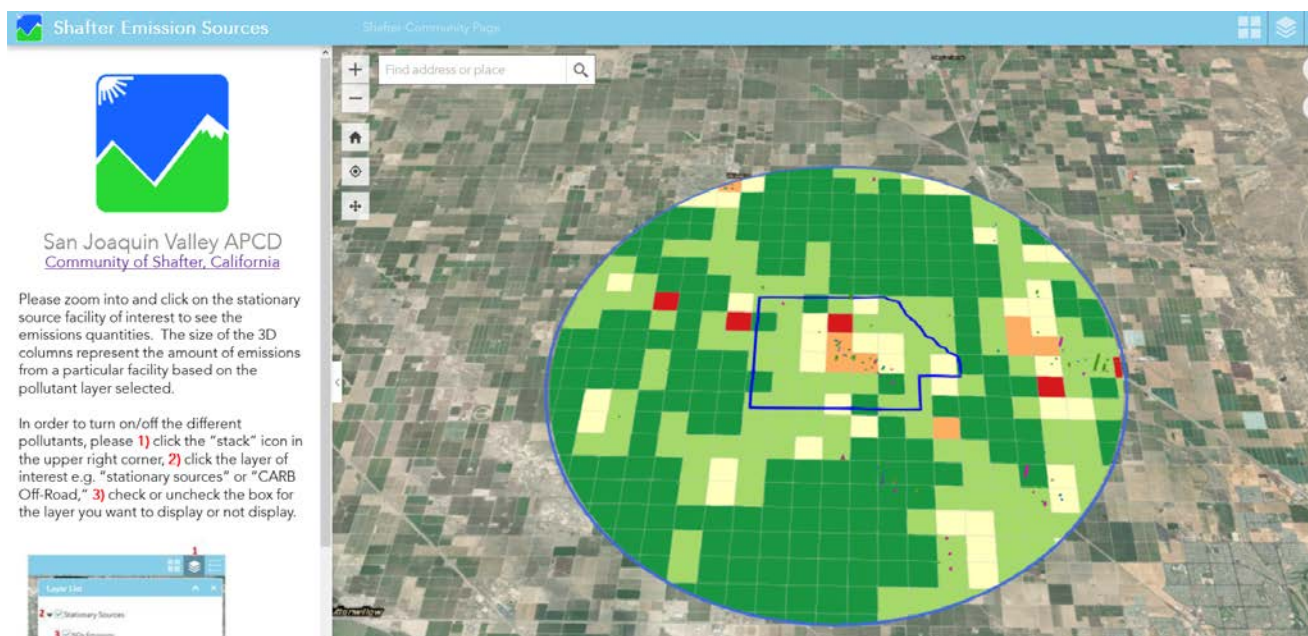
IV. Community Emissions Inventory Development and Ongoing Technical Assessment

Stationary Source Emissions Inventory – AB 617 implementation in the Shafter community includes the development of both a Community Air Monitoring Plan (CAMP) and a Community Emissions Reduction Program (CERP). To assist with the decision-making for both the CAMP and the CERP, and to inform the committees of existing conditions regarding air pollution, the District compiled criteria pollutant and Toxics Air Contaminant (TAC) emissions inventory data for all stationary sources. This emissions inventory compilation process involved the following:

1. Identifying permitted facilities that are within the AB 617 communities;
2. Geocoding permitted facilities (i.e. converting street addresses to coordinates and then verifying the locations);
3. Surveying District permitted facilities and processing the information submitted to the District;
4. Following up with facilities that have not submitted emissions inventory to date;
5. Processing inventory data including quality assurance of the final data before data are submitted to CARB; and
6. Compiling the emissions inventory data from the District's databases for each permitted facilities within the selected communities.

Each year, the District will continually update the stationary source emissions inventory for the Shafter community and incorporate the latest technical assessment on the community-specific webpage.

Figure 7 Interactive Emissions Inventory on CSC Webpage



Area-wide and Mobile Source Emissions Inventory – The District assisted CARB in developing selected community-level emissions inventories for area-wide and mobile sources. CARB has provided the area-wide and mobile source emissions data to date, with oversight and quality assurance provided by the District.

Emissions Inventory Summaries – The District compiled the emissions inventory from stationary sources and mobile sources under a single document. This compilation process and associated data were shared multiple times with the interested public and with the CSC in Shafter, as well as presented in both English and Spanish and made available on each of the District’s selected community websites:

- Emissions Inventory Data for Shafter:
<http://community.valleyair.org/selected-communities/shafter>

V. Community Air Monitoring

When working with the Shafter CSC to develop the Community Air Monitoring Plan (CAMP) and procure air monitoring equipment, the District used the following principles:

- *Expanded capacity at lower cost:* Will provide the District with a broad range of monitoring capabilities for multiple air pollutants without having to unnecessarily spend large sums of money in building traditional stationary air monitoring stations and platforms.
- *Scalable:* Will provide flexibility to customize the air monitoring instrumentation based on the community monitoring needs identified for the selected location. This includes flexibility in the number of pollutants being monitored, monitoring duration and methods. Due to the cost-effectiveness of the proposed design, the assets provide capabilities for multiple platforms to be utilized when needed.
- *Portable:* Will provide mobility ranging from allowing movements from one community to another or movements within a community as needed.
- *Rapid deployment:* Can be assembled rapidly and will require less support infrastructure than traditional stationary air monitoring stations.

As an outcome of this comprehensive evaluation process, the District hired a contractor to oversee the design and development of a number of key platforms and assets to be used in the Shafter CAMP. These resources include several stand-alone PM2.5 monitors, VOC and PM2.5 speciation equipment, 1 multi-pollutant compact air monitoring system, 1 mobile air monitoring trailer, and 1 mobile air monitoring van.

- *Stand-Alone PM2.5 Monitors:* The District is operating operate fixed air monitoring analyzers to measure ambient PM2.5. These monitors are placed in their respective locations for sufficient lengths of time to capture annual and peak PM2.5 pollution trends throughout the community, unless monitoring priorities change and monitor relocation is necessary.



- *Compact Multi-Pollutant Air Monitoring System:* These compact air monitoring systems will operate as semi-mobile platforms. Each platform will be equipped with advanced air monitoring analyzers measuring various pollutants, with the ability to communicate the community-level air quality in real time.



- *Air Monitoring Trailer:* These air monitoring trailer systems will operate as semi-mobile platforms. This platform will be equipped with advanced air monitoring analyzers with the ability to communicate the community-level air quality in real time.



- *Mobile Air Monitoring Van:* The van is ideal for targeting unmonitored areas of concern or regularly surveying the entire community within a short timeframe, allowing the District and the community to identify spatial air pollution trends throughout the region. The air monitoring van can also be useful for measuring pollution from on-road sources, and identifying sources of community-level air pollution. Additionally, the van can be parked in one location for longer periods of time to capture daily or weekly pollution from unmonitored areas within the community.



The fixed and semi-mobile platforms will provide information showing daily variations in pollutant concentrations over long periods of time and will complement the mobile monitoring van use which provides an instantaneous look at measured pollutants when and where the air monitoring occurred. The use of semi-mobile and mobile monitoring platforms as part of this community air monitoring plan will be able to capture the full picture of the community's air pollution concerns.

These air monitoring systems provide real-time readings of the following compounds:

- | | | |
|----------------|---------------------|-----------------|
| • Ozone | • Black Carbon (BC) | • PM2.5 Species |
| • NO, NO2, NOx | • Carbon Monoxide | • BTEX |
| • PM2.5 | • VOC Species | • SO2/H2S |

In addition, the community air monitoring networks also includes sampling equipment to capture air samples into canisters and filters for laboratory analysis to identify the VOC and PM2.5 compounds and species present in the local air. The District has also purchased additional equipment to support the vast collection of analyzers that will be operating in the communities. This support equipment includes zero air generators, calibrators, flow standards, data loggers, and various communication equipment.

These assets and equipment needs continual maintenance and oversight to ensure the successful operation of this new network. Staff will be responsible for operating and maintaining this new network so that it is functional and accurate at all times. These activities include but are not limited to regular maintenance, filter processing and handling, calibrations, and repairs ensuring equipment is operating at its optimal level and producing the most accurate air quality data at all times. In addition, the equipment being operated in the community air monitoring network also needs a large stock of consumables and spare parts to support the equipment being used. This takes ongoing organization, reconciliation, and ordering of parts to keep the equipment successfully operating.

Throughout the past year, the District continued to engage the Shafter CSC on planning and deploying the CSC-designed Community Air Monitoring Plan. As monitoring capabilities continue to be deployed in the community, the District regularly provides updates to the Shafter CSC regarding air quality data analysis and solicits further recommendations for new monitoring sites if deployment issues arise. Consistent with the community recommended CAMP design, air monitoring systems have been fully implemented in certain locations, while other locations are still in progress with varying challenges as described below.

In the community of Shafter, the implementation status of deploying the community air monitoring network is as follows:

- *Shafter Department of Motor Vehicles (PM2.5, VOC/PM2.5 speciation):* The District has placed a real-time PM2.5 monitor (Met One BAM-1022) on the roof of the DMV building on the corner of Pacific Avenue and Walker Street. Operation of this analyzer began in February 2019. Based on significant committee interest, the District deployed a real-time EBAM PM10 monitor to measure any impacts from nearby harvesting operations on the community, which operated from September 2019 through December 2019 and was re-installed and has been collecting data since July 23, 2020. The District also began operating VOC and PM2.5 speciation sampling at this location to begin to build an understanding of the relative comparison between the constituents that make-up the VOC and PM2.5 concentrations being experienced in the community. These speciation measurements began in November 2019. VOC and PM2.5

speciation air monitoring efforts will shift to the trailer to be placed at the North Shafter Farm Labor Camp once this site is established. Data collected from this site is being uploaded to CARB's AQview online portal on a regular basis.

