

Public Workshop for Petroleum Refinery Community Air Monitoring

August 22, 2023

webcast@valleyair.org

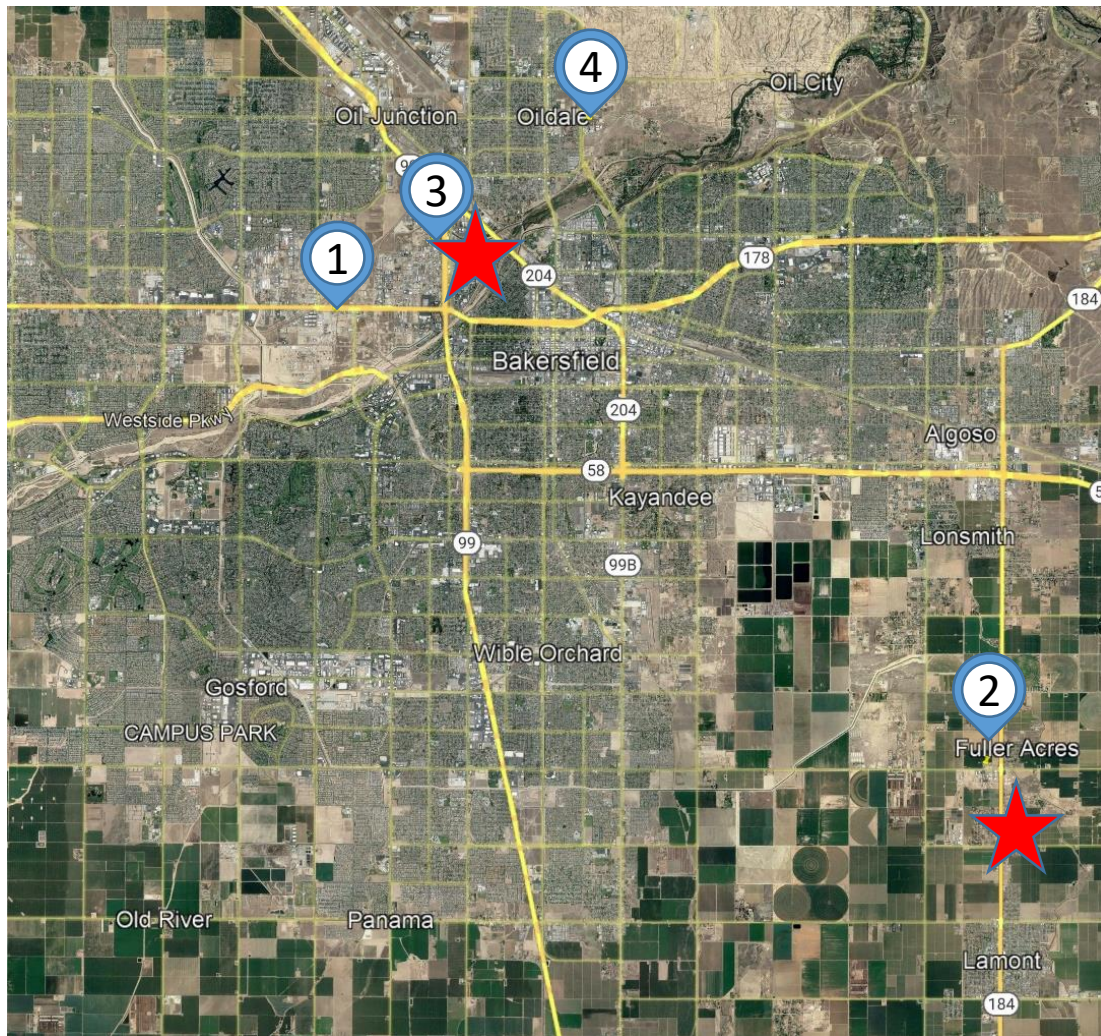
Purpose of Workshop

- Share initial concepts on new community air monitoring for two refineries due to recent amendments to District Rules 4460/3200
- Provide overview of petroleum refining in the Valley
- Provide overview of Assembly Bill (AB) 1647 requirements and recently amended District Rules 4460/3200
- Receive recommendations from community and other stakeholders on locations for community air monitoring

