AB617: Protecting Community Health

- March 28, 2018
- Greg Nudd
- Bay Area Air Quality Management District
- Deputy Air Pollution Control Officer
Overview

• History of Health Protection in Bay Area

• Community Health Protection Programs
  • CARE and AB 617

• Selecting Communities

• Getting Started

• Next Steps
Community Health Protection: An Air Quality Lens

Air Pollutants
- emission rates
- types of emissions

Ambient Concentration
- types of pollutants
- topography
- wind patterns

Exposure and Dose
- breathing rate
- location
- time

Health Effects
- dose
- susceptibility
Community Health Protection In the Bay Area

• Regional
• Facilities
• Communities
Regional-scale

- Considers regional population exposure to common sources
- Focus on carbon monoxide, lead, nitrogen dioxide, ozone, fine particles, sulfur dioxide
- Meeting ambient air quality standards
Facility-scale

- Single-source focused
- Focus on toxics
- Health risk assessments
Community-scale

- Bridges gap between regional and facility planning
- Focuses on cumulative impacts and community health
- CARE program (2008)
- AB 617 (2017)
CARE: First Community Program

- Complements traditional air quality planning
- Highlights communities most affected by high exposure and those vulnerable to air pollution
  - Maps areas of greater health impact based on cumulative air pollution levels and existing adverse health outcomes
  - Identifies vulnerable communities
- Strives to fill a gap in health protection between regional and facility-scale assessments

AB 617
A New Approach to Community Health Protection

- Originated in negotiations regarding the extension of Cap & Trade program (AB 398)
- Responds to advocates’ concerns with continued high levels of air pollution in local communities
- Directly addresses toxics and criteria pollutants in the most impacted communities
Program Goals

• Community Participation
• Eliminate Air Quality Disparities
• Reduce Health Burdens
• Continuous Evaluation and Improvement
AB 617
Program Components

- Community selection
- Community monitoring
- Emission reduction action plans
- Incentives
- Updated emissions inventory
- Best Available Retrofit Control Technology
State requires districts to work with communities to select all areas in the region that have a “high cumulative exposure burden” and then prioritize areas for community monitoring or actions plans over the next 6 years.
How do we select all candidate communities?

<table>
<thead>
<tr>
<th>CARE</th>
<th>Additional Impacts&lt;sub&gt;1&lt;/sub&gt;</th>
<th>Other Large Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>• High pollutants</td>
<td>• Life expectancy</td>
<td>• Oil refineries</td>
</tr>
<tr>
<td>• fine particles</td>
<td>• Low birth weight</td>
<td>• Cement plants</td>
</tr>
<tr>
<td>• toxics</td>
<td>• Diesel exhaust</td>
<td>• Chemical plants</td>
</tr>
<tr>
<td>• ozone</td>
<td>• Traffic</td>
<td>• Marine ports</td>
</tr>
<tr>
<td>• Mortality</td>
<td>• Socioeconomic factors</td>
<td>• Airports</td>
</tr>
<tr>
<td>• Cancer risk</td>
<td>• Education</td>
<td></td>
</tr>
<tr>
<td>• ER visits and hospitalizations due to</td>
<td>• Housing costs</td>
<td></td>
</tr>
<tr>
<td>air pollution</td>
<td>• Access to transportation</td>
<td></td>
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</tbody>
</table>

1. Additional impacts include all data indices from CalEnviroScreen and Healthy Places Index
Potential Candidate Communities

• CARE Areas

• Areas with large sources

• Areas with health vulnerability and pollution impacts, identified with statewide tools

• Areas with low life expectancy
Sources that Impact the I-880 Corridor

- Oakland Airport
- Freeways and major roadways
- Railroads
- Large distribution centers
How do we prioritize communities for action?

**Air Quality**
- Fine particles
- Toxics
- Ozone

**Health Burden/Vulnerability**
- Life expectancy
- Lung disease
- Heart disease

**Other Factors?**
Questions

• What do you think about the criteria for candidate areas?

• What other areas should be included and why?

• How should we prioritize areas for plans or monitoring?
What we’ve heard: overall program

• Improve Air District permitting process
  o Factor in cumulative impact before permitting

• Prevent increased air pollution in overburdened communities

• Challenge what is acceptable air pollution

• Be transparent, open, and accountable
What we’ve heard: selecting communities

- Overall strong support for community selection criteria

- In selecting communities, we should consider:
  - Odors
  - Heavy idling
  - History of regulatory violations
  - Income, race, and other factors that magnify health impacts
  - Historical contamination
  - Traffic congestion
  - Residential wood burning
  - Communities with engaged partners and existing infrastructure
  - Communities that have been left behind
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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</thead>
<tbody>
<tr>
<td>March 2018</td>
<td>• Begin community meetings</td>
</tr>
<tr>
<td>April 30, 2018</td>
<td>• Air districts submits candidate community areas, i.e. all high cumulative exposure burden areas, to State</td>
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<tr>
<td>July 31, 2018</td>
<td>• Final recommendation to State on Year 1, Year 2-5, Years 6+ communities</td>
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<tr>
<td>October 1, 2018</td>
<td>• State selects Year 1 communities</td>
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<tr>
<td>Fall 2019</td>
<td>• State selects additional communities (and annually thereafter)</td>
</tr>
</tbody>
</table>
Thank you for being here.

Greg Nudd  
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How should we select communities for years 2-5?

Where should we focus?
Where are sources of pollution?

Map it!

How concerned are you about the air pollution caused by various equipment types?

What does success look like?

Interactive Stations