- *Grimmway Academy (PM2.5)*: The District has placed a real-time PM2.5 monitor (Met One BAM-1022) on the roof of a building at Grimmway Academy on the corner of Mettler Avenue and Los Angeles Avenue. Operation of this analyzer began in July 2019. Data collected from this site is being uploaded to CARB's AQview online portal on a regular basis.
- *Sequoia Elementary (Multi-Pollutant Compact System)*: The District has been in discussions with the Richland Unified School District to place a compact monitoring system at Sequoia Elementary on the corner of Mannel Avenue and Fresno Avenue. On August 10, 2020, the Richland School District Board approved the request. In the interim while logistical, electrical, and site preparation work for the installation of the air monitoring equipment is in progress, the air monitoring van is being utilized to monitor areas nearby this location. Additionally, the Department of Pesticide Regulations has agreed to continue monitoring for pesticides at their current site at Sequoia Elementary.
- *Golden Oak Elementary (PM2.5)*: The CSC has identified this location as a source of concern due to the level of heavy duty diesel vehicles in the area and requested the monitor near the intersection. Following this guidance, the proposed location is within a few hundred feet of the intersection. The District has been in discussions with the Richland Unified School District to place a real-time PM 2.5 monitor at Golden Oak Elementary on the corner of S Wall Street and Lerdo Highway. On August 10, 2020, the Richland School District Board approved the request. In the interim while logistical, electrical, and site preparation work for the installation of the air monitoring equipment is in progress, the air monitoring van is being utilized to monitor areas nearby this location.
- *North Shafter Farm Labor Camp (Air Monitoring Trailer)*: The CSC worked closely with the District to recommend locations for the comprehensive air monitoring trailer, which has the ability to monitor for a variety of criteria pollutants and TACs, including speciation of hundreds of compounds. Due to the nature of the siting and power requirements for this platform, the District needed to ensure that the trailer is placed in a fenced-in region within the community where the District can have regular access and can install electrical upgrades to accommodate a 60 Amp 240V connection. The District has been in discussions with the Housing Authority of Kern County, and once a contract is approved by both agencies, monitoring will commence. In the interim, the air monitoring van is being utilized to monitor areas nearby this location. The District is looking at alternative locations nearby while details continue to be developed with the Housing Authority of Kern County, or should an agreement not be reached.
- *Mexican Colony (PM2.5)*: The CSC worked with the District to develop recommend locations for an additional fixed PM2.5 monitor. Due to the nature of the siting and power requirements for this analyzer, the District wanted to ensure that this monitor be installed on a secure roof where District personnel can have regular access. The District has yet to find a site with the proper safety, security, and siting requirements to place a PM2.5 monitor in this region. As an alternative, the District is using the mobile air monitoring van to monitor PM2.5 and other pollutants in the Mexican Colony area.

- *Air Monitoring Van Routes:* In addition to the semi-mobile and fixed platforms, the District has been taking advantage of the considerable air monitoring capabilities of the air monitoring van to measure a variety of pollutants of concern throughout the community. Measurements taken with the air monitoring van will allow the District and the CSC to understand local air pollution in these small communities while also giving the District the ability to rapidly respond to air pollution concerns in other unmonitored regions. Intensive air monitoring operations with the mobile van began in January 2020. In addition, as described earlier, the air monitoring van has enabled the District to commence air monitoring activities in areas that are still awaiting approval for installation of semi-mobile and fixed air monitoring equipment
- *Pesticide Monitoring Locations:* The California Department of Pesticide Regulation committed to working with the District, CARB, and the CSC to determine locations and frequency of pesticide monitoring in the Shafter area. This includes continuing the monitoring campaign at Sequoia Elementary School. A number of additional locations were recommended by the committee for additional pesticide monitoring, including possible monitoring near Maple Elementary School, Farm Labor Camp, and Mexican Colony. DPR will work with these recommendations and continue to keep the Shafter Community Steering Committee informed of any new developments concerning the pesticide monitoring program in the area.

Community Air Monitoring to Date

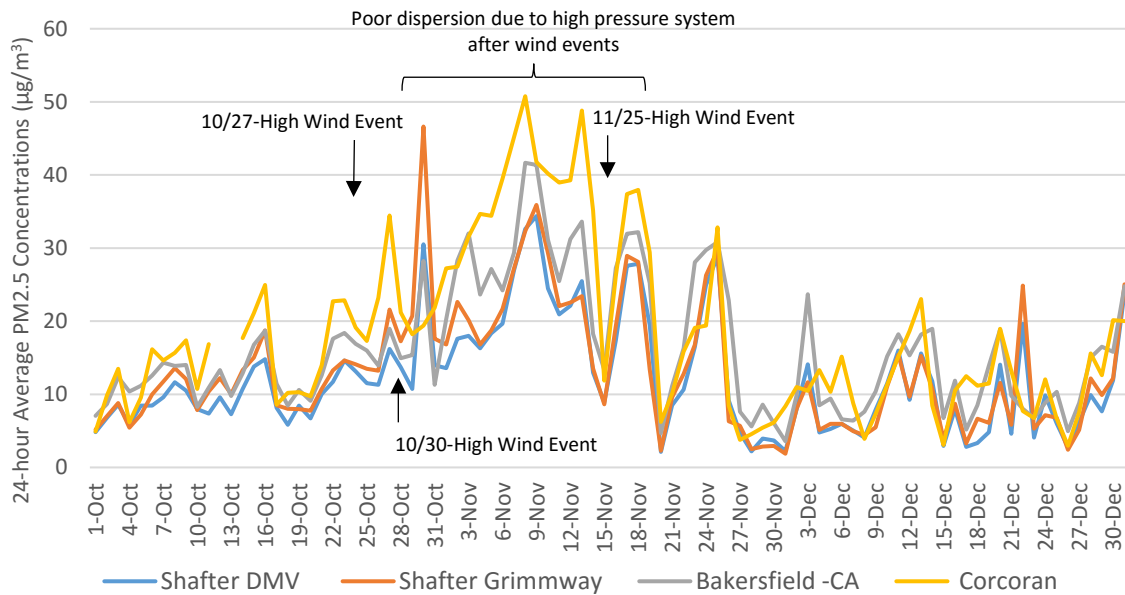
The District has invested an extensive amount of work into implementing the community air monitoring plan as expeditiously as possible, including researching, developing, configuring, deploying, troubleshooting, and maintaining new state-of-the-art high precision air monitoring equipment. This also includes the use of the mobile air monitoring van to take measurements in a variety of locations of interest and to respond to community concerns. The District has also contracted with analytical laboratories to conduct the needed analysis to speciate the VOC and PM_{2.5} samples being taken in the community. In addition, the District has worked closely with organizations to negotiate leases to authorize the deployment of the equipment on site, followed by logistical, electrical, and site preparation work for the installation of the air monitoring equipment.

Although an extensive amount of work has been completed to deploy and operate the air monitoring equipment, the District is still in the early stages of expanding the understanding of air quality in the Shafter community. The continued collection of air monitoring data will be valuable in providing a clearer and more complete picture of the air quality in the community.

The District has been providing regular updates to the Shafter CSC as the air monitoring work has continued to be conducted, and has been compiling detailed comprehensive quarterly reports and making them available on the community webpage for the public to review. The following provides a few examples of the summaries that have been provided so far.

As an example of data collected for Shafter, in the 4th quarter of 2019, we see that daily PM_{2.5} concentration levels are fairly consistent throughout the community when compared to nearby regulatory air monitors, as shown in the chart below.

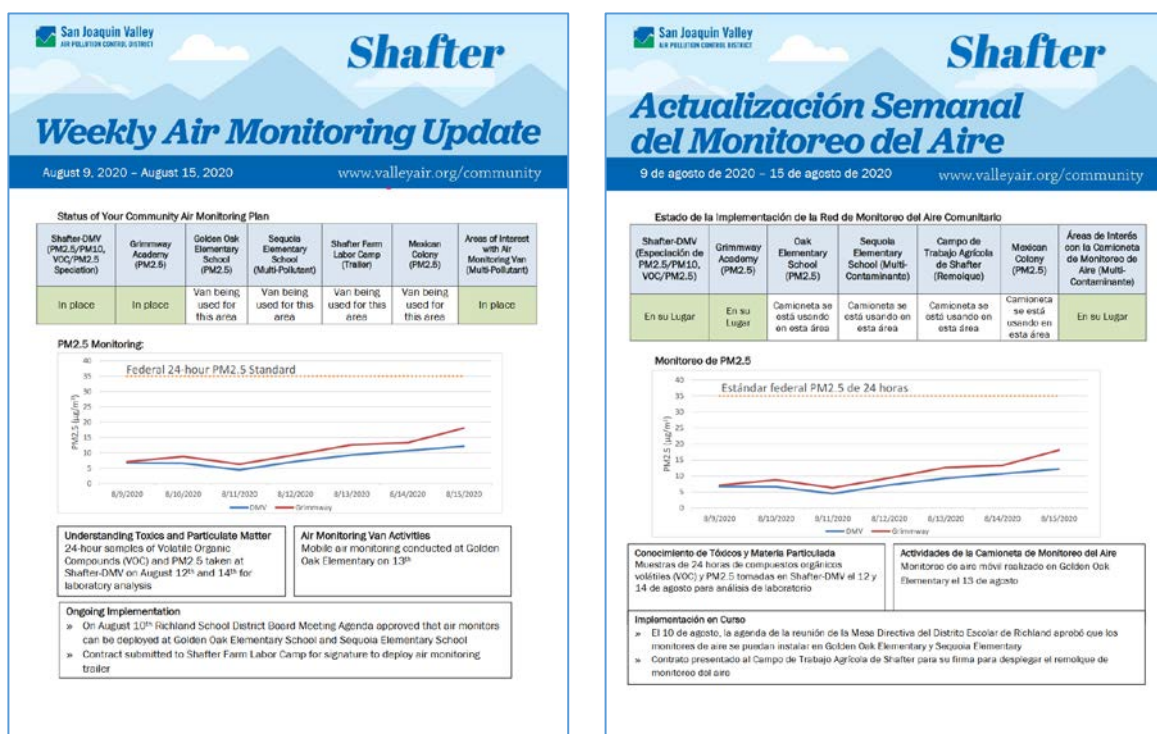
Figure 8 2019 Q4 Daily PM2.5 at Shafter-DMV, Shafter-Grimmway, Bakersfield- California, and Corcoran