Petroleum Refinery Industry

- Petroleum refinery facilities conduct a number of processes, including:
 - Fractionation or distillation of crude oils
 - Redistillation of unfinished petroleum derivatives
 - Cracking
- Refinery processes result in a variety of products, including:
 - Gasoline, naphtha, and kerosene
 - Distillate and residual fuel oils
 - Lubricants

San Joaquin Valley Refineries



Facility Name	Location	Community Air Monitoring
1) Bakersfield Renewable Fuels (Alon)	Rosedale Hwy, Bakersfield, CA	Implementation in progress
2) Kern Energy	Panama Ln, Bakersfield, CA	Implemented (see red star)
3) San Joaquin Refining Co.	Shell St, Bakersfield, CA	Implemented (see red star)
4) Tricor Refining, LLC	Manor St, Bakersfield, CA	Implementation in progress

Assembly Bill (AB) 1647

- As part of Assemblymember Muratsuchi's bill package, AB 1647 approved by the Governor of California on October 8, 2017
- AB 1647 requires:
 - Petroleum refineries develop, install, operate and maintain a fence-line air monitoring system at and near refineries in accordance to guidance developed by CARB and local air district
 - Air districts design, develop, install, operate and maintain a refinery-related community air monitoring system
 - Real-time data be made accessible to the public

District Rule Development

- In response to AB 1647, District Rule 4460 (Petroleum Refinery Fence-line Air Monitoring) and Rule 3200 (Petroleum Refinery Community Air Monitoring Fees) developed through public process and adopted on December 19, 2019
 - Rule 4460 requires fence-line air monitoring systems at Valley petroleum operations that were actively refining crude oil
 - Rule 3200 establishes fee structure to fund District community air monitoring operations near petroleum refineries
- Rules 4460/3200 amendments on October 20, 2022 included new definition of petroleum refinery, among other updates
 - Amended rules now apply to Bakersfield Renewable Fuels (Alon) and Tricor Refining, LLC

Petroleum Refinery Community Air Monitoring

- In addition to fence-line air monitoring, AB 1647 requires air districts to design, develop, install, operate and maintain a refinery-related community air monitoring system
 - District currently monitors sulfur dioxide, hydrogen sulfide, and BTEX compounds (benzene, toluene, ethylbenzene, and xylene) at refinery community air monitoring sites
 - Collected data made available in real-time data
 - Already implemented for Kern Energy and San Joaquin Refining



Image courtesy of Recordum, 2019

Considerations for Community Air Monitoring

- Number of factors to be taken into consideration when planning for placement of air monitoring equipment
 - Permission of land-owner to place equipment on property
 - Establishment of lease agreements with property owner
 - Security of the location to protect equipment
 - Access to power source to operate equipment
 - Proper monitoring siting (no obstructions, mindful of influence from other local sources of pollution)
 - Downwind/nearby applicable refinery and near populated area
- These factors frequently impact the ability to find a suitable community monitoring location
- These factors should be kept in mind when making recommendations for monitoring location

