



# Regulatory Approaches

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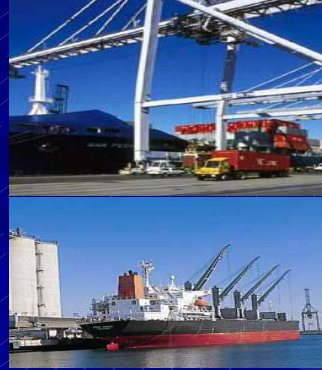
South Coast Air Quality Management District

## AQMD Clean Port Initiative Action Items

- AQMD and harbor commission summit to discuss coordination of control measures
- Ports to accelerate control efforts
- Full use of CEQA process
- Air quality monitoring within the ports
- Call for federal rules or legislation
- Emission reduction measures for top three Asian ports
- Call for the state Legislature to adopt port cleanup mechanism

# Key Air Pollutants

- Criteria Pollutants
  - NO<sub>x</sub>
  - Particulate Matter (PM)
- Air Toxics
  - Diesel Particulate



# Port-Related Source Categories

# Ocean Going Vessels



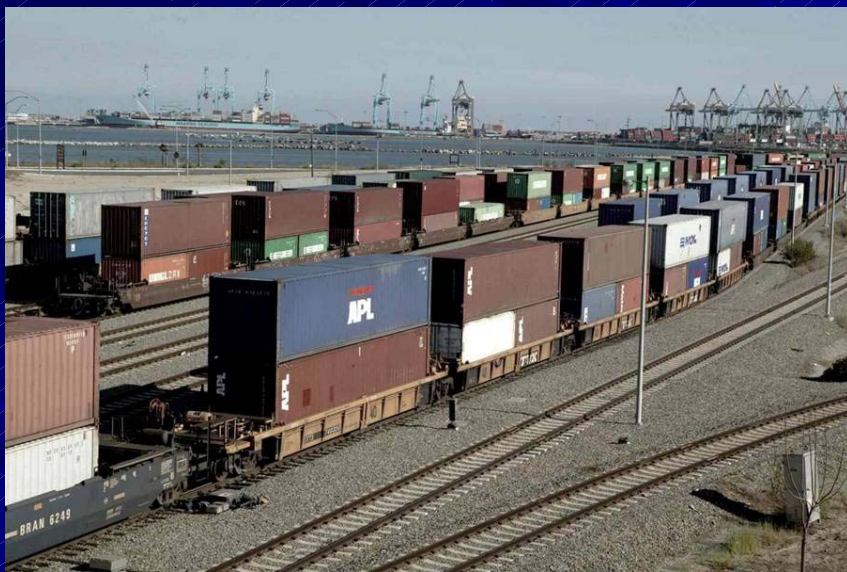
# Cargo Handling Equipment



# Harbor Craft



# Rail Operations



# Yard Equipment



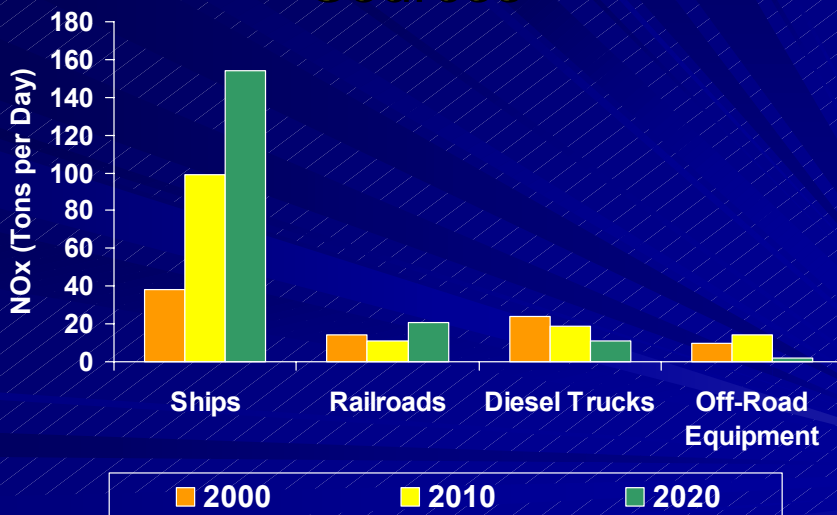
# Overhead Cranes



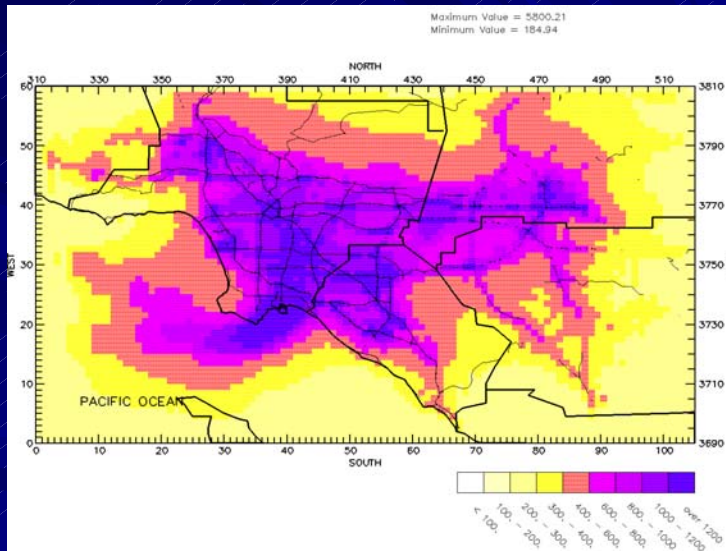
# Delivery Trucks



## NOx Trends for Port-Related Sources



## Modeled Cancer Risk Including Diesel

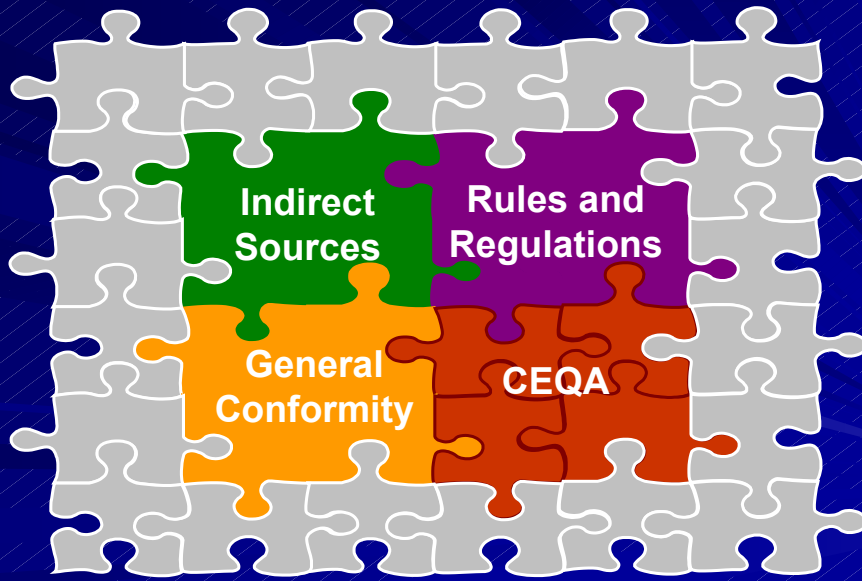


Multiple Air Toxics Exposure Study-II (MATES II) – November 1999

## Air Quality Needs

- 2003 AQMP Assessment: ~50% to 75% reductions needed for ozone and PM<sub>2.5</sub> standards
- 2004 Air Toxics Control Plan Target
  - 40% reduction in toxicity weighted emissions by 2010

# Local Regulatory Approach



## Rules and Regulations

- Information Gathering
  - Better quantify air quality and health impacts
  - Examples:
    - Emissions inventory (Rule 3503)
    - Health Risk Assessment (Rule 3503)
    - Recordkeeping (Proposed Rule 3501)

# Rules and Regulations

- Operational Requirements