In addition, to ensure that the community is fully apprised of the ongoing air monitoring efforts and are receiving the latest air quality information, bilingual weekly updates, comprehensive quarterly reports, and real-time air quality information about the community air monitoring efforts in Shafter are all posted on the community webpage:

<http://community.valleyair.org/selected-communities/shafter/community-air-monitoring/>

Figure 9 Examples of Bilingual Weekly Air Monitoring Update



The CSC requested a subcommittee for air monitoring to address questions they had about the air monitoring being performed. On September 22, 2020, the District held the subcommittee meeting and responded to specific questions provided by CSC members. Air District staff provided responses to the questions provided and there was an additional opportunity for question and answers. In addition, the subcommittee provided additional feedback on locations and timing of air monitoring, which the District took and have instituted the suggestions provided, including conducting more monitoring later in the day.

VI. Compliance and Enforcement Measures

During the development of the Shafter CERP, CSC members identified several primary sources of concern within the community. Based on the analysis of the District's enforcement history within the AB 617 community, several focused enforcement and compliance assistance measures were included in the CERP aimed at enhancing enforcement and education efforts through existing District enforcement programs to address those areas of community concern discussed below. In addition to the implementation of the enforcement measures adopted in the CERP, the District's Compliance Department has continued over the past year to promptly respond to public air pollution complaints in the community. A complete summary of complaints received and enforcement actions taken over the past year is attached to this report.

Enhanced Enforcement of Wood Burning Curtailments

To limit the potential for localized PM2.5 impacts associated with the failure to comply with mandatory episodic wood burning curtailments under District Rule 4901, the District optimizes rule effectiveness to reduce the public health impact of wood smoke, the District dedicates extensive staffing resources to operate a robust Rule 4901 enforcement program covering all aspects of the rule. The District's strategy

focuses on both compliance assistance and enforcement activities. On all curtailment days, the District dedicates significant staffing resources to conducting surveillance in neighborhoods and responding to complaints from members of the public to ensure compliance with the rule. The District treats fireplace surveillance and complaint response as the highest priority enforcement activity.

To address the community concern of residential wood burning, the District conducted expanded residential wood burning surveillance within the 617 community on each "No Burning Unless Registered" and "No Burning for All" day declared (4 hours of surveillance per day) during the 2019-20 wood-burning curtailment season (November 1 to February 29).

Enhanced Enforcement to Reduce Illegal Burning of Residential Waste

To limit the potential for localized PM2.5 and toxic impacts associated with the illegal open burning of residential waste and to address the community concerns in regards to illegal burning, the District conducted 20 hours of targeted surveillance quarterly to enforce the residential open burning prohibitions in District Rule 4103 and Title 17, California Code of Regulations, Section 93113 within the community.

Figure 10 Educational Billboard Placed in Shafter Community



Enhanced Enforcement of Statewide Anti-Idling Regulation

To address the community concern of heavy-duty trucks and to limit the potential for localized PM2.5 and toxic air quality impacts associated with the failure to comply with the state's heavy duty anti-idling idling regulation, the District staff performed quarterly anti-idling surveillance. Locations where surveillance was conducted was based on CSC input provided to the District and CARB. To ensure District staff are focusing in the areas where residents are being impacted, the District has included agenda discussions in CSC meetings to provide updates on these efforts and to receive CSC feedback on areas to be focused on while doing surveillance and will continue to do so moving forward. District staff also spoke directly to businesses, who rely on heavy-duty trucking, identified by the CSC to provide compliance assistance and education regarding the state's anti-idling Airborne Toxic Control Measure

requirements and steps to be taken to ensure compliance. While no violations were discovered during the surveillance performed, the District believes that the outreach provided to businesses in the community will contribute to increased compliance with the state's requirements.

Enhanced Inspection Frequency of Stationary Sources

The District conducts inspections and investigations of both permitted sources to determine compliance with a multitude of health-protective local, state, and federal air quality regulations targeting both criteria and toxic pollutants. These include (1) District rules and permit requirements; (2) statewide Airborne Toxic Control Measures; (3) statewide greenhouse gas regulations; and (4) federal New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, and Maximum Available Control Technology standards. The District closely monitors such sources and strictly enforces applicable requirements. Compliance evaluations are unannounced whenever possible and involve both a physical inspection of the facility and a review of operating and monitoring records.

To address the primary community concerns of oil and gas operations and agricultural sources in addition to other permitted sources of air pollution, the District reviewed the enforcement history of all permitted facilities in the community and each facility having an emissions violation within the last three years. The District committed to performing inspections of these facilities at least twice per calendar year for the next five years or until the facility has four consecutive inspections without an emission violation, whichever comes first. District staff has fully implemented this measure and increased inspections of these facilities is ongoing.

Pilot Training Program for Conducting Self-Inspections at Gas Stations

To address the community concern of oil and gas operations, the District has drafted a training outline, however, due to the close one-on-one interaction that is needed to train gas station owners/operators on conducting hands-on vapor recovery system inspections, training will be postponed until COVID-related restrictions are lifted.

Table 2 Shafter CERP Enforcement Measures Status

No.	Page in CERP	Measure	Description and Status
RB.3		Enhanced Enforcement of Wood Burning Curtailments	<p>District staff will allocate additional resources toward the enforcement of District Rule 4901 episodic curtailment requirements in the Shafter community. District staff will conduct at least 4 hours of surveillance within the Shafter community on each declared curtailment day for the next 5 winter seasons. The District will work with the CSC to focus surveillance efforts in areas where wood burning is more prevalent.</p> <ul style="list-style-type: none"> • The District conducted extensive surveillance during the 2019-20 wood-burning curtailment season (November 1 to February 29) for the purposes of enforcing the prohibitions in District Rule 4901. • Specifically, the District conducted four hours of surveillance in this community on each "No Burning Unless Registered" and "No Burning for All" day. • 361.8 hours of surveillance performed during the 2019/20 Check Before You Burn season. • 23 violations found
RB.5		Enhanced Enforcement to Reduce Illegal Burning of Residential Waste	<p>The District will conduct additional targeted surveillance efforts in the community at least once per quarter for the next 5 years. The District will work with the steering committee to focus surveillance in areas where illegal residential open burning has historically occurred.</p> <ul style="list-style-type: none"> • The District conducted 20 hours of surveillance in the first and second quarters of 2020 for the purposes of enforcing the residential open burning prohibitions in District Rule 4103 and Title 17, California Code of Regulations, Section 93113. • 12 violations found
HD.3		Enhanced Enforcement of Statewide Anti-Idling Regulation	<p>Enhanced enforcement of the statewide anti-idling regulation. The District will partner with CARB to conduct additional targeted anti-idling enforcement efforts in the Shafter community at least once per quarter for the next 5 years. The District and CARB will work with the CSC to identify heavy-duty vehicle idling "hot spots," especially those near schools, to aid in focusing the enforcement efforts.</p> <ul style="list-style-type: none"> • The District conducted extensive anti-idling surveillance in the first and second quarters of 2020 and visited locations identified by the CSC and CARB to have a history of high idling activity.

No.	Page in CERP	Measure	Description and Status
IS.3		Enhanced Inspection Frequency (2 inspections per calendar for 5 years or until 4 consecutive inspections with no violation)	<p>Enhanced stationary source inspection frequency. The District will increase the frequency of inspection at each facility within the Shafter community that has had an emission violation over the past 3 years. These facilities will be inspected at least twice per calendar year for the next 5 years or until the facility has 4 consecutive inspections without an emission violation, whichever occurs first.</p> <ul style="list-style-type: none"> The District reviewed the enforcement history of permitted facilities in this community and has increased inspection frequency for sources with emissions violations to at least twice per calendar year for five years or four consecutive inspections with no additional emissions violations, whichever comes first.
IS.4		Pilot Training Program for Conducting Self-Inspections at Gas Stations	<p>New pilot training program to instruct gas station operators in conducting thorough self-inspections of the vapor recovery systems to aid in the identification and timely repair of vapor recovery system defects. Once developed, the District will provide hands-on training to each of the 15 gas stations in the Shafter community.</p> <ul style="list-style-type: none"> The District has developed the training. Due to the close one-on-one interaction, that training is required, the District is postponing implementation of this measure until such a time that the training can be provided while ensuring the safety of District staff and facility staff.

VII. District Regulatory Measures

During CERP development, and throughout implementation, the Shafter CSC has worked with the District on developing measures that reduce PM_{2.5} and toxic air contaminant emissions that originate from industrial sources in and around the community. Beyond the regulations and stringent permitting requirements that are already implemented Valleywide, the District worked with the CSC to implement regulatory strategies in the following categories.

