

California Healthy Housing Coalition Annual Meeting

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BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Policies for Reducing Air Pollution Emissions/Exposures

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Background



- Air quality has improved in the Bay Area
- Not everyone is breathing the same air
- Poor, communities of color are adjacent to freeways, ports, power plants, refineries and heavily used transportation corridors
- Residents of these communities are exposed to higher concentrations of fine particulate matter and toxic air contaminants and experience greater health risk i.e., asthma, respiratory illness and heart conditions
- Staff works closely with California Air Resources Board and communities most impacted by air pollution to reduce exposure in response to Assembly Bill 617

Planning Healthy Places



- Local planning decisions influence public exposure to air pollution
- Climate and air quality programs emphasize infill, TOD to reduce auto use
- Infill and TOD locations are typically within cities where pollution levels are higher
- Goal is to promote infill development while protecting public health
- Air District published planning guidance in 2016
- Encourage local governments to consider and address local air quality issues early in the planning and development process
- Provide tools, guidance and information, including:
 - Detailed maps of local sources of air pollution;
 - Feasible and effective “best practices” to minimize exposure; and
 - Strategies to reduce emissions
- Desired outcome: work with cities & counties on “healthy infill”

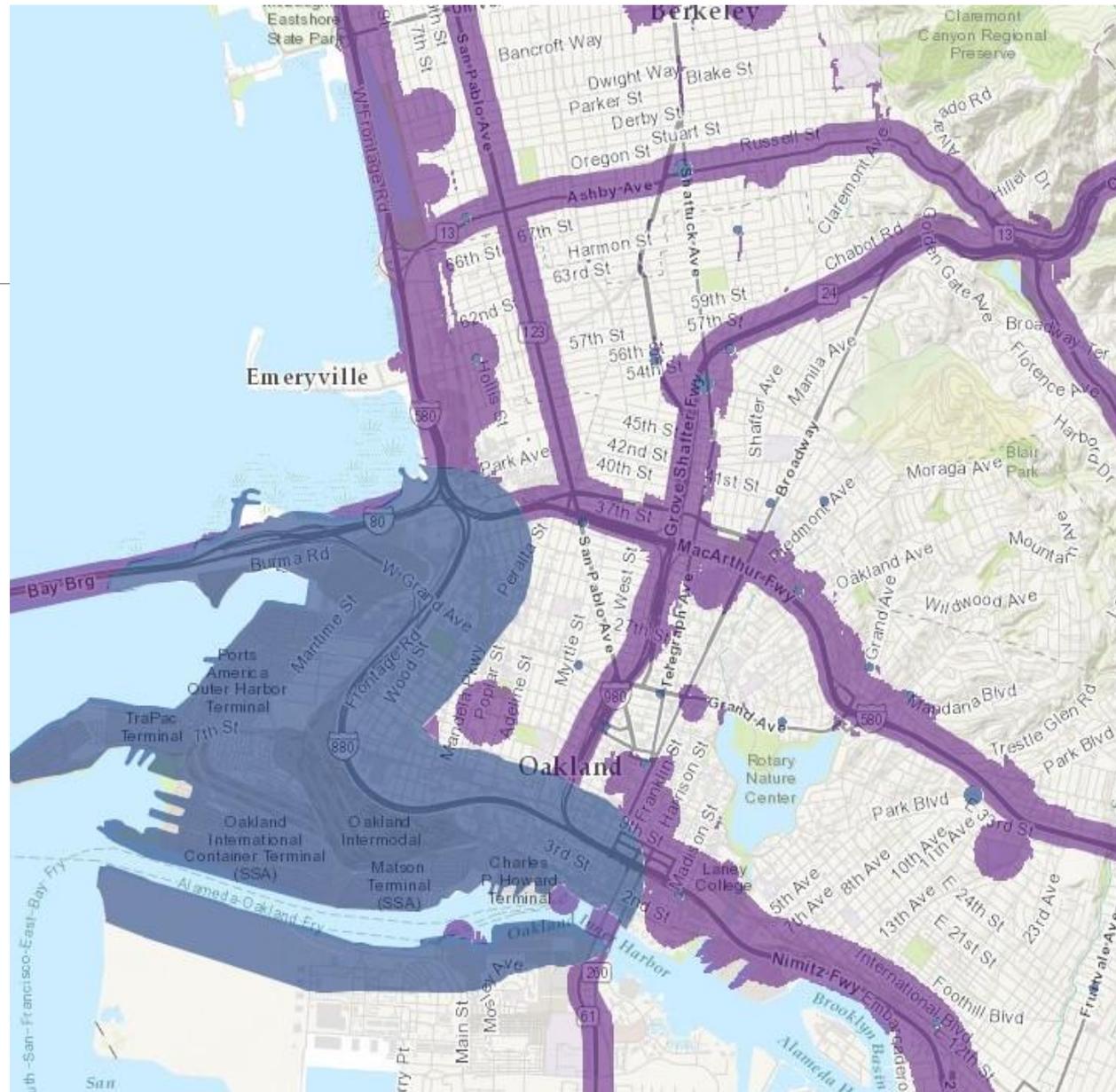
Maps support local policies

Purple areas:

Implement best practices to reduce emissions and exposure

Blue areas:

Large or complex sources of air pollution, including ports, airports, refineries, and railyards need further study



