Richmond-San Pablo Focus Areas – October 9, 2019

This packet contains maps and air quality information to help facilitate discussion on focus areas for additional air quality monitoring efforts in Richmond-San Pablo. The map on the next page shows the entire Richmond-San Pablo initial study area and focus areas. Based on previous Steering Committee discussions, the focus areas were drawn to include the largest pollution sources in the Richmond-San Pablo area and neighborhoods adjacent to those sources. The focus areas are in no way final and are meant as a starting place for discussing possible air monitoring projects.

Air quality screening using mobile and saturation monitoring techniques adopted by the Steering Committee on June 19 will take place throughout the entire study area, including areas not shown as possible focus areas on the map. These screening and saturation monitoring efforts may help to better identify possible pollution sources in areas outside the focus areas shown, and subsequently help develop monitoring objectives and efforts.

Maps of the individual focus areas are provided in this packet for discussion. Each focus area map shows:

- Large pollution sources that have air quality permits with the Air District
- Pollution sources of concern identified at steering committee meetings
- Locations of existing air quality monitoring (partial list)

QUESTIONS TO CONSIDER AS WE DISCUSS THE FOCUS AREAS:

1. What, if any, sources of air pollution concern you that are missing from the area depicted? Do you have other recommended changes to the focus area?
2. What potential actions would you like air monitoring data (beyond the initial screening) to support in this area?
3. How should we engage the public in this area so that they can help us choose options for additional air monitoring?
Map of Richmond-San Pablo Focus Areas
Richmond-San Pablo Screening Area

The map on this page outlines the Richmond-San Pablo initial study area, which extends from the Richmond Harbor north through the Montalvin and Tara Hills neighborhoods. Air quality screening using saturation and mobile monitoring techniques is in progress throughout this initial study area. These monitoring efforts are summarized in the table below.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Monitoring Type</th>
<th>Pollutants Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Groundwork</strong></td>
<td>Saturation: network of 50 Clarity sensors</td>
<td>PM$_{2.5}$, NO$_2$</td>
</tr>
<tr>
<td>Richmond</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PSE/APEN</strong></td>
<td>Saturation: network of 50+ Aeroqual sensors</td>
<td>50 monitors for PM$_{2.5}$, NO$_2$, O$_3$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-10 monitors for PM$_{2.5}$, VOC, CO</td>
</tr>
<tr>
<td><strong>Aclima</strong></td>
<td>Mobile: block-by-block screening</td>
<td>PM$_{2.5}$, NO$_2$, O$_3$, CO, CO$_2$</td>
</tr>
</tbody>
</table>

Saturation air quality monitoring is performed using frequent measurements at many locations across the initial study area. Mobile air quality measurements are taken in motion on a vehicle, providing for screening every road over a large area. These screening methods may help better characterize air quality both inside and outside the identified focus areas.
Richmond Harbor Focus Area

The Richmond Harbor focus area extends from the south waterfront along San Francisco Bay to along the I-580 corridor. This area contains numerous pollution sources related to port and shipping activities, industrial facilities, and heavy freeway traffic associated with I-580. The map below shows some of the larger sources of pollution in the Richmond Harbor area, and whether the main pollutants of concern emitted by the sources are particulate matter (PM), air toxics, or both.
Marina Bay Focus Area

The Marina Bay focus area surrounds the Inner Harbor Basin and extends north to the I-580 corridor. This area is east of the main shipping and terminal operations but contains several medical- and biological-related facilities, major food distributors, and freeway traffic associated with I-580. The map below shows some of the larger sources of pollution in the South Richmond area, and whether the main pollutants of concern emitted by the sources are particulate matter (PM), air toxics, or both.
North Richmond, Shields-Reid, Western San Pablo Focus Area

The North Richmond, Shields-Reid, and western San Pablo focus area is roughly bounded by Richmond Parkway on the north, 23<sup>rd</sup> Avenue on the east, and Rheem Avenue on the south. This area contains several pollution sources including wastewater plants, landfills, metal recyclers and metal works facilities, traffic along busy surface streets like Richmond Parkway, and rail lines. The northern part of the Chevron refinery campus also extends into this area.
Iron Triangle, Atchison Village, Santa Fe Focus Area

This focus area includes the Iron Triangle, Atchison Village, and Santa Fe neighborhoods in Richmond, and extends from I-580 northward to encompass much of the Chevron Refinery campus and the Burlington Northern Santa Fe railyard. Large industrial facilities like Chevron and Chemtrade are major sources of pollution in this area. Immediately to the east of these major sources and the railyard are residential neighborhoods. BART also has a railyard in the northeastern part of this area. The map below shows some of the larger sources of pollution in west and southwest Richmond, including industries, roadways and railways, auto body shops, and gas stations. Locations of existing air monitoring stations are also shown.
Belding-Woods, Coronado, Pullman, Cortez-Stege Focus Area

This focus area covers much of central Richmond, including the Belding-Woods, Coronado, Pullman, and Cortez-Stege neighborhoods, and extends roughly from Cutting Boulevard northward to Rheem Avenue. This area encompasses downtown Richmond and several residential neighborhoods. While this area does not contain large industrial sources of pollution, several auto body shops and gas stations are clustered particularly along 23rd Street. Additional pollution sources include Kaiser Permanente and transit operations by BART and AC Transit.
Hilltop and Parchester Focus Area

This focus area encompasses the Hilltop Village, Hilltop Bayview, Hilltop Green, Parchester Village, and Tara Hills neighborhoods. Much of the area is residential or commercial, but the western side of this focus area includes a range of facilities in metalworks, biologics, warehousing, and distribution. Additionally, railways are located along the western and northern sections of this area, and heavy traffic is common along the I-80 corridor, Richmond Parkway, and San Pablo Avenue.
I-80 Corridor, North & East, Eastern San Pablo, East Richmond, Richmond Annex Focus Area

Interstate 80 runs north-south through the eastern neighborhoods of Richmond and San Pablo. Traffic on this freeway averages about 200,000 vehicles daily through Richmond and San Pablo, making it a major source of pollution. Several gas stations and autobody shops are also located along the I-80 corridor. The I-80 corridor and other pollution sources are shown on the map below, which also continues onto the next page.
I-80 Corridor, North & East, Eastern San Pablo, East Richmond, Richmond Annex Focus Area

Map below is the southern half of this focus area, continued from previous page.