

DRAFT – FOR DISCUSSION PURPOSES ONLY

# Ports Workgroup Report to the Mobile Source Technical Review Subcommittee (MSTRS)

Ann Arbor, Michigan

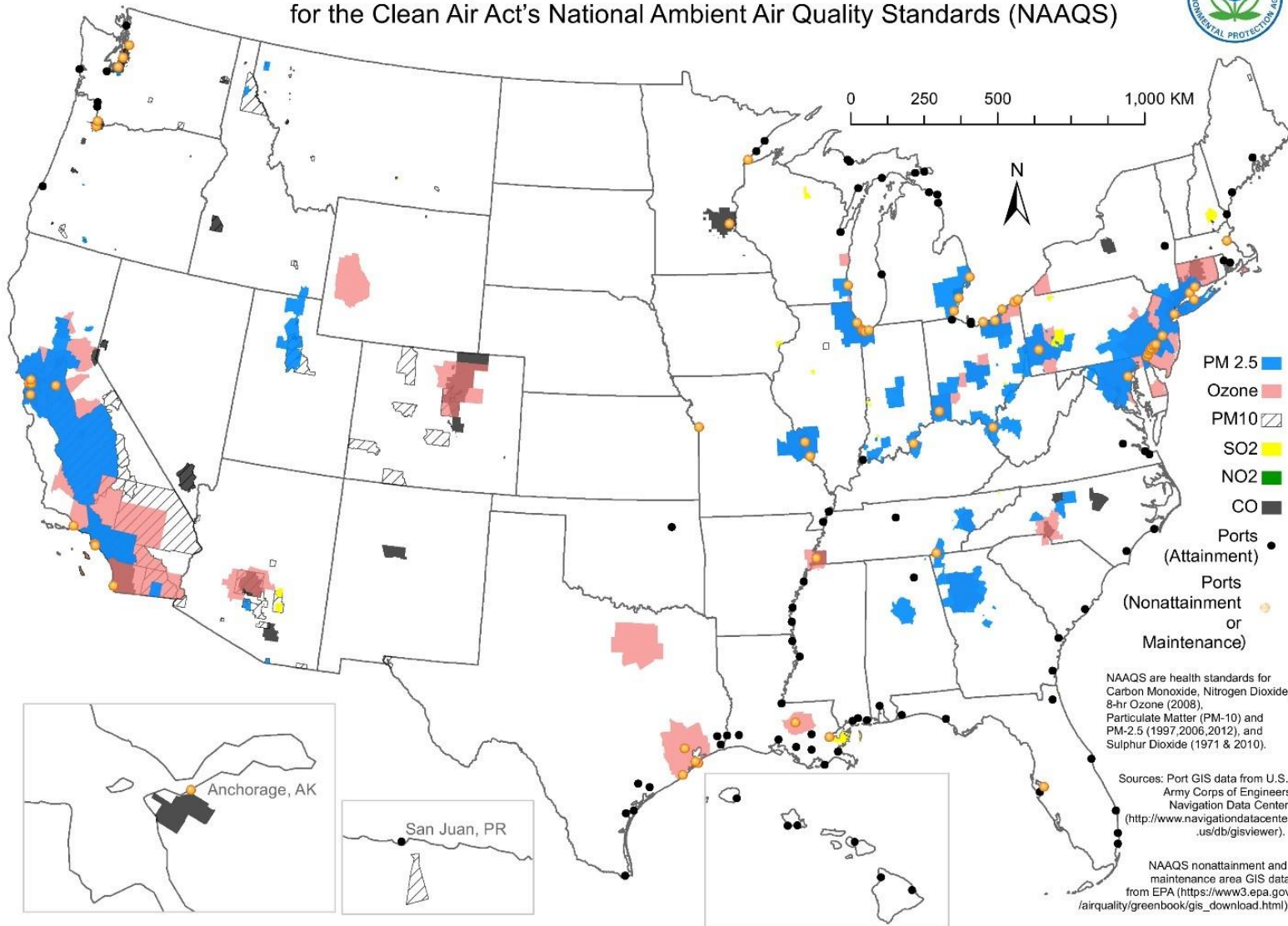
June 16, 2016



# Agenda

- The purpose and Workgroup charge
- Organizing to address the issues
- The recommended program and its components:
  - Program Design
  - Emission Reduction Strategies
  - Community-Port Engagement Tools
  - Coordination with Relevant Government Programs
  - Increasing and Targeting Funding
  - Information Clearinghouse and Communications
  - Inventories and Metrics
- Discussion and next steps