  - Modify operations to reduce emissions
  - Example: Idling restrictions (Proposed Rule 3502)
- Emission or Risk Reduction
  - Requirements to reduce emissions or health risk from specific industry or source category
  - Examples:
    - Establish emission or health risk standard
    - Technology-based requirements

# Indirect Source Control Concept

- Criteria Pollutants: New Source Review
  - No Net Increase; or
  - Cleanest Available Equipment and Offsets
- Air Toxics
  - New Source Review
    - No net increase in toxicity-weighted emissions, or
    - Cleanest available equipment and limited residual risk

# Indirect Source Control Concept (Continued)

- Existing Sources
  - Facility-wide cap
  - Port area acceptable cumulative risks



## CEQA Review

- Air Quality Analysis
  - Regional impacts (All Criteria Pollutants)
  - Localized impacts (NO<sub>x</sub>, CO and PM<sub>10</sub>)
- Health Risk Assessment
  - On-site diesel mobile sources
  - Stationary Sources (All TACs)

# CEQA Review

*(Continued)*

- Feasible and Enforceable Mitigation Measures
  - Operational
  - Technological
- Alternatives
  - Site Location
  - Project scale
  - Reconfiguring project



## General Conformity

- Applicable to federally funded projects
- Consistency with air quality management plans
  - Emission budgets assumed in the plans
  - Inventory methodology
  - Mitigation measures

# Conclusion

- Regulatory approach - one tool to ensure progress
- Policy objectives
  - Reduce community exposure
  - Attain air quality standards
  - Accommodate growth
- Regulatory goals
  - Cleanest new equipment deployed
  - All feasible measures at earliest time possible
  - Expedited fleet turnover