August 19, 2019

San Joaquin Valley APCD
Attn.: Jessica Olsen
1990 E. Gettysburg Avenue
Fresno, CA 93726

RE: Comments – Draft Community Emissions Reduction Program (CERP)
Shafer – AB 617

Dear Ms. Olsen,

Kern County Planning and Natural Resources appreciates the opportunity to provide comments on the Draft Community Emission Reduction Program (CERP) prepared under AB 617 for the community of Shafer. While the original boundary for the project during the solicitation for the Steering Committee was limited to the City of Shafer jurisdiction, after selection of the Committee members they requested that the boundary be expanded for a 7 mile radius from the center of Shafer, which now includes lands under the jurisdiction of the Kern County Board of Supervisors for land use. As such, we provide the following comments on specific issues raised by the community and Steering Committee.

LU 3: SETBACKS FOR NEW OIL WELL DRILLING (Page 93)

The report includes materials and discussion on requiring that "no new oil wells be drilled within 2,500 feet of residents, schools and all environmental sensitive locations". Permitting for new oil and gas wells in unincorporated areas has been required since December 2015 by the Kern County Board of Supervisors. No permit can be issued by the California Division of Oil, Gas and Geothermal Resources (DOGGR) until they receive a permit from Kern County. Each permit is reviewed by staff of the Planning and Natural Resources Department for compliance with Chapter 19.98 Oil and Gas Activities and all mitigation measures of the Final Environmental Impact Report certified for the oil and gas activities in the valley area, including this portion of the Shafer community. Since implementation of the ordinance in December 2015, (4 years) within the county lands included in the AB 617 Shafer 7 mile boundary, nine (9) new oil and well permits have been issued and all have paid mitigation for air impacts.

This comprehensive project level ordinance and environmental technical document modeled the air impacts for cumulative impacts including the 58,000 active wells, 30,000 abandoned wells, related tanks and pipelines and future production which is capped by the EIR analysis. Prior to this ordinance update, there was no permit required from Kern County and the setback in the
zoning ordinance was 150 feet. This Environmental Impact Report and adopted ordinance includes the first comprehensive Health Risk Assessment of the construction and operation of an oil well in Kern County and related facilities. The science based approach on the Health Risk Assessment and noise analysis substantiated that the adopted new setback of 210 foot setback is fully protective of the sensitive land use of single and multiple family homes, a place of public assembly such as a community center, schools and hospitals. However, to address the construction and operation impacts of the individual wells and related employee and truck trips, the first Oil and Gas Emission Reduction Agreement (# 20160168/ Kern County Agreement # 890-2016 ) was executed between the Air District and the Board of Supervisors as a required mitigation measure. This agreement provides for a "no net increase" air impact mitigation that has resulted in a binding program between the Air District and the County to remove polluting sources in advance of 30 years of impacts of oil operation. This fee includes a factor to account for the cumulative impacts of all older wells as well and these activities in operation. This program, since the implementation of the permitting ordinance in December 2015, has resulted in over $50 million in total fees paid for air impacts on each permit and managed with the Air District for grants. This mitigation fee is not tied to location or adjacent land uses, but is assessed on all permits for new wells issued. The grants are available to any organization or city in the valley and we have encouraged our Kern County cities or organizations to apply for the funds.

Staff has received this suggestion of a 2,500 foot setback from a variety of forums. However, none of these materials have provided any science to provide a new Health Risk Assessment or other technical information to support the 2,500 foot setback or the source of this recommendation. As a comparison, the science based recommended setbacks for residential and other sensitive uses from a freeway is 500 feet. As a standard freeway is approximately 210 feet wide with thousands of health impacting cars and trucks, this proposal would be the equivalent to 11 freeway widths. Our Oil and Gas Permitting ordinance reports and Environmental Impact Report can be found here https://kernplanning.com/planning/kern-county-oil-gas-permitting-3/ and provides extensive, peer reviewed, technical data on this subject.

VB 1: INCENTIVE PROGRAM FOR INSTALLATION OF VEGETATIVE BARRIERS AROUND/NEAR SOURCES OF CONCERN. (Page 111)

The inclusion of barrier landscaping and wind break trees in projects can be an effective way to minimize dust and other pollutant issues. No permit is required to augment an agricultural zoned property for the inclusive of such a barrier, even on a Dairy as long as it is outside the established road right of way. However the implementation of the Sustainable Groundwater Management Act (SGMA) in this basin will limit the allocation of water that could be provided for such additional plantings. Further, the very agricultural use of the property may cease due to the loss of sufficient water to continue farming. The topic is very timely as the implementation of Groundwater management will result in an approximately 500,000 acres San Joaquin Valley wide to become fallow and, if not managed properly unstable. In Kern County the number of acres that may become fallow and unplanted estimates range from 150,000 to over 250,000 acres. Besides vegetative barriers the recommendation should include programs to ensure support for programs for property owners to stabilize their non-plantable fields to prevent dust storms and other impacts on the community. Such programs include support for planting native cover crops until they can become habitat or be used for alternative uses for the properties such as solar panels.
Adding any additional landscaping to an industrial project in the landscape area requires compliance with the Kern County Landscape ordinance which is mandated by the State to reflect the drought tolerant model ordinance. Such plantings, as shown in the examples, appear to be older plantings and may now be constrained by the Model Water Efficient Landscape Ordinance (California Code of Regulations, Title 23 Waters, and Division 2 Department of Water Resources – Chapter 2.7 – 2015).