# Ports in Areas Designated Nonattainment or Maintenance for the Clean Air Act's National Ambient Air Quality Standards (NAAQS)



# Charge for the MSTRS Ports Initiative Workgroup

EPA asked MSTRS for recommendations on:

- Development of an EPA-led voluntary environmental port initiative
- How to effectively measure air quality and GHG performance of ports and/or terminals within ports

The workgroup should consider:

- Past MSTRS and other recommendations
- Existing port environmental improvement programs
- Ports in the context of the broader transportation supply chain
- Information from EPA's Assessments as available

# “Ports” are complex legal & operational systems.

- **Port Authority**
  - Government-established entity
  - May be “Landlord,” Operating or both
  - Financial and legal responsibilities
  - Environmental requirements for expansions, changes and as needed due to policies, or by government or tribal agencies programs.
  - Some have or are developing environmental strategies, inventories and programs
  - The “convening” entity
- **Other port operators**
  - Marine terminals (cargo and passenger)
  - Private terminals, Pilots, tugs and harbor craft
  - Energy and fuel suppliers
  - Dredging/maintenance/construction
  - On/near-port railyards and warehouses
  - Satellite port facilities
  - USCG, CBP and other governmental entities
  - (On-port manufacturing was excluded from study)
- **Port facility visitors/users**
  - Ocean/lake/river-going vessels and barge services
  - Rail carriers
  - Trucking companies
  - Supply deliveries
  - Workers for all entities
  - Passengers
  - Military vessels may/ay not be included
- **Others impacted**
  - Surrounding community and tribes
  - Other governmental entities (federal, state, local and tribal)
  - Cargo owners, shippers and recipients
  - Marine or land-based ecosystems
  - Fishermen, offshore oil and suppliers, recreational users

# MSTRS Ports Workgroup

Co-chairs:	Lee Kindberg, Maersk Line, and Sarah Froman, EPA
Ports:	Maryland, Charleston, Long Beach, New Orleans, Virginia
Terminals:	Ports America
Shippers:	Cargill, Walmart, HP
Equipment:	Caterpillar, Manufacturers of Emission Controls Association
Rail:	Burlington Northern Santa Fe
Trucking:	Evans Delivery
Port Communities:	East Yard Communities for Environmental Justice, Southeast CARE Coalition, Steps Coalition
Tribes:	Fond du Lac Air Program
NGOs:	Environmental Defense Fund, Natural Resources Defense Council
Research/analysis:	International Council on Clean Transportation
Government:	New Jersey DEP, SC DHEC (voting) and MARAD, CMTS (non-voting)
Non-voting:	American Association of Port Authorities, Bruce Anderson*
EPA Support	OTAQ, Office of Environmental Justice, Office of Water Region 1, Region 2, Region 6, Region 9

\* The Workgroup wishes to thank Bruce Anderson for volunteering his knowledge and expertise in the area of port-related emissions inventories, metrics, and methodologies.

# Workgroup Process

- Subgroups assessed needs/opportunities and developed recommendations:
  - Definition/Scope of a Port
  - Technology Implementation and Barriers
  - Federal Agency Coordination
  - Port Inventories and Metrics
  - Strategies for Community-Port Engagement
  - Program Design/Structure
- The Port Initiative Workgroup worked to create a report that reflects the viewpoints of all Workgroup members. Where opinions differed on particular recommendations, the differing points of view are discussed, and these recommendations are identified with an asterisk (\*).
- One idea was considered out-of scope or non-consensus (Section 9).

## Section 2: EPA should establish a voluntary ports environmental performance program.

### “PACE: Port Action for a Clean Environment”

- Intent: Drive continuous improvement by
  - providing access to resources and tools,
  - sharing expertise on freight and passenger movement and port-related health impacts,
  - better aligning federal agency programs and funding, and
  - advancing the adoption of clean, innovative technologies and operational strategies.