Figure 11 Identifying Areas of Concern during CSC Meeting



PM2.5 Plan Rule Updates

The District will be analyzing and amending eight District rules to pursue additional emission reduction opportunities beyond BARCT. These rule amendments will be reviewed on the schedule included in the District's 2018 PM2.5 Plan, recently adopted by CARB into the State Implementation Plan and approved by U.S. EPA. Various source categories addressed through this ongoing regulatory development process includes Flares; Boilers, Steam Generators, and Process Heaters; Internal Combustion Engines; Commercial Underfired Charbroilers; Glass Melting Furnaces; and Solid Fuel-Fired Boilers.

District staff have continued moving forward with technical evaluation and public engagement efforts for scheduled regulatory measures, with several District rules scheduled for proposed amendments in the 2020-2021 timeframe. Emissions reductions achieved through the implementation of more stringent limits potentially required through these rule amendments will further contribute to reduced exposure to air pollution in the community. CSC members, members of the AB 617-selected community, and the general public are encouraged to be involved in the upcoming rulemaking process for these rules.

Rule	Stationary/Area Source Category	Rule Development Status
4901	Wood burning fireplaces and heaters	Completed: Adopted/enforced in 2019/20 winter season
4311	Flares	Regulatory and public engagement process currently in progress – amendments scheduled for consideration in 2020
4306	Boilers, steam generators, and process heaters	
4702	Internal combustion engines	
4692	Under-fired charbroilers at commercial restaurants	Regulatory and public engagement process to begin in 2020 - amendments scheduled for consideration in 2021
4354	Glass Melting Furnaces	

4352	Solid-Fuel Fired Boilers	Regulatory and public engagement process to begin in 2020 - amendments scheduled for consideration in 2021
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Implementation of New Criteria and Toxics Report (CTR) Regulation

Under AB 617, CARB is tasked with developing a uniform statewide system for reporting inventories for criteria and air toxic emissions for stationary sources to the public. The uniform statewide system is currently under development. CARB is also leading an effort to develop a new regulation, titled the Criteria and Toxics Reporting (CTR), to establish District permitted stationary source emissions inventory reporting requirements. Since the CTR regulation is being developed by CARB in two distinct phases or articles, the District's efforts on the CTR's development follows CARB's two-phased approach.

Phase I: General Requirements – Since January 2018, District staff has been heavily involved with other Districts and CARB in the development of Phase I of the CTR regulation, *General Requirements*. The District's involvement in this process includes executive management, management, supervisory, and staff-level employees. The type of engagement has been broad, including varying levels of involvement (daily, weekly, biweekly, and monthly activities) ranging from conference calls and other correspondence, to meetings and workshops. The District has met with CARB, industry, and various stakeholders on numerous occasions to address CTR implementation issues. As a result of these multiple consultations, District staff has proposed numerous edits to the proposed CTR language to streamline the implementation of the proposed regulation and further enhance the document.

Phase II: Uniformity (Calculating and Reporting Emissions) – In addition to the development of the General Requirements, the CTR will contain a Uniformity of emissions inventory reporting section that will be used to calculate emissions and report data to CARB, with the end goal of a consistent statewide emissions inventory. The development of the Uniformity section is based on a sector-based or equipment type approach. To date, the sectors being analyzed are power generation, oil and gas, and landfills. Similar to Phase I, the District has been at the forefront of this effort, leading the workgroup that is developing the power generation guidance. District management and staff are also participating in the other two workgroups. The three workgroups have had multiple conference calls and have developed draft guidance documents.

Best Available Retrofit Control Technology (BARCT)

AB 617 required districts that are in nonattainment for one or more air pollutants to adopt expedited schedules by January 2019 for the implementation of Best Available Retrofit Control Technology (BARCT). Significant work was necessary to demonstrate that existing rules met BARCT requirements or, where it was not clear that BARCT requirements were met, identify potential gaps in the existing rules, establish a rule-review schedule, and take the schedule to the District's Governing Board for approval before the deadline. The Board adopted the District's BARCT Analysis Schedule on December 20, 2018. The District is now implementing the plan, and, where necessary, develop rule amendments consistent with state BARCT requirements. The District must also share its findings with the state as CARB compiles the BARCT clearinghouse.

District's expedited BARCT Schedule: <http://community.valleyair.org/best-available-retrofit-control-technology-barct>

Starting in 2019 and continuing in 2020, the District has begun performing a further BARCT analysis of 12 of the 16 rules identified, typically in the order of documented priority. Each District rule and source category are evaluated in comparison to federal and state air quality regulations, and the regulations of other air districts in California and throughout the country.

The District held a public workshop on July 30, 2020 and provided a update to the public on the progress the District has made on the 8 rule evaluations (see published report – [link](#)) and discussed the next steps associated with further evaluating the remaining District Rules for satisfying BARCT requirements. The following table summarizes the status of the BARCT rule evaluations.

Rule	Title	BARCT Status
4454	<i>Refinery Process Unit Turnaround</i>	<i>Meets BARCT</i>
4641	<i>Cutback, Slow Cure, And Emulsified Asphalt, Paving And Maintenance Operations</i>	<i>Meets BARCT</i>
4104	<i>Reduction of Animal Matter</i>	<i>Meets BARCT</i>
4409	Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities	Combined rule development public process to evaluate/implement additional BARCT requirements commencing 2020 - expediting the rulemaking efforts for three of the five rules (Rules 4623, 4624, and 4401) to streamline assessment
4455	Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants	
4623	Storage of Organic Liquids	
4624	Transfer of Organic Liquids	
4401	Steam-Enhanced Crude Oil Production Wells	
4702	Internal Combustion Engines (VOC only)	BARCT evaluation in progress and scheduled for 2020 completion
4694	Wine Fermentation and Storage Tanks	BARCT evaluation in progress and scheduled for 2020 completion
4603	Surface Coating of Metal Parts and Products, Plastic Parts and Products, and Pleasure Crafts	BARCT evaluation in progress and scheduled for 2020 completion
4601	Architectural Coatings	BARCT evaluation in progress and scheduled for 2020 completion
4566	Organic Material Composting Operations	BARCT evaluation scheduled for 2021 completion
4625	Wastewater Separators	BARCT evaluation scheduled for 2021 completion
4621	Gasoline Transfer Into Stationary Storage Containers, Delivery Vessels, and Bulk Plant	BARCT evaluation scheduled for 2021 completion
4402	Crude Oil Production Sumps	BARCT evaluation scheduled for 2021 completion

The District is also working with the affected facilities to identify the potential control options that may result in additional emissions reductions. The affected facilities are providing the District with technical information and costs related to potential control options to determine the feasibility of implementing each option identified.

Technology Clearinghouse

AB 617 requires CARB to establish and maintain a statewide clearinghouse that identifies the best available control technology, best available retrofit control technology for criteria air pollutants, and related technologies for the control of TACs.

Since 2019, District staff have been participating in bi-weekly conference calls with CARB and other air district staff to discuss the proposed changes to the statewide clearinghouse and the new database and website interface that CARB and their programming consultant is creating. Through collaborative discussions, the District has provided input on facility and pollutant definitions; source category, subcategory, and classification differences; public usability and device specificity; and many other topics. To date, CARB has published an initial Technology Clearinghouse webpage¹ and has published, the following prototype tools to support public needs while the remainder of the Technology Clearinghouse system is developed:

- Next Generation Technology (Released November 2019) - [Emergency Back-up Power Options for Residential Applications](#)
- Rules (Released March 2020) - [Current Air District Rules Tool](#)
- Next Generation Technology (Released June 2020) - [Emergency Back-up Power Options for Commercial Applications](#)

Additional meetings have been scheduled and significant work and testing of the new database, tools, and website is still being performed.

AB 2588 Air Toxic Hot Spots

The District's integrated air toxics program fulfills the state AB 2588, California Air Toxics Hot Spots, mandates, which are aimed at quantifying and assessing localized health risk, notifying affected residents, and reducing risk from facilities with high risk caused by air toxic emissions. The state Hot Spots Act, is only one part of the District's comprehensive program to regulate air toxics in Valley communities. To achieve maximum efficiency and effectiveness, the District operates an integrated air toxics program that implements local, state, and federal mandates.

¹ <https://ww2.arb.ca.gov/our-work/programs/technology-clearinghouse>

Table 3 Shafter CERP Regulatory Measure Status

No.	Page in CERP	Measure	Description and Status
IS.1		Flares-Amend Rule 4311	<p>Amend Rule 4311 (Flares) to require ultra-low NOX controls where technologically and economically feasible. This strategy would adopt new requirements to District Rule 4311 for the application of ultra-low NOx flare emissions limitations for existing and new flaring activities to the extent that such controls are technologically achievable and economically feasible. The District has already begun the public rule development process and has an anticipated adoption date in 2020.</p> <ul style="list-style-type: none"> • District continuing to conduct public process to amend Rule 4311 (Flares). Recent public workshop held on July 30, 2020. Workshop notice was sent out to steering committees to encourage their participation. Rule action planned in 2020.

VIII. Land Use Measures

During CERP development, and throughout implementation, the Shafter community has expressed concerns about planned industrial development, specifically distribution centers planned which can result in increased exposure to emissions for residents that live near heavy duty trucking corridors and major thoroughfares in the community. To address community member concerns, measures were included in the CERP that focused on strategies to reduce conflicting land uses in the community, as well as transportation strategies that reduce exposure to mobile source emissions resulting from land use decisions.

