

OTC Annual Meeting

June 13, 2013
New Haven, CT

Mobile Source Committee Update



Overview

1. Aftermarket Catalysts
2. Inventory
3. Federal Updates
 - a) Emission Control Areas
 - b) Tier 4 Nonroad Engines
4. Ongoing Efforts

Aftermarket Catalyst Recommendation

- EPA's policy was set in 1986 and has not been updated to reflect improvements in technologies & emission standards.
- Tier 3 proposal did not include an updated program.
- OTC submitted a finalized recommendation for an updated catalyst program to EPA in April, 2011.



Aftermarket Catalyst Model Rule

Goal: To develop an aftermarket catalytic converter model rule for OTR states to use:

- Essentially provides the language necessary for a state to pursue adoption of the California aftermarket catalyst program.
- Based on regulation implemented by New York.
- Has optional language for allowing used converters to be installed on vehicles with OBD.

	NO _x	NMHC	CO
Annual (tpy)	10,000	2,000	27,000
Daily (tpd)	30	6	74

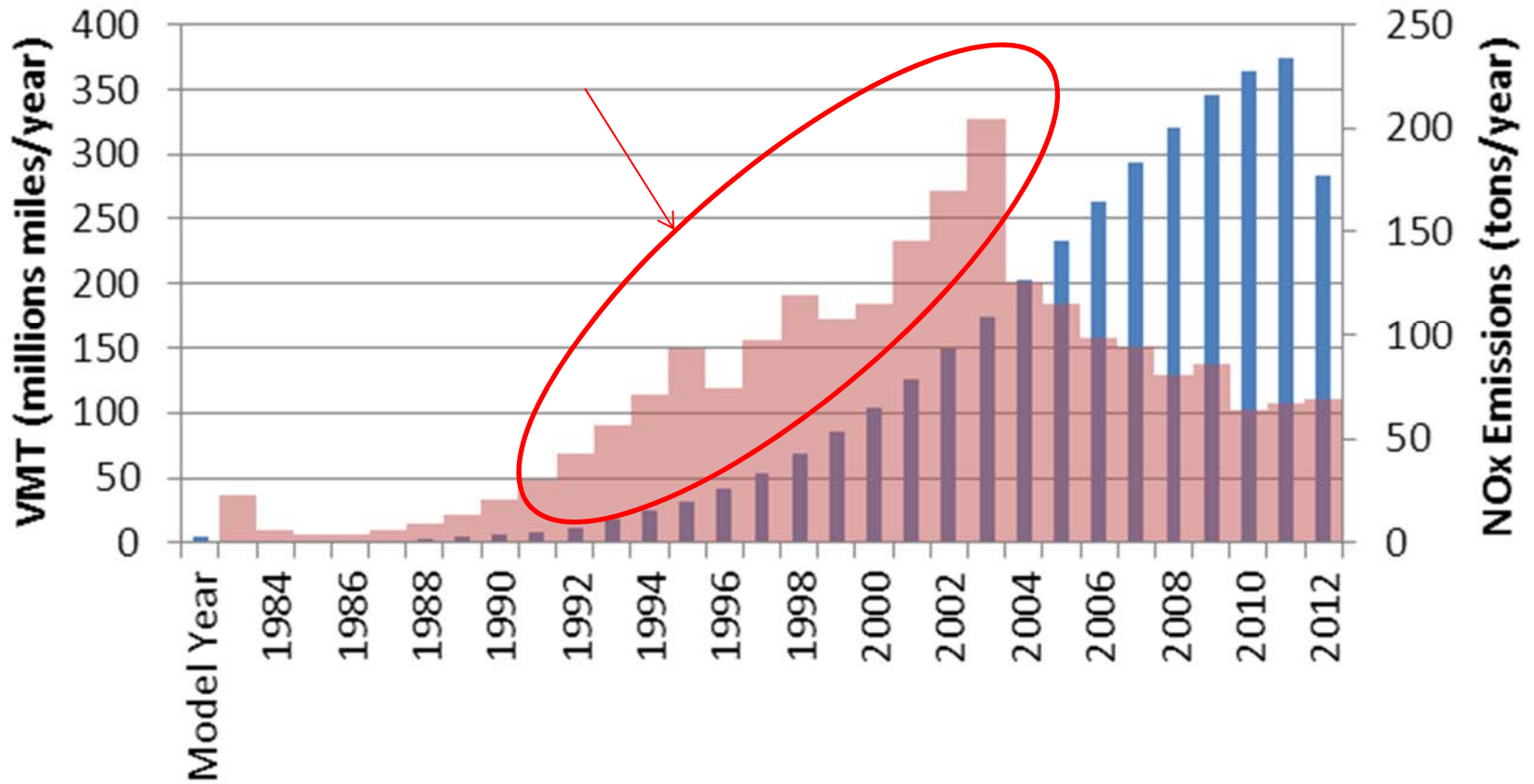
Aftermarket Catalyst Model Rule

- Next Steps:
 - Solicit Stakeholder Comments - Due July 15, 2013
 - The committee will finalize the Technical Support Document