Conclusion

The department is in the process of updating our Kern County General Plan and Kern County Metropolitan Bakersfield General Plan. A series of stakeholder groups on topics ranging from Healthy Communities to Disadvantaged Communities is beginning before the end of the year to review and revise land use Policies County wide and make recommendations on new concepts and new ideas. The product of this and other AB 617 community projects are important contributions to that process and we appreciate the community involvement and Air District leadership. We will use this information to inform our process as well and work in partnership for healthy communities countywide. If you need further information or have questions, please don’t hesitate to contact us at Loreleio@kerncounty.com or 661-862-8866.

Sincerely,

Lorelei H. Oviatt, AICP
Director

cc: Supervisor Couch – Kern County District 4
Interim Shafter City Manager – Jim Zervis
ridesharing). Under this strategy, 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.

In addition, as part of its Environmental Justice General Plan Element, the City is considering the following strategies to reduce the amount of vehicular travel within the Shafter area and reduce vehicle miles travelled, thereby reducing air pollutant emissions in the Shafter area:

1. Work to enhance community connectivity between residential uses, shopping, health care, employment, and community services via transit and non-motorized means of travel and maintain efficient land use patterns that reduce the number of miles residents, workers, and visitors need to travel between various activities within Shafter.

2. Plan for and maintain a system of pedestrian and bicycle facilities that connects residents to schools, places of work, parks and recreational facilities, shopping and restaurants, health care facilities, transit, and places of worship.

3. Establish standards and implement a system to evaluate new development and transportation projects in relation to the vehicle miles travelled (and mobile source emissions) they will generate and provide for appropriate mitigation measures to be applied to projects having significant vehicle miles travelled impacts.

4. Work with the San Joaquin Valley Air Pollution Control District to provide funding for (1) paving of roadway shoulders to provide for bicycle lanes and (2) increasing the frequency of street sweeping and improved maintenance of designated bikeways, including patching and/or sweeping of paved shoulders where gravel, glass or other debris has accumulated, and trimming of foliage where it encroaches into the paved shoulder.

**LU.3: SETBACKS FOR NEW OIL WELL DRILLING**

**Overview:** Some Steering Committee members suggested that no new oil wells be drilled within 2,500 feet of residents, schools and all environmental sensitive locations.

**Jurisdictional Issues:** It should be noted that the District has no authority over how agencies allow land under their jurisdiction to be used. These so-called “land-use” decisions are historically the responsibility, under state law, of cities and counties, or, in some cases, state and federal agencies responsible for transportation corridors, state and federal parks, and other properties. AB 617 does not provide the District with new land-use regulatory authority, so land-use authority remains with cities, counties, and
state and federal land-use agencies, as discussed in CARB’s Blueprint (see “Who Has the Authority to Implement Actions?” page 26 of the Blueprint). However, the District has made available to the responsible agencies the various land-use strategies that have been presented by the Committee for potential inclusion into the CERP for responsible agency’s input and response in the Shafter Community Emissions Reduction Program.

Implementing Agency: City, County, and the California Division of Oil, Gas, and Geothermal Resources (DOGGR)

Type of Action: Partnership

Timing: Unknown

Description of Proposed Actions: The District will work with the City, County, and DOGGR to communicate this Steering Committee suggestion and receive agency feedback and response about this measure for potential inclusion in the CERP. The City of Shafter has responded as follows:

Kern County has adopted an ordinance establishing setback requirements for oil facilities from sensitive uses (Chapter 19.98 of the Kern County Zoning Ordinance). The Environmental Impact Report (EIR) prepared by the County for that ordinance evaluated health risks for sensitive uses from oil production facilities. Based on the Health Risk Assessment prepared for that EIR, Kern County also adopted mitigation measures that will be implemented to avoid potential significant impacts from oil production facilities on sensitive uses.

The City of Shafter Zoning Ordinance also establishes setback requirements for oil facilities from sensitive uses (Shafter Municipal Code Title 17, Chapter 9). The City will review the EIR and health studies prepared by the County for its oil and gas production ordinance and consider standards for preparation of health risk assessments to avoid creation of significant impacts from oil production facilities on sensitive uses.