With active participation from Kern County and the City of Shafter in community meetings, the District and the CSC have been able to continue to work with the appropriate land use agencies to continue to move CERP measures forward.

Table 4 Shafter CERP Land Use Measures Status

No.	Page in CERP	Measure	Description and Status
RD.1		Road Dust: Evaluate increasing frequency of street sweeping	<p>The District, through partnerships with other entities (including City of Shafter, Kern County, and Kern Council of Governments), will work to identify opportunities to expand and improve street sweeping efforts in the community.</p> <ul style="list-style-type: none"> District is coordinating with land use agencies to present and discuss implementation of the measure to CSC.
RD.2		Road Dust: Road paving and sidewalk installations	<p>Road and sidewalk improvements. The District will work with city and county partners to provide up to \$2.775 million in match funding to leverage available local, state, and federal funding sources for road and sidewalk improvement projects in the community. The District will partner with the City of Shafter and Kern County to notify them as other grant funding opportunities for road paving, road resurfacing, and sidewalk improvements become available. The District will provide support to the City and County in paving grant applications through letters of support and technical support, as requested.</p> <ul style="list-style-type: none"> District is coordinating with land use agencies to present and discuss implementation of the measure to CSC
HD.9		Heavy Duty Truck Rerouting	<p>Heavy duty truck rerouting. The District will work with the City, County, Caltrans, and all other appropriate land-use and transportation agencies to communicate this Steering Committee suggestion. The City of Shafter will review truck travel patterns within the Shafter area and work toward a system of truck routes that facilitates efficient goods movement while minimizing proximity of truck travel to sensitive receptors, as part of its Environmental Justice General Plan Element.</p> <ul style="list-style-type: none"> District is coordinating with land use agencies to present and discuss implementation of the measure.

No.	Page in CERP	Measure	Description and Status
LU.1		New Construction: Provide assistance during the CEQA process	<p>Provide assistance during the California Environmental Quality Act (CEQA) process. The District will work with the City and County on active CEQA coordination with the land use agencies and project proponents for proposed projects within the Shafter Community and surrounding area.</p> <ul style="list-style-type: none"> • District working on developing language for the CEQA commenting process and currently working on a plan to further coordinate with the City of Shafter and Kern County. • District coordinating with land use agencies and project proponents at the early stage, thus allowing to further enhance projects by incorporating clean air measures at the early stage of the planning process.
LU.2		Land Use/Sustainable Development: Implement Projects that Reduce VMT	<p>Support projects that reduce vehicle miles traveled (VMT). Provide District support for projects that reduce VMT, including advocacy for competitive project proposals and potential match funding support to eligible projects, as appropriate, through existing District programs (i.e. bicycle path infrastructure, electric vehicle charging infrastructure, vanpooling and ridesharing). The District plans to work with City of Shafter to obtain feedback on opportunities for community members to be involved in land use planning processes. City of Shafter has committed to notify community members about upcoming meetings that address the development of the Environmental Justice element of the City's General Plan.</p> <ul style="list-style-type: none"> • District working on developing language to be incorporated in the District CEQA commenting process. • More specifically, the language will be aimed at providing support to projects that result in VMT reduction. • District will participate in City's General Plan development process when the process begins • The District plans on working with City of Shafter and community members to develop a procedure and identify opportunities for community members to be involved in land use planning processes.

No.	Page in CERP	Measure	Description and Status
LU.3		Setbacks for New Oil Drilling	<p>Setbacks for new oil well drilling. The District will work with the City, County, and DOGGR to communicate this Steering Committee suggestion (no new oil wells with 2500 feet of residents, schools and all environmental sensitive locations).</p> <ul style="list-style-type: none"> • The District has reviewed the environmental impact report and the related health risk assessments study prepared for the EIR regarding the County's oil and gas production ordinance. • The District will continue to ensure that projects do not result in significant impact on the health of residents, including sensitive receptors. • In addition, the City of Shafter has committed to reviewing the EIR and health studies prepared by the County for its oil and gas production ordinance and to considering standards for preparation of health risk assessments to avoid creation of significant impacts from oil production facilities on sensitive uses.
LU.4		Construction Emissions: High Speed Rail Construction	<p>Reduce emissions associated with the construction of the high speed rail (HSR) within the 7-mile radius around the community of Shafter. The District will work with CARB and California High Speed Rail Authority to communicate community concerns and receive feedback on appropriate processes to address suggestion that HSR construction within the 7-mile radius use Tier 4 engines in all off-road construction equipment.</p> <ul style="list-style-type: none"> • District working on establishing an internal process for communicating community concerns on the High Speed Rail project. • The District will reach out to the HSR Authority to discuss the community suggestion for the HSR construction to use Tier 4 engines within the 7-mile radius.
LU.5		Funding for Bike Lanes	<p>Funding for bike path construction. This strategy would provide incentive funding for the development and construction of Class 1, Class 2 and Class 3 bicycle paths, lane striping and routes. The proposed funding level of this measure is \$1,000,000.</p> <ul style="list-style-type: none"> • District coordinating with the Land Use Agency to present and discuss implementation of the measure. District is working on developing language for the CEQA commenting process.

IX. Pesticide Measures

The CSC identified this measure as one of their main priorities and as such, the District focused on collaborative efforts to move this measure forward, working in collaboration with the CSC, CARB, and the California Department of Pesticide Regulation (DPR) to reduce pesticide emissions, exposure, and additional notification to community residents. Since adoption and approval of the Shafter CERP, DPR has committed to continuing pesticide monitoring within the AB 617 boundary, begun discussions with the Shafter CSC on the development of a 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. Since February 2020, DPR has attended every Shafter CSC meeting to provide updates on progress towards meeting the state's CERP commitments. Recently, at the request of the CSC, the District, DPR, and CARB convened a subcommittee with CSC members and the Kern County Ag Commissioner to have more regular, detailed communication about the implementation of this CERP measure.

Table 5 Shafter Pesticide CERP Measure Status

No.	Page in CERP	Measure	Description and Status
A.10		Pesticide Measures	<p>Reducing exposure to pesticides in the community. The District has forwarded all pesticide-related emission reduction strategy suggestions to DPR and CARB, and has received a commitment from DPR to implement specific measures to reduce community exposure to pesticides, as follows: Monitoring (Current Monitoring, Monitoring Expansion); Pesticide Notification System; Emission Reductions; Additional Resources</p> <ul style="list-style-type: none"> • Shafter was included as part of a DPR pesticide reduction pilot program and study, requiring applications of 1,3-D to adhere to DPR proposed mitigation options beginning in September 2020 and will last for one year • The District has worked to bring DPR to every CSC meeting to listen to community feedback and provide updates on pilot study and electronic notification updates • DPR and CARB convened a CSC subcommittee in September 2020 and plan to regularly work with the CSC on implementing these measures

X. Incentive Measures

The approved CERP includes numerous incentive-based measures identified and prioritized by the CSC. These measures include a variety of projects and programs that are already approved for funding through CARB's Community Air Protection (CAP) Guidelines, including electric school bus replacement, school filtration, truck and off-road equipment replacement and alternative fuel infrastructure. The District had been working closely with the CSC on prioritizing and implementing these measures as feasible throughout the community. The CERP also includes numerous measures that fall outside of the pre-approved program categories included in the CAP Guidelines. However, the CAP Guidelines include a process to develop project plans for these new and innovative CERP incentive measures for funding utilizing available funding. The CSC is notified, via email and during CSC meetings, as new project plans are developed and submitted to CARB for approval to be able to provide input and feedback on any requested changes, including possible changes to the recommending funding amounts. These project plans are posted on the District's Community webpage to encourage CSC comments and feedback during the process, allowing CSC members to suggest changes to incentive measure funding amounts. The District is currently developing project plans for a variety of programs including the Burn Cleaner Woodstove Change-out Program and the Drive Clean in the San Joaquin Vehicle Repair and Replacement Program.

For more complex programs and programs of specific CSC interest, subcommittees comprised of interested CSC members and other stakeholders have been convened to guide and inform the development of these measures. This includes subcommittees for the school filtration and electric school bus replacement programs.

For all incentive-based measures, the District will closely monitor program demand and keep the CSC members apprised and in the event that a measure is over or undersubscribed, the District will work with them to reallocate funding. The District will continue to work closely with the CSC throughout this process to prioritize funding in areas and programs of specific interest to the CSC and incorporate new program ideas based on CSC member feedback and as feasible.

