

# Maritime Air Quality Improvement Plan

Stakeholder Kick-Off Meeting  
April 10, 2007



MARITIME AIR QUALITY IMPROVEMENT PLAN

## Geographic Scope

Presented by:  
Roberta Reinstein  
*Port of Oakland*  
and  
Margaret Gordon  
*West Oakland Environmental Indicators Project*



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## Pollutants and Sources

Presented by:  
Environ International Corp.



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## Air Emissions Sources at the Port

- Ocean Going Vessels
- Harbor Craft
- Cargo Handling Equipment (CHE)
- Trucks
- Trains
- Construction



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## What's Emitted

### Criteria Pollutant

### Impact

Diesel Particulate Matter (DPM)



Local

Nitrogen Oxides (NOx): can contribute to ozone and PM formation



Regional

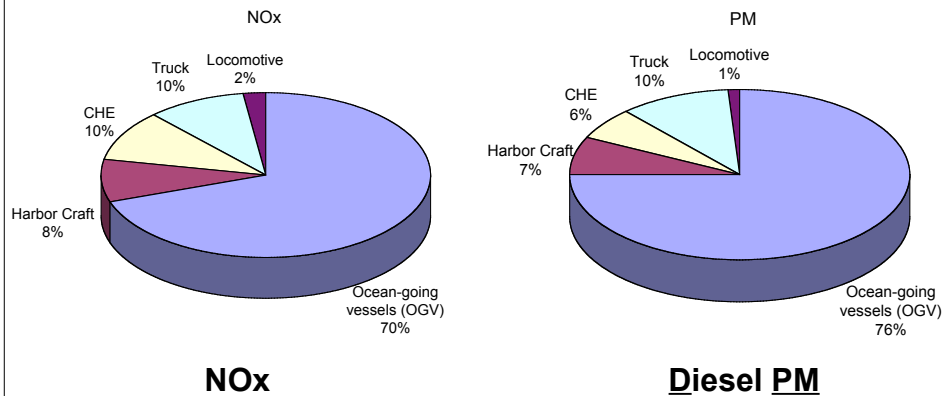
Other regulated pollutants:

- Sulfur Oxides (SOx)
- Reactive Organic Gases (ROG)
- Carbon Monoxide (CO)
- Non-Diesel PM



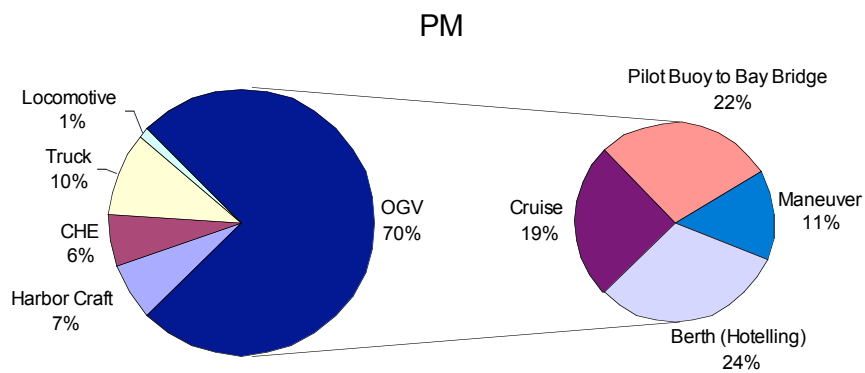
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# 2005 Port Emissions



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# Port DPM Emissions



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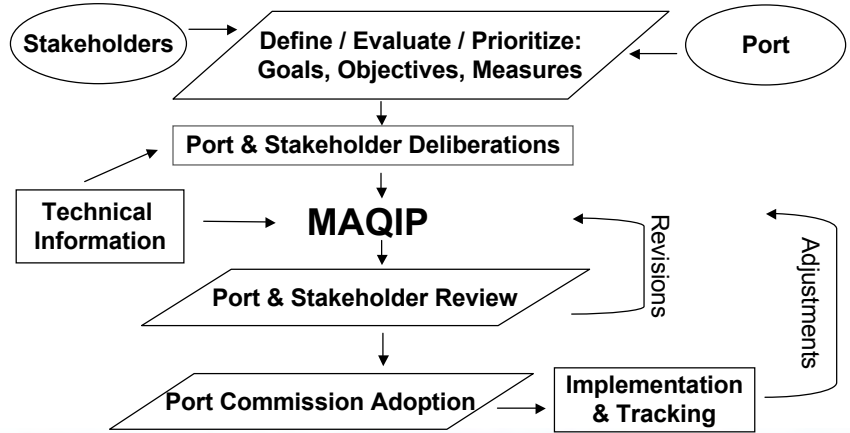
# Development of the