LU.4: REDUCE EMISSIONS ASSOCIATED WITH THE CONSTRUCTION OF THE HIGH SPEED RAIL WITHIN THE 7-MILE RADIUS AROUND THE COMMUNITY OF SHAFTER

Overview: The goal of this strategy is to reduce emissions from High Speed Rail (HSR) construction equipment operating within the 7-mile radius to reduce the impact of pollution on area residents. While the Air District has already negotiated as a part of the CEQA commenting process a commitment by California High Speed Rail (HSR) Authority to completely mitigate their construction emissions on a regional basis, their construction project will still generate local air pollution impacts, largely due to the use of heavy-duty diesel equipment. To minimize these impacts, the Committee suggests that the HSR Authority use only Tier 4 engines in this heavy-duty equipment.
VEGETATIVE BARRIERS IN SHAFTER

BACKGROUND
Vegetative barriers, also known as windbreaks, are composed of one or more rows of trees or shrubs that may be planted in specific areas of concern in order to improve air quality in the immediate area by intercepting airborne particles, dust, chemicals, and odors. Pollutants directly emitted from cars, trucks, and other motor vehicles are found in higher concentrations near major roads. In addition, stationary sources such as industrial facilities, factories, and agricultural operations can also contribute air pollutants to their surrounding areas. Examples of these directly emitted pollutants include particulate matter (PM), oxides of nitrogen (NOx), and volatile organic compounds (VOC).

While various emission control techniques and programs exist to reduce these pollutants from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the uptake of gaseous pollutants. Examples of vegetative barriers include trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In addition to air quality benefits, vegetative barriers can improve aesthetics, increase property values, reduce heat, control surface water runoff, and reduce noise pollution.

Characteristics of a vegetative barrier that should be considered include the porosity/density of the vegetative barrier, the characteristics of the vegetation during different seasons, leaf surface characteristics, vegetation air emissions (e.g. biogenic VOCs), and the resistance of the vegetative barrier to air pollution. Other considerations include: soil characteristics, availability of water, control of water runoff, maintenance of the vegetative barrier, use of native and non-invasive species, and roadway safety. Vegetative barriers may also be used with solid barriers to increase mitigation.

Figure 4-8: Vegetative Barrier w/ Solid Barrier on Highway 198, Visalia, CA*
Figure 4-9: Vegetative Tree Barrier between main road and railroad tracks on Highway 43, Shafter, CA*

Figure 4-10: Vegetative Barrier around Foster Farms, Fresno, CA*

*Latest Google Map Information

COMMUNITY CONCERNS AND COMMENTS
The Shafter steering committee has identified Vegetative Barriers as a priority for air pollutant mitigation. Committee members have requested more information and resources on vegetative barriers and their development. Members have also asked to require incentives for any vegetative barrier projects. Community members expressed interest in planting vegetative barriers on the perimeter of agricultural operations to reduce dust, and between local rail routes and residential areas.

CURRENT PROGRAMS
The Valley Air District, the City of Shafter, Kern County, The California Department of Transportation (Caltrans), and other local partners have promoted the use of vegetative barriers for reducing exposure to air pollutants, mitigating the urban heat island effect, and improving aesthetics.

STRATEGIES DEVELOPED FOR IMPLEMENTATION IN COMMUNITY
Based on community interest in installing vegetative barriers, the following measure was developed for implementation as a part of the Shafter CERP.
The following is a suggested measure not within the Air District’s jurisdiction to directly implement:

**VB.1: INCENTIVE PROGRAM FOR THE INSTALLATION OF VEGETATIVE BARRIERS AROUND/NEAR SOURCES OF CONCERN**

*Overview:* The purpose of this strategy is to provide incentives for the installation of vegetative barriers around/near sources of concern to reduce particulate matter, odor, and other emissions, as feasible. Based on community interest in vegetative barriers, the District will be partnering with other agencies to funnel available grant funding to the community to support the installation of vegetative barriers at/near industrial facilities and along major transportation and goods movement corridors. The District will also work with the National Resources Conservation Service (NRCS) to evaluate the feasibility of installing vegetative barriers near agricultural farms and identify potential additional funding sources.

*Jurisdictional Issues:* It should be noted that the District has no authority over how agencies allow land under their jurisdiction to be used. These so-called “land-use” decisions, such as whether to allow or require vegetative barriers in specific locations, are historically the responsibility, under state law, of cities and counties, or, in some cases, state and federal agencies responsible for transportation corridors, state and federal parks, and other properties. AB 617 does not provide the District with new land-use regulatory authority, so land-use authority remains with cities, counties, and state and federal land-use agencies, as discussed in CARB’s Blueprint (see “Who Has the Authority to Implement Actions?”, page 26 of the Blueprint). However, the District has made available to the responsible agencies the various land-use strategies that have been presented by the Committee for potential inclusion into the CERP for responsible agency’s input and response in the Shafter Community Emissions Reduction Program.

*Implementing Agency:* SJVAPCD, Caltrans, NRCS, other local partners

*Type of Action:* Partnership, Incentives

*Implementation:* 2020-2024

*Description of Proposed Actions:* 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