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

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Location</th>
<th>Community Air Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Bakersfield Renewable Fuels (Alon)</td>
<td>Rosedale Hwy, Bakersfield, CA</td>
<td>Implementation in progress</td>
</tr>
<tr>
<td>2) Kern Energy</td>
<td>Panama Ln, Bakersfield, CA</td>
<td>Implemented (see red star)</td>
</tr>
<tr>
<td>3) San Joaquin Refining Co.</td>
<td>Shell St, Bakersfield, CA</td>
<td>Implemented (see red star)</td>
</tr>
<tr>
<td>4) Tricor Refining, LLC</td>
<td>Manor St, Bakersfield, CA</td>
<td>Implementation in progress</td>
</tr>
</tbody>
</table>
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
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
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: | Brad Dawson |
| Mail:    | San Joaquin Valley APCD |
|         | 1990 E. Gettysburg Ave |
|         | Fresno, CA 93726 |
| Phone:  | (559) 230-5800 |
| Fax:    | (559) 230-6064 |
| Email:  | brad.dawson@valleyair.org |
| Listserv: | [http://lists.valleyair.org/mailman/listinfo/petroleum_refineries](http://lists.valleyair.org/mailman/listinfo/petroleum_refineries) |
Questions/Comments