Figure 12 Educational Incentive Posters Used during CSC Meetings

Table 6 Shafter CERP Incentives Measures Status

No.	Page in CERP	Measure	Description and Status
A.2		Provide Incentives for Low-Dust Nut Harvesters	<p>Incentive program for replacing conventional nut harvesting equipment with low-dust harvesting equipment. The goal of this action is to replace up to 25 pieces of conventional nut harvesting equipment operating in and around the community with new, low-dust harvesting equipment. The proposed funding amount of \$2,500,000 would cover up to 75% of the cost of replacing up to 25 pieces of agricultural equipment at an average incentive of \$100,000 each. Reducing the amount of dust from almond harvesting has been a priority for the CSC and towards that end, the District prioritized the project plan and submitted it for approval to CARB.</p> <ul style="list-style-type: none"> District staff submitted the project plan to CARB for approval under CAP guidelines and posted the project plan on the AB 617 webpage for additional CSC feedback. District conducting outreach to potential applicants. District worked with CARB to restart PM10 monitoring campaign at DMV site before almond harvesting season

No.	Page in CERP	Measure	Description and Status
A.3		Provide Incentives for Alternatives to Agricultural Burning (chipping/soil incorporation)	<p>Incentive program for deploying on-field alternatives to the open burning of agricultural materials. This strategy would provide enhanced access to District's Alternative to Agricultural Open Burning Incentive Program for growers within Shafter and the surrounding area by providing access to \$1,000,000 in dedicated funding. This strategy would fund up to 2000 acres of alternative practices. Reducing the amount of agricultural burning was a high priority and as such, the District prioritized completion of the required project plan to CARB.</p> <ul style="list-style-type: none"> District staff submitted the project plan to CARB for approval under CAP guidelines and posted the project plan on the AB 617 webpage for additional CSC feedback.
A.5		Provide Incentives to Replace Diesel and Natural Gas Agricultural Pump Engines with Electric Motors	<p>Incentive program for replacing older diesel or natural gas-fired agricultural irrigation pump engines with electric motors. The goal of this action is to replace up to 10 diesel or natural gas-fired agricultural irrigation pump engines operating in and around the community with new electric motors, including capital funding for equipment and line extension. The proposed funding amount of \$230,000 would cover up to approximately 60% of the cost of replacing up to 10 existing irrigation pump engines at an average incentive of \$23,000 each.</p> <ul style="list-style-type: none"> Priority level High with CSC. Program guidelines already eligible for funding with CAP funding. District currently conducting outreach to potential applicants and funding projects submitted to District.

No.	Page in CERP	Measure	Description and Status
A.6		Provide Incentives to Replace Diesel Ag Equipment (tractors) with Cleanest Available Equipment	<p>Incentive program for replacing older diesel agricultural equipment with cleanest available equipment. The goal of this action is to replace up to 100 pieces of agricultural equipment operating in and around the community with new, cleanest available technology. The proposed funding amount of \$5,000,000 would cover up to 60% of the cost of replacing up to 100 pieces of agricultural equipment at an average incentive of \$50,000 each.</p> <ul style="list-style-type: none"> • Priority level high with CSC. • Program guidelines already eligible for funding with CAP funding. • District currently conducting outreach to potential applicants and funding projects submitted to District.
RB.1		Provide Enhanced Incentives to Replace Wood Burning Devices	<p>Incentive program for the replacement of existing wood burning devices and pellet stoves with natural gas or electric technologies. This strategy would provide enhanced financial incentives to replace existing wood burning devices and pellet stoves with natural gas or electric technologies. Incentives available to Shafter residents would include \$3,000 for natural gas devices and \$4,000 for an eligible electric heating device. The goal of this measure is to replace 200 wood burning devices in Shafter with natural gas or electric alternatives, including heat pumps, at an expected cost of \$600,000.</p> <ul style="list-style-type: none"> • District staff are currently working on the guidelines based on the CARB's draft Community Air Protection incentive guidelines provided to District staff on June 2, 2020. • Estimate 2-3 weeks for submittal to CARB for approval. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment.

No.	Page in CERP	Measure	Description and Status
LG.1		Provide Enhanced Incentives for Replacement of Residential Lawn and Garden Equipment	<p>Incentive program for the replacement of residential lawn and garden equipment. This strategy will provide Shafter residents with increased incentives for the replacement of residential lawn care equipment, with an increased incentive amount for residents within the community. The goal is to replace 280 gas powered units at an expected cost of \$100,000.</p> <ul style="list-style-type: none"> District staff submitted the project plan to CARB for approval under CAP guidelines and posted the project plan on the AB 617 webpage for additional CSC feedback.
LG.2		Enhance Outreach and Access to Incentive Funding for Commercial Lawn and Garden Equipment	<p>Incentive program for the replacement of commercial lawn and garden equipment. This strategy will provide commercial lawn care providers operating in Shafter with enhanced outreach and access to available incentives offered by the District. The goal is to replace 30 pieces of commercial grade gas powered lawn and garden equipment at an expected cost of \$40,000.</p> <ul style="list-style-type: none"> District staff submitted the project plan to CARB for approval under CAP guidelines and posted the project plan on the AB 617 webpage for additional CSC feedback.

No.	Page in CERP	Measure	Description and Status
SD.1		Seek incentives for local businesses and homeowners to install solar power and energy storage	<p>Incentive program for installing solar in the community. The District will commit up to \$1.5 million in District funding to incentivize the installation of residential solar and zero and near-zero emission appliances, in the City of Shafter, by committing a 10% match to state funding for residential solar and zero and near-zero emission appliances in the Community. The total state and District funding under this proposal would total \$15 million for residential solar and zero and near-zero emission appliances in Shafter, with District funding leveraging new PUC/CARB funding programs for solar and zero and near-zero emission appliance installations. The District will help to coordinate meetings with, and actively advocate for funding from, entities that offer incentives for solar photovoltaic (PV) installation and other green energy programs that have the potential to reduce utility rates in the community.</p> <ul style="list-style-type: none"> • District reached out to other agency partners to bring programs to residents, working with CARB to establish funding structure. • Solar measure discussion on August 10 CSC Meeting with CPUC, Grid Alternatives, and Community Action Partnership of Kern (CAPK). • Information about community and residential solar programs provided during and after CSC meeting. • Discussed options for conducting outreach to community members with CSC, recommended course of action was to develop a postcard to be sent to Shafter community residents and District staff are currently working with CPUC, Grid Alternatives, CAPK on the outreach postcard. • District has also developed language for District commenting letters under CEQA.

No.	Page in CERP	Measure	Description and Status
CC.1		Incentives to reduce PM from commercial underfired charbroilers	<p>Incentive program for installing advanced emissions control equipment on underfired charbroilers. This strategy would provide funding for the installation of control equipment at one Shafter restaurant to reduce particulate emission from underfired charbroilers, and to provide enhanced outreach and education to local restaurants regarding health impacts and availability of funding for installation of controls. Proposed funding amounts of \$150,000 would cover up to 100% of the cost of installing emissions control equipment.</p> <ul style="list-style-type: none"> • District working on outreach to restaurants in the community of Shafter to solicit interest in the District's incentive program for the installation and operation of emissions control technology for under-fired charbroilers. • District has developed language for District commenting letters under CEQA.
HD.1		Provide Enhanced Incentive Funding for Zero and Near-Zero Emission Technology	<p>Incentive program for heavy duty truck replacement with zero and near zero emission technology. This strategy would provide enhanced outreach and access to incentive funding for zero and near-zero emissions clean truck technologies that operate within the community. This measure would replace 40 older, heavy duty diesel trucks operating in Shafter with zero or near zero emission technology at an expected cost of \$4,000,000.</p> <ul style="list-style-type: none"> • District staff are currently working on the guidelines based on the CARB's draft Community Air Protection incentive guidelines provided to District staff on June 2, 2020. • Estimate 4-6 weeks for submittal to CARB for approval. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District has developed language for District commenting letters under CEQA.

No.	Page in CERP	Measure	Description and Status
HD.2		Deployment of Zero Emission Yard Trucks and Truck Refrigeration Units (TRUs)	<p>Incentive program for the deployment of clean yard trucks, transportation refrigeration units, and relative infrastructure. This strategy would provide incentive funding for operators to replace their diesel powered yard trucks or transport refrigeration units with zero emission technology. The goal is to deploy 10 new zero emission yard trucks or transportation refrigeration units along with the associated infrastructure at a cost of \$1,500,000.</p> <ul style="list-style-type: none"> • District staff are currently working on the guidelines based on the CARB's draft Community Air Protection incentive guidelines provided to District staff on June 2, 2020. • Estimate 4-6 weeks for submittal to CARB for approval. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District has developed language for District commenting letters under CEQA.
HD.5		Incentive Program for Transit Bus Replacement (for Dial-a-Ride)	<p>Provide incentives to purchase two electric Dial-a-Ride transit vehicles. The goal is to provide up to \$400,000 for the purchase of two electric vehicles to be utilized in dial-a-ride service within and surrounding the City of Shafter.</p> <ul style="list-style-type: none"> • Priority level medium with CSC. • District staff are currently working on the guidelines based on the CARB's draft Community Air Protection incentive guidelines provided to District staff on June 2, 2020. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment.

No.	Page in CERP	Measure	Description and Status
HD.8		Support Planning and Development of Clean Fueling Infrastructure: Alternative Fuel Fueling Station	<p>Support planning and development of clean fuel infrastructure. The goal is to work closely with businesses, public agencies and fueling providers to support and incentivize the development of clean-vehicle fueling infrastructure. This includes increased outreach to businesses and public agencies operating vehicles within the community as well as prioritized funding for projects that serve vehicles operating in the community. Depending on the size, throughput and configuration of the fueling infrastructure, the proposed funding amount of \$1,000,000 would incentivize the development of one new natural gas fueling station.</p> <ul style="list-style-type: none"> • Already held solicitation, identified potential projects near community. • Working on contracting these projects. • Already eligible under CAP guidelines, so these can move forward quickly. • District is working on developing language for District commenting letters under CEQA.
HD.4		Enhance Outreach and Access to Incentive Funding for New School Buses	<p>Incentive program for replacing older diesel school buses with zero or near-zero emission school buses. The goal is to replace up to 10 school buses, operated by Richland School District and/or Kern High School District with zero-emission battery-electric school buses. The proposed funding amount of \$4,000,000 would cover up to 100% of the cost of replacing up to 10 diesel school buses with electric buses at \$400,000 each.</p> <ul style="list-style-type: none"> • Already eligible for CAP funds. Replaced several school buses for Richland School District. • Subcommittee formed, met during kickoff meeting in July 2020 • Guidelines are already complete for this project category. • Funding available immediately. • Need to work with CSC to identify additional bus replacement projects within the community. • District is working on developing language for District commenting letters under CEQA.