# Section 2.1: Scope of the PACE program

## *("Definition of a Port")*

- The scope of the EPA voluntary ports initiative is maritime activities directly related to the movement of cargo, products or people including those associated with either state/local public port facilities or private terminals and federal facilities as appropriate.
- These activities include operation of vessels, cargo handling equipment, rail, truck/vehicles and storage/warehousing directly related to the transportation of maritime cargo or passengers.
- Activities can be related to infrastructure development and maintenance.

**NOT just targeted to Port Authorities  
(but they are key players).**

## Section 2.2: Overall Program Design

2.2.1 Provide funding, technical resources, and expertise to enable environmental improvements

2.2.2 \*Evaluate the feasibility and added value of formal tiered participatory program

2.2.3 Set goals, track progress, and incorporate ongoing feedback

- Set goals to work collaboratively with a specified number of ports in a given timeframe (e.g., 20 ports by 2020)
- Establish voluntary registry of goals and progress
- Publish results

# Overall Program Design (continued)

## 2.2.2 \*Evaluate the feasibility and added value of a formal tiered participatory program

- Some members felt technical resources, funding and coordination would be sufficient/the best use of EPA resources
  - Some were concerned about duplicating efforts (e.g., with Green Marine) and that many ports may not have bandwidth to participate
- Others felt a more formal structure with clear incentives may be needed to ensure accountability and continual improvement
- The Workgroup also found it challenging to reach consensus on what AQ/GHG management practices are appropriate for each tier given diversity of ports (discussed further as part of “Roadmap”)

# 6 Focal Areas of Program

*(with report section numbers)*

3. Emission Reduction Strategies
4. Community-Port Engagement Tools
5. Coordination with Relevant Government Programs
6. Increasing and Targeting Funding
7. Information Clearinghouse and Communications
8. Inventories and Metrics

## Section 3: Emission Reduction Strategies

1. \*Develop a national roadmap of best practices
2. Develop guidance on strategies
3. Develop alternatives for technologies that don't fit existing regulatory approval/verification processes
4. Facilitate demonstration projects
5. Develop way to verify operational efficiency improvements
6. Develop guidance on clean construction specifications
7. Develop method to identify high emitting vehicles & promote maintenance best practices
8. Encourage effective state-level HD I&M

# Emission Reduction Strategies (continued)

## *Roadmap challenges:*

Characteristic	Challenges
Not static	<ul style="list-style-type: none"><li>• Best practices are continually evolving.</li></ul>
Flexible but aggressive	<ul style="list-style-type: none"><li>• Accommodate “beginner” ports as well as more advanced ports.</li><li>• Numerical goals</li></ul>
Scope	<ul style="list-style-type: none"><li>• Which pollutants &amp; which media</li></ul>
Value added	<ul style="list-style-type: none"><li>• How to complement existing programs</li></ul>
What’s in it for the ports	<ul style="list-style-type: none"><li>• State/federal support</li><li>• Clear incentives</li></ul>
Accountability	<ul style="list-style-type: none"><li>• 3<sup>rd</sup> party verification</li></ul>

# Emission Reduction Strategies (continued)

## *Roadmap evolution*

**Fall 2015: Focus was on designing a Roadmap for the program.** The Workgroup designed 3 program options based on resources available to EPA

1. Improve existing program but no significant resource investment;
2. Expand existing program (middle of the road) with some extra resource investment;
3. Innovative new program with ambitious goals & significant resources.

**Winter 2015: Evaluated “resource” model vs. “membership” model.**

- Some felt another membership program was not needed.
- All agreed a resource model would be useful.