# Maritime Air Quality Improvement Plan



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## MAQIP Planning Process



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## MAQIP Elements

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- Goals and objectives
- Analysis of current & future conditions



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## MAQIP Elements (cont.)

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- Potential control measures
  - Emission reductions
  - Feasibility analysis
  - Cost/benefit analysis
- Selected air quality improvement strategies
  - Future year emission estimates
  - Implementation plan



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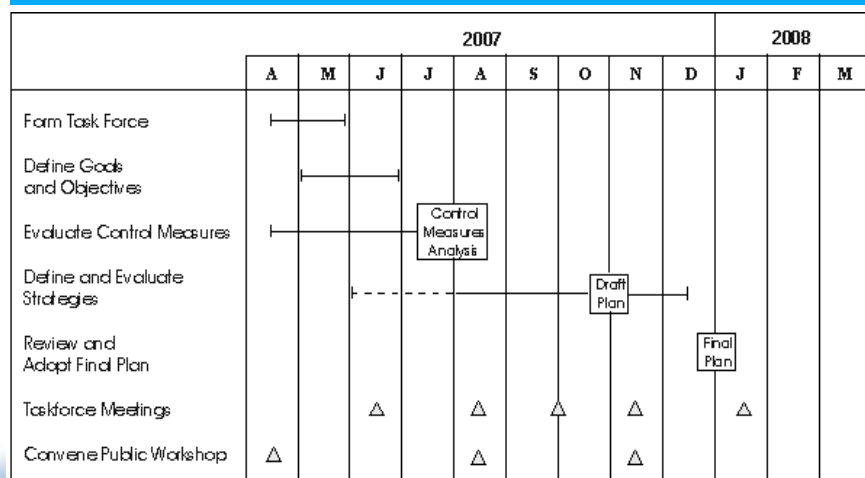
# MAQIP Technical Development

- Define baseline conditions
- Select planning horizon(s)
- Define future port activity
- Identify potential control measures
- Evaluate alternative control strategies
- Evaluate implementation mechanisms
- Tracking/monitoring



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## Draft MAQIP Development Schedule



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# **Regulatory Context: ARB Goods Movement Emission Reduction Plan**

Presented by:  
Sierra Nevada Air Quality Group  
(Bill Sylte)



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## **Statewide Goals**

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- Reduce DPM-related health risk by 85% by 2020
- Reduce emissions to 2001 levels by 2010
- Ensure risk reduction in local communities
- Attain air quality standards



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## Regulation

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- Major emissions reductions at Port of Oakland
- Cargo handling & OGV auxiliary engines fuel requirements adopted in 2005
- Other rules affecting OGV main engine fuels, shore power, harbor craft, and port trucks scheduled for adoption in 2007



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## Challenges

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- Ambitious schedule
- Cost & cost effectiveness
- Limits to jurisdiction
- Port differences
- Compliance
- Social/economic/labor



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# I- Bond

Presented by:  
Roberta Reinstein, Port of Oakland



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## Background

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- \$1 billion earmarked for “goods movement-related” air quality projects STATEWIDE
- Competing with other regions, in particular Los Angeles/Long Beach for funding
- BUT, not all funds will go to southern California



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## Status Update

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- Eligibility criteria and time line for I-Bond program are uncertain
  - More info by Fall 2007
- Level of program development influences likelihood of receiving funding
- Community participation and support are key selection factors for the ARB



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## Library

<http://www.portofoakland.com/environm/>



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