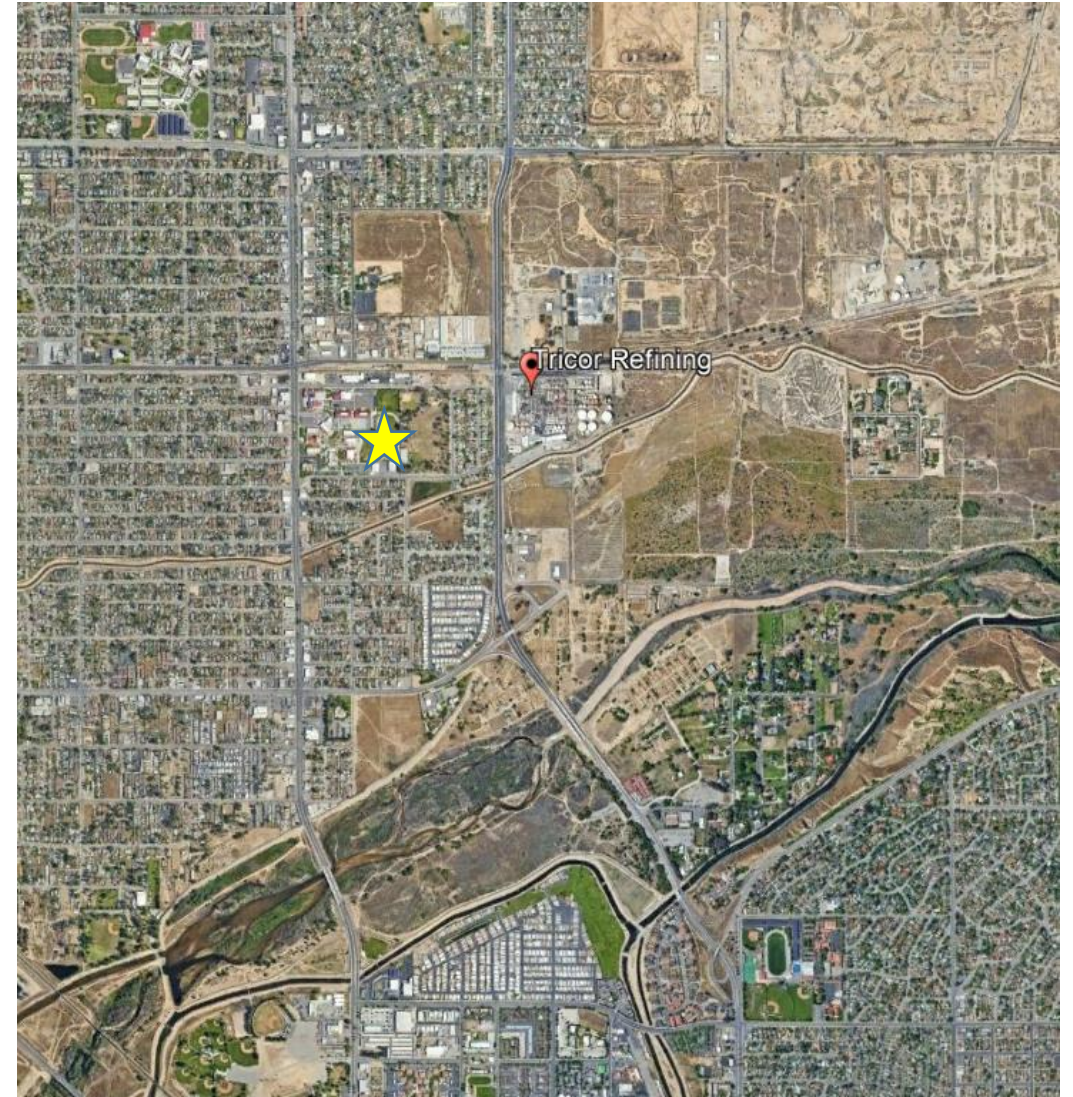


Tricor Refining

Potential Air Monitoring Location Tricor Refining LLC

School:

- Near sensitive receptors
- Access to power
- Secure location for air monitoring equipment





Bakersfield Renewable Fuels (Alon)