**Spring 2016: Focus shifted to a Roadmap for Port Authorities and port participants**

- Some thought we were falling short of our charge, so attempted to design tiered approach and define “what good would look like.”
- Initial versions were very prescriptive; strategies for each sector under each tier.
  - E.g.: Must implement x strategies from Step 2 before move to Step 3.
- Focused our efforts on proposing a continual improvement structure that could be used as a pattern for any Port Authority or port operator

# Fall 2015

	Program Approaches Based on Resource Availability – DRAFT		
	Improve Existing Ports Program (Low Resource)	Middle of the Road	Ports Leadership program (High Resource)
Approach description	“As is with improvements” EPA organizes to focus more on ports and leverage existing resources more effectively.	Expands existing program with some added resource investment	EPA takes the lead to establish an innovative program with ambitious goals, new tools and accelerated improvements.
Issue Area:			
Agency coordination and organization (federal, states, IMO, other)			
Funding			
Methodologies and Guidance			
Information clearinghouse			
Public awareness/general outreach/communications			
Shipper engagement			
Regulatory and voluntary benefits quantification			
Goal setting and progress measurement			
Recognition, verification, and confirmation of achieving goals			



**Voluntary Roadmap for Reducing Air Emissions and GHG from Ports and Freight Movement**

	STEP 1** This Step focuses on achieving compliance with existing regulations and starting the community/stakeholder engagement process.	STEP 2** Step 1 Strategies + Select X Number of Strategies or 10% reduction from baseline	STEP 3** Selected Step 2 Strategies + Select X Number of Strategies or 25% reduction from baseline	STEP 4** Selected Step 3 Strategies + Select X Number of Strategies or 40% reduction from baseline	STEP 5** Selected Step 4 Strategies + Select X Number of Strategies or 55% reduction from baseline
Management and Technology strategies					
Logistics and efficiency (see footnotes for concepts to be included)					
Community & industry engagement strategies					
EPA and State support					

# June 2016 – Workgroup recommendation\*

	STEP 1: ASSESS	STEP 2: PLAN & IMPLEMENT	STEP 3: MONITOR, ADJUST, AND ENHANCE
OBJECTIVES	<p>Develop baseline emissions inventory and evaluate specific opportunities for emissions reductions including reduction of air toxics exposure in local communities and near local tribal nations.</p> <p>Assess community/tribal/stakeholder interests in anticipation of engaging them in the development and implementation of an emission reduction plan.</p>	<p>Develop and begin implementing a short term and long term strategic plan to reduce air emissions and related local health risks. Design formal framework and commitment for routine community engagement, dialogue, and decision making including reporting of information.</p> <p>Demonstrate achievement and progress in implementing the strategic plan and the emission reduction targets. Develop refined emissions inventory including projections for future years.</p>	<p>Demonstrate significant progress in implementing the strategic plan across all sectors.</p> <p>Assess progress in implementing strategic plan, and evaluate additional opportunities for emissions reductions, with a goal of widespread use of zero emission technologies.</p>
MANAGEMENT STRATEGIES	STEP 1: ASSESS	STEP 2: PLAN & IMPLEMENT	STEP 3: MONITOR, ADJUST, AND ENHANCE
SECTOR SPECIFIC BEST PRACTICES			
LOGISTICS AND EFFICIENCY STRATEGIES			
COMMUNITY, TRIBAL NATIONS AND STAKEHOLDER ENGAGEMENT STRATEGIES			

# Emission Reduction Strategies (continued)

## Roadmap recommendation – June 2016

### **3 steps**

- Assess: collect baseline data; begin community/stakeholder engagement
- Plan & Implement: develop & implement strategic plan with milestones & performance targets; report metrics; recommended best practices.
- Monitor, Adjust & Enhance: assess program; refine plan by evaluating new technologies/operational practices; ongoing & continual improvement; recommended aggressive best practices.

Each step includes: management strategies; technology strategies; efficiency strategies; community strategies

## Section 4: Community-Port Engagement Tools

1. Finalize EPA's capacity-building tools
  2. Develop future tools in partnership with key stakeholders
  3. \*Prioritize regional office actions in communities disproportionately exposed to port area emissions
- A number of other recommendations are also related to community engagement. Examples include:
- Guidance on developing and communicating inventories
  - Use of emerging tools ("citizen science")
  - Guidance on emissions reduction strategies and best practices
  - Advocating for EJ in the NEPA process
  - For a more complete list see Section 4

## Community-Port Engagement Tools (continued)

### 4.3 \*Prioritize regional office actions in communities disproportionately exposed to port area emissions

- Some members felt that Port Authorities and other port operators should always be included in EPA meetings with communities
- Others felt it was appropriate and valuable for EPA to meet with communities independently