Best Practices to Reduce Emissions



Retrofit
Generator

Electrify
Loading Docks

TDM
Strategies

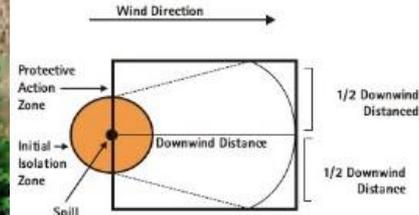
Promote
EV Plug-
In
Stations

Limit
Idling
Times

Traffic
Management
Strategies

PHP recommends that local governments adopt best practices to reduce emissions as required policies or ordinances

Best Practices to Reduce Exposure



Project Phasing

Alternative Truck Routes

Air Filtration (Merv 13)

Dense Tree Planting

Health Protective Distances

Second floor Residences

Feasible, relatively low cost, and effective ways to reduce exposure to air pollution, thereby minimizing potential adverse health effects

Complements emissions reduction measures



Examples of Local Action

City/County of San Francisco

Article 38

- Adopted in 2008 updated 2014
- Established Air Pollution Exposure Zones to protect public health in San Francisco
- Focused on zip codes with high hospitalization rates and emergency room visits for air pollution illnesses
- Targeted zones include areas 500 feet from a freeway
- Requires enhanced ventilation systems equivalent to MERV 13 in new development projects and to be installed in sensitive use buildings identified in zones

Clean Construction Ordinance

Reduce Emissions at S.F. Construction sites

- Adopted in 2007/Expanded 2015 to sites with high level of background concentrations of air pollution
- Best Practices to reduce exposure in the community

Best Practices

- Use most effective diesel emission control device verified by CARB (Tier 4 engine meets this requirement).
- Restrict idling to two minutes
- Properly maintain and tune equipment

Construction Plan

- Construction Minimization Plan for Projects in Exposure Zones
- Equipment inventory, construction timeline, idling and engine limits
- Monitoring and Reporting of Construction Activities

City of Oakland

Standard Conditions of Approval (SCA)

- SCA for development projects are a part of the municipal code formally adopted in 2008
- SCA for all environmental effects including air quality
- Air quality includes “Basic Controls” for dust and exhaust related construction projects
- “Enhanced Controls” for large residential and demolition projects to address dust and exhaust emissions
- Incorporate specific measures into project design to reduce potential health risk due to exposure to toxic air contaminants in the community
- Air filtration systems; phasing; upper floor receptors; tree planting; receptors distances from trucks; Tier 4 emission standards

AB 617- Community Health Protection Program

Community Protection

- More needs to be done to improve air quality and health in our most impacted communities
- Assembly Bill 617 (AB 617) – Community Health Protection Program aims to reduce exposure to PM and TACs in communities most impacted by air pollution
- Air District is partnering with local community leaders to better understand local air pollution and to develop plans & programs to improve local conditions
- Eight AB 617 communities in Bay Area; initial focus on West Oakland and Richmond/San Pablo

AB 617/West Oakland

- Working with the West Oakland Environmental Indicators Project (WOEIP), a local Environmental Justice organization to identify solutions to air pollution in West Oakland
- WOEIP and Air District partnered to develop the West Oakland Community Action Plan (WOCAP)
- WOCAP builds on existing plans in Oakland and identifies air pollution sources and the people most affected by air pollution in West Oakland
- WOCAP provides measures to reduce adverse air emissions and exposure from freeways, railyards, seaport, and industry in West Oakland



West Oakland Strategies - Overview

Land Use

Relocate recycling businesses

Accelerate relocation of auto-repair & painting that conflict with West Oakland Specific Plan

Incentives to relocate truck yards/repair, etc.

Trucks

Better route & parking enforcement

Stop idling in West Oakland

Incentives for cleaner trucks

More street sweeping

Other Mobile Sources

Incentives for cleaner rail, marine, off-road upgrades

Implement zero-emissions equipment

CARB mobile source regs

Bike/ped/transit incentives

Stationary Sources

New or amended regulations

Reduce risk from existing facilities

Incentives for stationary diesel engines

Enhanced enforcement

Health Programs

Exposure reduction (filtration, tree planting, etc.)

Expansion of County Asthma Management

Healthy Oakland Development Guidelines

Action needed by various agencies

Resources

California Air Resources Board, (2017) “Air Quality and Land Use Handbook Strategies to Reduce Exposure Near High-Volume Roadways”: <https://www.arb.ca.gov/ch/landuse.htm>

California Air Resources Board, “Reducing Toxic Air Pollutants in California Communities”: <https://www.arb.ca.gov/toxics/brochure.pdf>

California Air Resources Board, “Impacts of the Built Environment: Improving Public Health and Sustainability in California's Communities”: <https://ww3.arb.ca.gov/research/vprp/vprp.htm>

Bay Area Air Quality Management District, (2016) “Planning Healthy Place”: www.baaqmd.gov/plans-and-climate/planning-healthy-places

Bay Area Air Quality Management District, (2012) “Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area”: <https://www.bing.com/search?q=BAAQMD,+Understanding+Particulate&src=IE-SearchBox&FORM=IESR3S>

Bay Area Air Quality Management District, (2019) “West Oakland Community Action Plan”: <https://www.baaqmd.gov/community-health/community-health-protection-program/west-oakland-community-action-plan>

City of Oakland, Department of Planning and Building Bureau of Planning, “ Standard Conditions of Approval”: <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/agenda/oak065148.pdf>

San Francisco Department of Public Health, “ Article 38”: <https://www.sfdph.org/dph/files/EHSdocs/AirQuality/Article38DevGuidance.pdf>

San Francisco Department of Public Health, “Clean Construction Ordinance”: <https://www.sfdph.org/dph/EH/Air/CleanConstruction.asp>