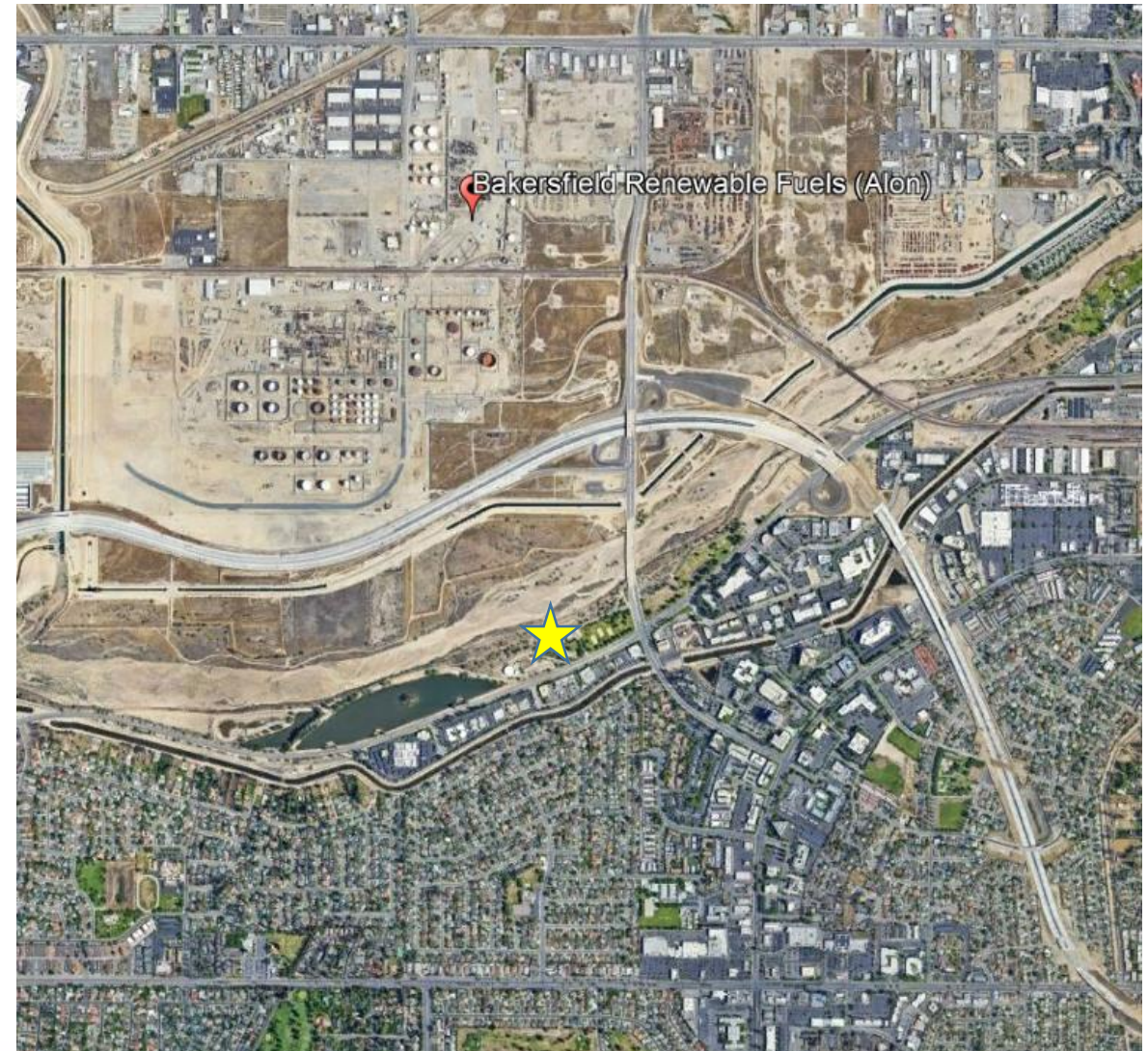
Potential Air Monitoring Location Bakersfield Renewable Fuels (Alon)

Park:

- Downwind of refinery
- Upwind of nearby community
- Access to power
- Secure location for air monitoring equipment

NOTE:

- Application to impose facility condition to prevent petroleum refining and associated activities submitted to District
- Upon full issuance of new permits, facility will no longer be subject to District Rules 4460/3200
- District continue to evaluate potential implementation of community monitor



Next Steps: Public Engagement Process for Petroleum Refinery Community Air Monitoring

Public Workshop (Today)

8/22/23

Public Comments Due

9/22/23

District Develops Community Air Monitoring Plan (with public feedback)

Fall 2023/Winter 2023

District Develops Community Air Monitoring Systems

Fall 2023 to Spring 2024

District Begins Community Air Monitoring (anticipated)

Spring 2024

Public Participation and Comment Invited throughout Process

Contact

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Questions/Comments