# Section 5: Coordination with Relevant Government Programs

1. Coordinate within EPA, with CMTS, and other state, fed, and tribal agencies. Examples include:
  - Internal coordination with SmartWay, Regional Diesel Collaboratives, NEJAC, Office of Environmental Justice, other env. media offices
  - CMTS Maritime and Air Emissions Workgroup and EJ Interagency Working Group as forums for federal coordination
  - Coordination with HHS/CDC on health impact communications
2. Advocate for environmental justice, protection of treaty rights, mitigation, and transparency in the NEPA process
3. Work with sister agencies on voluntary national strategies to reduce emissions from the entire freight network
4. Expand SmartWay to other port operators (e.g., vessel operators) and consider how to recognize existing SmartWay partner port strategies

# Section 6: Increasing and Targeting Funding

1. Seek DERA reauthorization and full funding
2. Encourage use of more CMAQ funding at ports
3. Collaborate with other federal agencies to coordinate and publicize funding
4. Encourage use of SEPs to fund port projects
5. Provide funding for demonstration projects
6. \*Support and incentivize inventories and clean air plans
7. Identify new, feasible sources of self-sustained funding
8. \*Prioritize funding based on demonstration of measurable improvement; strengthen criteria to ensure public health benefits



# Increasing and Targeting Funding (continued)

## 6.6 \*Support and incentivize inventories and clean air plans

- Range of opinions on how to use funds to promote inventories and clean air plans
  - Some members recommend EPA fund inventory/clean air plan development
  - Others recommend restricting EPA funds to Port Authorities that have conducted or committed to conducting inventories

## 6.8 \*Prioritize funding based on demonstration of measurable improvement; strengthen criteria to ensure public health benefits

- Range of views on how stringent criteria for future funding should be or whether the criteria for DERA should change
  - Some say strong funding criteria (e.g., requirement to have inventory, clean air plan, participate in structured EPA program,) are needed
  - Others are concerned that strong criteria could preclude Port Authorities with limited bandwidth (and possibly the greatest emissions reductions needs)



# Section 7: Information Clearinghouse and Communications

1. Develop communications and outreach strategy to promote use of program resources
2. Create web-based information clearinghouse



# Section 8: Inventories and Metrics



1. Develop inventory guidance
  - Acknowledge various levels and quality of data
  - Consider emerging data sources (e.g. citizen science)
2. Assist and encourage development of refined port-related inventories
3. Facilitate simple, non-technical communication of inventories to stakeholders
4. Provide guidance on indicators/metrics
5. Identify and/or develop calculators
6. Provide guidance on other programs' indicators, metrics, and tools

# Section 9: Ideas Felt to be Non-Consensus or Out of Scope

Prioritization of these recommendations, along with other emissions reduction strategies (including regulatory approaches), was raised in some Workgroup discussions. The Workgroup did not reach a consensus on this broader prioritization, since our scope was defined as a voluntary initiative. The following statement reflects the concerns expressed by those members:

- *The Workgroup has provided EPA with numerous recommendations, a number of which will require significant time and expense for the Agency to implement. In prioritizing which requests to adopt in the near-term, EPA should, first, articulate its air quality and human health goals with respect to reducing freight emissions, including a timeline for reaching those goals; and then determine the combination of strategies it should employ to reach those goals (including funding, voluntary, regulatory, and guidance-oriented strategies). Such an assessment will help ensure that EPA's actions are driven by its mission (protect human health and the environment) and timely delivered.*

# Next steps

1. Discuss the process and draft report/recommendations with MSTRS at June 16 Ann Arbor meeting.
  - Approval as is or with suggested changes
  - Incorporate MSTRS suggestions into the report, and do final clean up.
2. Presentation to CAAAC
  - Update at June 29 meeting in DC
  - Broader discussion and approval will depend on MSTRS comments and CAAAC timing
  - Incorporate CAAAC suggestions
3. CAAAC submits the final recommendations to the Administrator

# Thanks from the Workgroup



# Anticipated report updates prior to presentation to CAAAC

1. Reference the 2015 Health Effects Institute diesel toxicity study in the introductory section.
2. Edits :
  - Reinsert 2 paragraphs in 6.8 for clarity