No.	Page in CERP	Measure	Description and Status
HD.7		Incentives for Railcar Movers/Switchers	<p>Incentive program for replacing older diesel railcar movers and switcher locomotives with new clean-engine technology. The goal is to replace up to 3 older, high-polluting railcar movers and/or switcher locomotives operating within and surrounding the community. The proposed funding amount of \$4,100,000 would cover up to 95% of the cost of replacing up to 3 diesel railcar movers and/or switcher locomotives at \$1,340,875 each.</p> <ul style="list-style-type: none"> • Already eligible for CAP funds. • We have already been working with companies in community to identify potential projects. • Need further input from CSC members on potential projects. • Working with CARB on getting expedited final approval to fund under CAP based on the CARB's draft Community Air Protection incentive guidelines provided to District staff on June 2, 2020. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for community steering committee members to review and comment. • District has developed language for District commenting letters under CEQA.
PF.1		Enhance Outreach and Access to Incentive Funding for Public Fleet Vehicles	<p>Incentive program for replacing older public fleet vehicles with new, clean-vehicle technology. The goal is to work closely with public agencies, including City of Shafter and Kern County, to replace vehicles through the District's Public Benefit Grants Program. This includes increased outreach to public agencies operating vehicles within the community as well as prioritized funding for projects in the community. The proposed funding amount of \$100,000 would cover the replacement of up to 5 vehicles at an incentive of \$20,000 each.</p> <ul style="list-style-type: none"> • Prioritized by CSC as one of their low priorities. • Assigned staff to develop project plan, submit to CARB for approval to utilize CAP Funding. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District is working on developing language for the CEQA commenting process.

No.	Page in CERP	Measure	Description and Status
C.1		Host Tune-In Tune-Up Events within Community	<p>Incentive program to host a local Tune In Tune Up event to reduce emissions from older, high polluting cars. This strategy would provide funding for a "Tune In Tune Up" event in the community of Shafter and funding for vehicle repairs (up to \$850 in vehicle emissions related repairs). The overall cost of this measure is \$400,000 which would provide funding for the event related expenses as well as 500 vehicle repairs.</p> <ul style="list-style-type: none"> • Working with District implementation partner (Valley CAN) to schedule a weekend repair/screening event within the community. • Need to get input from CSC on event, or enhanced outreach focus for online virtual event model based on COVID - 19 restrictions. • Potentially, all members of AB 617 area would be offered a repair voucher directly if their vehicles meet criteria. • District staff are currently working on the guidelines based on the CARB's draft Community Air Protection incentive guidelines provided to District staff on June 2, 2020. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District is working on developing language for District commenting letters under CEQA.

No.	Page in CERP	Measure	Description and Status
C.2		Incentive Program for the Replacement of Passenger Vehicles with Battery Electric or Plug-in Hybrid Vehicles	<p>Incentive program for the replacement of passenger vehicles with battery electric or plug-in hybrid vehicles. This strategy would provide increased levels of incentive funding to Shafter residents to replace their older vehicles with battery electric or plug in hybrid vehicles. This measure would provide \$6,000,000 for the replacement of up to 300 vehicles. In addition, the District would work with a local partner to deploy 20 battery electric vehicles with a range of at least 150 miles and associated charging infrastructure for residents who would like to ‘check out’ battery electric vehicles to ensure that a battery electric vehicle would meet their needs.</p> <ul style="list-style-type: none"> • District and CARB issue updated inventory information for June 1, 2020 discussion with CSC to help develop baseline for this measure • Assigned staff to develop project plan, submit to CARB for approval to utilize CAP Funding. • Once submitted, the District will post the guidelines on the District’s AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District is working on developing language for District commenting letters under CEQA.
C.3		Incentive Program for Installation of EV Charging Infrastructure	<p>Incentive program for installation of electric vehicle charging infrastructure. This strategy would provide incentive funding to private and public entities to provide publically accessible charging infrastructure in the Shafter community. This strategy would utilize the existing Charge Up program guidelines and funding amounts. This goal of this measure is to install up to 78 electric vehicle chargers, including Level 2 and Level 3 chargers, in Shafter at an expected cost of up to \$850,000.</p> <ul style="list-style-type: none"> • Prioritized by CSC as one of their medium priorities • Assigned to staff to develop project plan, submit to CARB for approval to utilize CAP Funding. • Existing District program. • Once submitted, the District will post the guidelines on the District’s AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District is working on developing language for the CEQA commenting process.

No.	Page in CERP	Measure	Description and Status
C.4		Increased Educational Training for EV Mechanics	<p>Incentive program for educational training for electric vehicle mechanics. This strategy would provide up to \$30,000 for 2 alternative fuel mechanic training courses provided by an appropriate entity. Additional outreach will be conducted to identify projects that would provide a benefit to the Shafter community.</p> <ul style="list-style-type: none"> • Prioritized by CSC as one of their medium/lower priorities. • Assigned to staff to develop project plan, submit to CARB for approval to utilize CAP Funding. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment. • Already approved District program through REMOVE Program.
C.5		Incentive Program for Launch of Car Share Program	<p>Incentive program for the launch of a car sharing program in the Shafter community. This strategy would provide funding for a partnering car share provider to launch a program in the Shafter community. The District would leverage experience with existing ride share programs operating in the Valley in order to expand to the Shafter area. This measure would provide \$500,000 in funding for the electric vehicles, related infrastructure and subsidies to help minimize the initial cost to the end user.</p> <ul style="list-style-type: none"> • Prioritized by CSC as one of the low priorities • Assigned to staff to develop project plan, submit to CARB for approval to utilize CAP Funding. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District is working on developing language for the CEQA commenting process.

No.	Page in CERP	Measure	Description and Status
IS.2		Evaluate feasibility of funding further emissions reductions from oil and gas production operations	<p>Evaluate feasibility of funding further emissions reductions from oil and gas production operations. This strategy would evaluate the feasibility of creating an incentive program for oil and gas production operations to fund the installation of technologies that further reduce emissions. The District will work with oil and gas production operations in the Shafter area to identify potential emission reduction opportunities, such as electrifying pump jacks that are currently operating with internal combustion engines. The District will identify available grant funding to assist implementation.</p> <ul style="list-style-type: none"> The District has identified potential emission reduction opportunities for oil and gas production operations. The District is continuing to evaluate the feasibility of funding these operations and continuing to identify available grant funding to assist implementation.
IS.5		Provide Incentives to Install Advanced Control Technology	<p>Provide incentives to install advanced control technology. This strategy would provide incentives for stationary sources within the Shafter community to install advanced control technology, beyond existing controls, that would not otherwise be economically feasible to install. The District will identify types of facilities and controls not otherwise identified in the CERP and will work with partners to implement these advanced controls. The District will also identify available grant funding to assist implementation, the number and types of projects to be funded.</p> <ul style="list-style-type: none"> The District has identified potential emission reduction opportunities from the installation of advanced control technologies. The District is continuing to evaluate the feasibility of funding interested stationary sources and continuing to identify available grant funding to assist implementation.

XI. Outreach and Mitigation Measures

The District's Outreach and Communications team conducts multilingual air quality outreach throughout all eight counties of the San Joaquin Valley. The District coordinates events, delivers presentations, responds to the media 24/7, manages social networks, pilots outreach campaigns like the Healthy Air Living (HAL) Schools and Check Before You Burn (CBYB) programs, and connects with the public in multiple languages across any medium.

The Community Air Quality Outreach Strategy adopted as a part of the Shafter CERP was developed with the CSC to respond to the community-specific concerns and go beyond current outreach efforts. This

includes recent paid and free outreach via social media to provide community-specific information about local conditions and steps the public can take to protect themselves during episodes of poor air quality.

Figure 13 Example of Recent Social Media Targeted to AB 617 Communities



The District has also worked with the CSC to post billboards reminding the public not to burn trash (see Figure 10). Much of the outreach strategies in the CERP originally relied on in-person outreach via workshops, presentations and events. The CSC and District have been working to adjust some outreach strategies to adhere to public health official's COVID-19 social distancing guidelines. For example, the District and CSC are investigating the potential of hosting some virtual town halls to educate the public on grants programs available through AB 617.

In addition, CSC has begun to work with school officials throughout the community to implement a school filtration program, expand the electric school bus grant program, and enroll additional schools in the Healthy Air Living Schools program.

Table 7 Shafter CERP Outreach and Mitigation Measures Status

No.	Page in CERP	Measure	Description and Status
O.1		Community Air Quality Outreach Strategy	<p>Outreach to increase the community awareness and knowledge of air quality. This strategy would increase community awareness of available tools to keep informed of real-time changes in air quality through social media campaigns and a series of partner workshops. Social media campaigns would be launched on three platforms. A partnership with local civic and community organizations would be established to host workshops at locations commonly available to the public such as libraries, schools, and community, health, or recreation centers. The annual goals for this strategy are: (a) attend/host 4 community meetings to share information; (b) complete 1 community-targeted social media campaign; and (c) circulation of infographics to at least 4 community spaces.</p> <ul style="list-style-type: none"> • First AB 617 bilingual social media campaign to encourage residents to download real-time air quality app running on Twitter, Facebook and Instagram, geo-targeted to community zip codes running July and August.
O.2		Sharing Clean Air Efforts and How Communities Can Get Involved	<p>Outreach to share clean air efforts and how communities can get involved. This strategy would increase awareness of programs by establishing a series of outreach events within Shafter. This strategy would also create an annual youth symposium to educate and encourage high school students to share air quality information with their peers, helping to sustain community awareness through future generations. The annual goals for this strategy are: (a) attend/host 4 community meetings to share information and; (b) complete 1 community-targeted social media campaign.</p> <ul style="list-style-type: none"> • Investigating potential of a Virtual Town Hall to engage residents and students while Covid-19 limits in-person meeting. • Potentially offer "Door Prizes" for attendees.
O.3		Joint Advocacy for Continued/Additional Funding to Support Air Quality Improvement Measures	<p>Joint advocacy for continued/additional funding to support air quality improvement measures. CARB and the Air District will work with Steering Committee and other interested parties to advocate for additional and continuing funding from the state to implement AB 617 and to fund emission reduction efforts in disadvantaged communities.</p> <ul style="list-style-type: none"> • Planning to bring funding opportunities to committee as opportunities arise at the state.

