

Review and Look Ahead

Richard Sinkoff
Port of Oakland



MARITIME AIR QUALITY IMPROVEMENT PLAN

Highlights: April 2007 – January 2008

- First air quality process of its kind in Bay Area
- 6 Task Force meetings, 1 work shop, 2 work teams
 - Space for education, information sharing, discussion
- Developed a framework for air quality planning
 - Planning goals and objectives
 - Relationships between emissions, risk, and pollutants
 - Growth and regulatory context
 - Emission and risk reduction goals
 - Implementation and monitoring
- Mobilized interagency discussion



MARITIME AIR QUALITY IMPROVEMENT PLAN

2

Next Steps: The MAQIP

MAQIP Draft Document

February-March 2008

Review Draft Document

Mid-April 2008

Task Force Review Session

Mid-April 2008

Revisions and Final Document

May 2008

Board of Port Commissioners

June 2008



MARITIME AIR QUALITY IMPROVEMENT PLAN

3

Next Steps: Stakeholder Group

Task Force Breakout Group Discussion

Today

Establish Stakeholder Advisory Group

March 2008

Convene Stakeholder Advisory Group

April 2008



MARITIME AIR QUALITY IMPROVEMENT PLAN

4

Next Steps: Initiatives

- Comprehensive Truck Management Plan
 - New Project Manager
 - Roll-out in Spring 2008
- On-going projects
- Early actions



MARITIME AIR QUALITY IMPROVEMENT PLAN

5

Questions



MARITIME AIR QUALITY IMPROVEMENT PLAN

Emission and Risk Reduction Goals

Delphine Prévost and Richard Sinkoff
Port of Oakland



MARITIME AIR QUALITY IMPROVEMENT PLAN

Update (12/14/07-1/30/08)

- New regulations adopted by CARB (<http://www.arb.ca.gov/diesel/mobile.htm>)
 - Shore-side power
 - Port trucks
 - Harbor craft
- With above rules as “existing” regulations, most noteworthy change is greater PM reductions in 2012 (trucks)



MARITIME AIR QUALITY IMPROVEMENT PLAN

8

Update (12/14/07-1/30/08)

- Review of growth apportionment by source category
- Assessment of practicability of “above and beyond” (2012 vs. 2020)
- Consistency of approach across pollutants
- Quality assurance / quality control



MARITIME AIR QUALITY IMPROVEMENT PLAN

9

PM Risk Reduction Goal (%)

(Updated; Baseline=2005)

2020: - 85%

- Also expect reductions around 23% in 2012
- Goal are for seaport-related PM emissions and risk
- Based on cancer risk from PM; as cancer risk decreases, so does non-cancer risk
- Based on working assumption of “1:1” emission to risk ratio (pending HRA) – i.e. all source categories contribute same level of risk per ton of emissions.



MARITIME AIR QUALITY IMPROVEMENT PLAN

10

PM Emission Reduction Goals (%)

(Updated; Baseline = 2005)

- OGV (ships - all except hotelling)
- Harbor Craft

- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	2012 old	2012 new	2020 old	2020 new
Off-shore	NNI	2	-75	-85
On/near shore	-50	-65	-85	-85

**Draft and Subject to Change
Do Not Cite or Quote**



MARITIME AIR QUALITY IMPROVEMENT PLAN

SOx Emission Reduction Goals (%)

(Updated; Baseline=2005)

- OGV (ships - all except hotelling)
- Harbor Craft

- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	2012 old	2012 new	2020 old	2020 new
Off-shore	NNI	-3	-90	-94
On/near shore	-85	-85	-85	-85

**Draft and Subject to Change
Do Not Cite or Quote**



MARITIME AIR QUALITY IMPROVEMENT PLAN

NOx Emission Reduction Goals (%)

(Updated; Baseline=2005)

- OGV (ships - all except hotelling)
- Harbor Craft

- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	2012 old	2012 new	2020 old	2020 new
Off-shore	TBD	12	NNI	TBD
On/near shore	-5	1	-30	-34

**Draft and Subject to Change
Do Not Cite or Quote**



MARITIME AIR QUALITY IMPROVEMENT PLAN

13

Other Pollutant Reductions

- Current focus is on:
 - Health risk (and hence proximity to people)
 - Regulatory drivers
 - Therefore, first: PM, SOx
- More work to be done on NOx - Port to evaluate setting off-shore NOx reduction goals.
- ROG to decrease about 15% (on/near-shore by 2020)
- Port to evaluate setting emission reduction goals for CO
- For GHG, note major regulatory guidance and requirements are pending (AB 32).



MARITIME AIR QUALITY IMPROVEMENT PLAN

14

Future Work

- Routine review of forecasting effort as data become available
 - Growth projections
 - Source categories accommodating growth
 - In particular, more study needed for berthing time assumptions
 - Regulatory compliance
 - Emission inventory updates
- Adjustments as needed to refine 'model'
- Refinement of relationship between emission source categories and contributions to risk (HRA)



MARITIME AIR QUALITY IMPROVEMENT PLAN

15

Achieving Our Goals

- A goal is something to strive for. We may do better; we may fall short.
- We are committed to achieving our goals by taking all feasible measures.
- Achieving our goals requires action of all stakeholders.
- 2012 planning horizon:
 - Continued stakeholder involvement
 - Compliance program design
 - Early implementation
 - Focus on institutional readiness



MARITIME AIR QUALITY IMPROVEMENT PLAN

16

Questions



MARITIME AIR QUALITY IMPROVEMENT PLAN