

November 13, 2019

Summary from Richmond-San Pablo Mapping Discussions: Air Quality Concerns and Uses for Air Quality Data

The Steering Committee identified air quality concerns and uses for additional air quality data through several small group mapping discussions. Results from those discussions are summarized below to help the Steering Committee define air quality monitoring objectives and projects.

Data to support reduction strategies for mobile and off-road sources

- **Marine vessels/operations** (harbor craft, ferries, ocean-going vessels)
 - How do marine operations in Richmond inner harbor (including Levin Terminal) affect local air quality?
 - Which marine vessels contribute most to air pollution in the Richmond Harbor area?
 - How do operations at Chevron long wharf impact nearby air quality?
 - How do marina operations and the SF Bay ferry impact air quality around Marina Bay?
- **Diesel truck traffic**
 - Are trucks following specified truck routes or using local/neighborhood streets?
 - What impact do diesel trucks have on air quality near sensitive receptors (like schools?)
- **Railways, railyards, rail crossings**
 - Can coal dust be detected in the air along railways (like along Carlson Blvd)?
 - What pollutants are produced by rail operations and when are they highest?
 - Where are how frequent are traffic backups at at-grade railroad crossings? What impact do those backups have on local air pollution?
- **Busy or congested surface streets**
 - How does commuting along surface streets to avoid freeway traffic affect neighborhood air quality? Some specific streets include Harbour Way, Pennsylvania Ave, Rheem Ave, Barrett Ave, Macdonald Ave, 13th Street, 23rd Street, San Pablo Ave, Solano Ave, and Arlington Blvd.
 - What are pollution levels along busy roadways adjacent to schools?
- **Off-road diesel sources** (like generators and construction equipment)
 - How do housing construction projects around Marina Bay and Point Richmond impact neighborhood air quality? Are there other locations with significant construction impacts?
 - What impact do diesel generators have on air quality and where? How often are they in use?
- **Freeways**
 - What is air quality like in neighborhoods along I-80 and I-580 compared to neighborhoods farther away from the freeways?
 - What happens to pollution levels when traffic backs up onto surface streets, and where are the largest impacts?

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Data to support reduction strategies for stationary sources

- **Large permitted sources** (like Chevron, Chemtrade, petroleum product storage, coal terminal, metal scrap or welding, water treatment, landfill, cement plant)
 - What are air pollution levels (PM and air toxics) in neighborhoods adjacent to Chevron? How do refinery sources/operations (including non-stack sources such as tank storage, bioreactor, current or former refinery ponds) contribute to air pollution?
 - Validate emissions estimates on permitted sources and identify new sources that may need permits.
 - What is the impact of coal terminal and related operations on local air quality? Some identified concerns include coal piles at the terminal, unloading and loading operations, and trains carrying coal (such as along Carlson Blvd.)
 - Do the metal scrap facilities near Brookside impact the nearby youth center or other nearby neighborhoods?
 - What is the impact of emissions from the wastewater treatment plant in areas nearby where people spend time? How often is it an issue and what is causing the odor?
- **Warehouses and truck-related businesses**
 - What impact do delivery/distribution centers (like Amazon, Whole Foods, Blue Apron, UPS, USPS) have on local air quality, particularly where they are concentrated in Marina Bay and north of Hilltop?
 - What kinds of trucks (and how many) do businesses use? What routes do they take?
- **Sources of fugitive particulate matter and dust or air toxics**
 - What is the impact of rock crushing operations on local air quality, particularly near facilities near North Richmond and at the Richmond port?
 - What is the impact of dust from empty or abandoned lots on air quality, such as near the BART railyard or along other rail lines or roads on land owned by Caltrans?
 - Are there air quality impacts (PM or air toxics) from historic sources or contaminated land areas?
- **Common small businesses**
 - What impact do certain small businesses have on neighborhood air quality:
 - Auto body shops (particularly the cluster along 23rd Street)
 - Restaurants/food/beverage (like barbecues, broilers, bakeries, breweries)
 - Dry cleaners
 - Gas stations
- **Future sources**
 - How and where do we expect construction projects (such as new housing developments or at the Richmond-San Rafael Bridge toll plaza) impact neighborhood air quality?
 - Are there expected neighborhood impacts from upcoming new large facilities, such as the planned PowerPlant cannabis processing facility?

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Data to support other uses

- **Real-time and accessible information**
 - Website or app with neighborhood-level data
 - Alert/notification system when pollution levels rise to a certain level
 - Provide data that are easy to interpret to make health-based decisions
 - What/how much pollution is the public exposed to at recreational areas, such as along the Bay Trail, at Point Pinole, Miller/Knox Regional Shoreline, or at other parks and playgrounds?
- **Locate and identify pollution hotspots**
 - Where are pollution levels (PM and air toxics) unusually high, especially near sensitive receptors or where people spend time?
 - What pollution sources contribute to unusually high pollution areas? When (days of week or times of day) do these hotspots occur?
 - How does pollution (PM and air toxics) vary overall from neighborhood to neighborhood?
- **Track air quality trends over time**
 - Are pollution levels changing? If so, what is causing those changes?
 - How do we best track progress from emissions and exposure reduction efforts?
- **Odor Identification**
 - What sources are odors coming from, particularly in vicinity of Richmond Harbor, Marina Bay and North Richmond?
 - What pollutants/compounds are associated with odors? Are there any present that have known health risks?
 - What pollutants and health risks are associated with odors or other emissions from restaurants?
- **Collect and share air quality information for vulnerable populations**
 - What/how much pollution are children exposed to at or near schools?
 - Data to alert schools to make decisions on outdoor activities, events and filtration.
 - Are there areas with elevated pollution levels where vulnerable people spend time (like senior centers, day care centers, schools, or medical facilities)?