No.	Page in CERP	Measure	Description and Status
SC.2		HAL Schools: Increase Participation	<p>Reduce children's exposure through increased enrollment in Healthy Air Living (HAL) Schools program. This strategy would seek to enroll both Shafter school districts in the Healthy Air Living Schools program. SJVAPCD representatives would meet with teams of key staff (such as administrators, coaches, nurses, science teachers) from both school districts within the boundary to ensure understanding of and adherence to the program. SJVAPCD representatives would also attend at least 4 school community events such as health fairs or parent nights to educate the community about air quality and the HAL Schools program.</p> <ul style="list-style-type: none"> All of the schools in the community are now currently enrolled in HAL Schools and we're identifying opportunities to meet with school staff, administrators and parents.
IAQ.1		Mitigate indoor exposure to air pollution through weatherization and enhanced energy efficiency	<p>Incentive program for weatherization and energy efficiency. The District will work with CAPK to help increase awareness and access for low-income community members to state funding for weatherization programs, including exploring the opportunity for funding air filters for residential use. The District and CAPK will coordinate a meeting in Shafter where residents can learn about available funding for weatherization services and fill out the appropriate forms and applications.</p> <ul style="list-style-type: none"> Partnership with Community Action Partnership of Kern (CAPK) to bring resident incentives to participate in energy efficiency upgrades in Shafter. CAPK presented to community during August CSC Meeting

No.	Page in CERP	Measure	Description and Status
SC.1		Air Filtration Systems in Community Schools	<p>Incentive program to install advanced air filtration systems in community schools. This strategy would provide up to \$250,000 in incentive funding for schools and daycares in Shafter to install advanced air filtration systems. Proposed funding amounts would provide 10 schools with funding to retrofit schools with advanced HVAC filtration systems.</p> <ul style="list-style-type: none"> • High-priority measure, CAP guidelines already in place. • District and CSC subcommittee met July 2020 for kickoff meeting, and August 2020 for second subcommittee meeting. • District has been working with CSC member and local schools to assess feasibility of installing these high-efficiency filtration systems. • Planning conference calls with area schools. • District is working on developing language for District commenting letters under CEQA.
RB.2		Educate Public About Harmful Impacts of Wood Burning	<p>Educate public about harmful impacts of residential wood burning. This strategy would create a series of 4 public workshops to educate Shafter residents about wood burning topics and to address questions and concerns interactively and accessibly within a forum setting. Wood burning infographics and educational materials would also be circulated to at least 6 community spaces throughout Shafter and the surrounding community with the goal of continuing to spread awareness and increasing applications for incentive funds supporting the transition to natural gas and electric devices.</p> <ul style="list-style-type: none"> • District worked with CSC to get specific feedback regarding outreach measures. • The District will continue to work with the CSC on identifying locations where outreach will be most effective and form of outreach while preparing materials for fall outreach.

No.	Page in CERP	Measure	Description and Status
RB.4		Outreach to Reduce Illegal Activity	<p>Reduce illegal burning through residential open burning education. This strategy would establish a series of 5 public workshops to educate Shafter residents about the illegality and health impacts of burning waste, and to address questions and concerns interactively and accessibly within a forum setting. This strategy would also invest funds into geo-targeted outdoor ads in areas with frequent violations, including 4 billboards, 3 pieces of street furniture (such as bus shelters or kiosks), and 2 buses routed through relevant locations. Additionally, 2 postcard mailers would be sent to county residents in rural areas</p> <ul style="list-style-type: none"> • District worked with CSC to get specific feedback regarding outreach measures. • First Bilingual "Don't Burn Trash" billboard posted in Shafter during July and August on HWY 43 and Kimberlina, and will work with the CSC on identifying additional opportunities, to perform outreach and what types of outreach will be most effective (billboards, mail outs, etc.)
VB.1		Provide Incentives for Installation of Vegetative Barriers Around/Near Sources Of Concern	<p>Incentive program for the installation of vegetative barriers around/near sources of concern. The District will work closely with the community, city, California Department of Transportation, Natural Resource Conservation Service and others to investigate and identify areas suitable for installation of vegetative barriers. Type and location of projects will be developed with the input of Steering Committee, and funded as funding sources are identified.</p> <ul style="list-style-type: none"> • Priority level High with CSC. • District has reached out to Tree Foundation of Kern to coordinate presentation to CSC at upcoming meeting. • Assigned to staff to develop project plan, submit to CARB for approval to utilize CAP Funding. • Once submitted, the District will post the guidelines on the District's AB 617 webpage and will provide an opportunity for CSC members to review and comment. • District has developed language for District commenting letters under CEQA.

No.	Page in CERP	Measure	Description and Status
UG.1		Identify opportunities for increased urban greening and forestry in the community	<p>Increased urban greening and forestry to improve air quality. The goal is to identify and support efforts to increase urban greening and forestry to improve air quality and overall quality of life for residents in the community of Shafter. The District is committing up to \$50,000 in 20% match funding towards a total of up to \$250,000 in funding from other agencies and tree planting advocates. In addition, the District is committing \$5000 for a study by San Joaquin Green (formerly Tree Fresno) and Tree Foundation of Kern to identify planting locations, maintenance needs, and irrigation plans.</p> <ul style="list-style-type: none"> • The District is reaching out to Tree Foundation of Kern to coordinate attendance at an upcoming CSC meeting • District has also developed language for District commenting letters under CEQA.
IR.1		Idling-Reduction Strategy: Reducing Automobile Idling Near Sensitive Receptors	<p>Automobile idle-reduction outreach to reduce the exposure of sensitive receptors to vehicle emissions. This strategy would provide and distribute 10 sets of bilingual English and Spanish idle-reduction street signs to be installed in locations that commonly serve sensitive groups throughout the community boundary. SJVAPCD representatives would also develop and deliver 4 presentations about the impacts of vehicle exhaust and related District resources such as incentive funding for cleaner vehicles and school programs that deliver free idle-reduction signs to schools throughout the Valley.</p> <ul style="list-style-type: none"> • District worked with CSC to get specific feedback regarding outreach measures • The District will continue to work with the CSC on identifying locations where bilingual signs will be most effective

No.	Page in CERP	Measure	Description and Status
A.4		Promote Implementation of Conservation Tillage Practices	<p>Promote implementation of conservation tillage practices. District staff will work with local agricultural groups to conduct focused outreach to promote more widespread implementation of conservation tillage practices such as cover cropping, no till, low till, strip till, and precision agriculture within the Shafter community and 7-mile buffer area.</p> <ul style="list-style-type: none"> The District held 2 workshops in Shafter and Bakersfield and worked with the agricultural representatives and the Kern County Farm Bureau to invite area farmers to discuss the District's Conservation Management Plan program. A key part of the conversation was the promotion of conservation tillage practices and the air pollution reduction benefits along with possible soil health and cost savings associated with the practice.
A.9		Support dairy farms near Shafter in implementing Alternative Manure Management Strategies	<p>Alternative manure management practices at dairies. The District will work with stakeholders and organizations, such as the California Department of Food and Agriculture (CDFA), Natural Resources Conservation Service (NRCS) and the California Dairy Quality Assurance Program (CDQAP), to examine the potential and feasibility of various alternative manure management practices to reduce emissions and to promote these practices at dairies near the community of Shafter.</p> <ul style="list-style-type: none"> District held a meeting with technical lead staff for the CDFA Alternative Manure Management Program in August 2020. District staff will continue to coordinate with CDFA to conduct outreach to dairies near the community and to schedule an informational public workshop in the community about AMMP in the coming year.

XII. Metrics for Tracking Progress

The District and CSC included a robust set of metrics to track progress in the Shafter CERP. To the maximum extent possible, the District has looked to tie emissions reductions targets to individual CERP measures. Of the 54 measures in the adopted CERP, 25 are incentive-based measures where the District and CSC worked to identify the number of units targeted for replacement, by year, throughout implementation of the CERP. The remaining measures, whether incentive-based, enforcement, outreach, mitigation, or a land use partnership, have metrics that outline the expected emissions reductions, number of planned inspection hours, scheduled meetings, or other interactions expected for

the implementation of the each measure. The District continues to reassess and evaluate these metrics with the CSC as CERP implementation meetings continue. As CARB approves the District's project plans and incentive based measure spending increases, the District will keep the CSC apprised at subscription rates for the various measures and will solicit feedback on whether funding amounts need adjusting.

The CSC has made it clear that having the ability to track and measure implementation progress in English and Spanish is very important. Towards that end, the District developed a measure tracker that is updated on a monthly basis in both English and Spanish on the top of the Shafter AB 617 Community Webpage under the heading "Track Shafter Progress." District staff have taken the opportunity to share the tracker with the community on multiple occasions and have taken and incorporated feedback from CSC members.