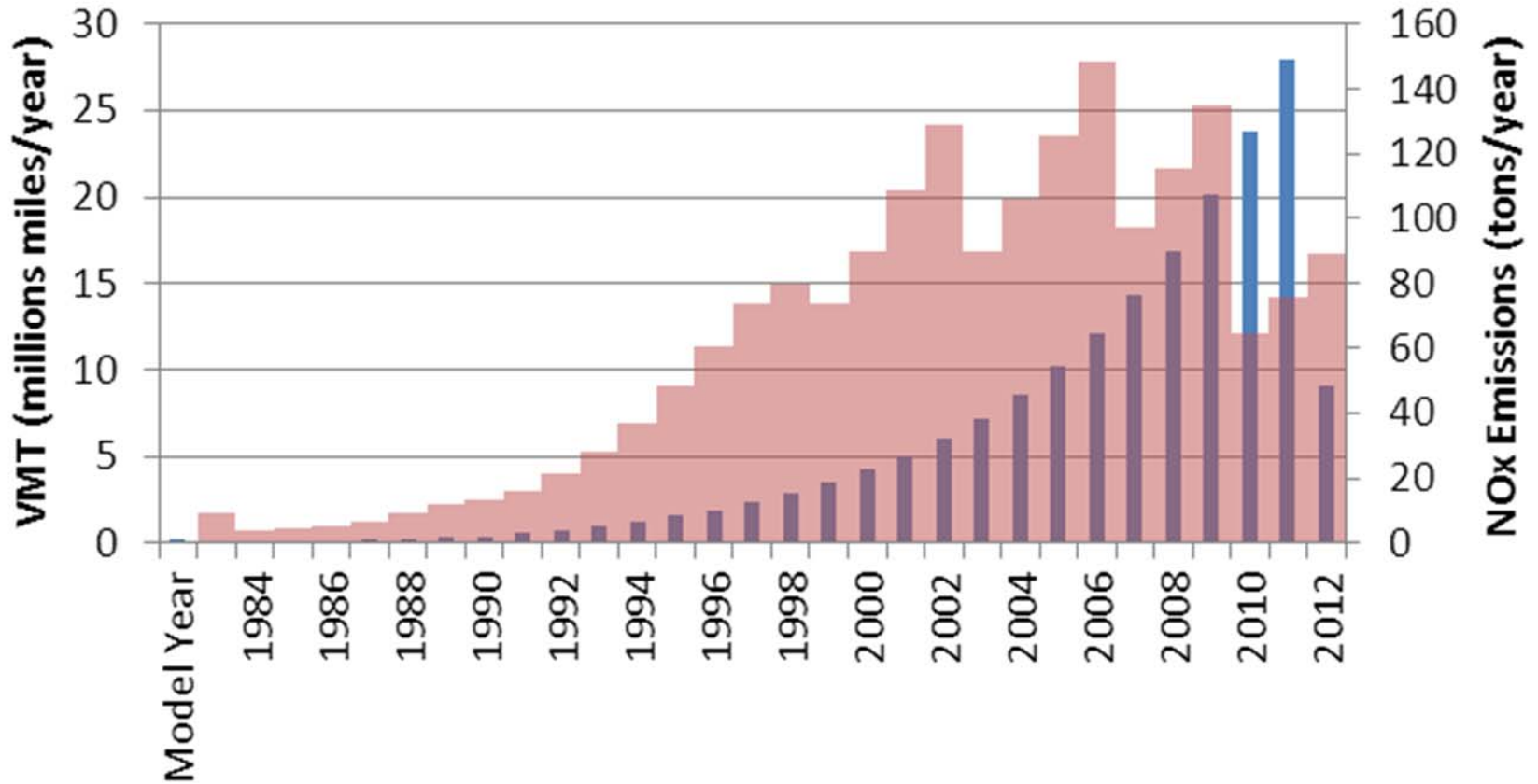
Onroad Inventory Project

- Analyzing 2007 & 2020 for a mix of suburban and urban counties
 - Baltimore City, MD
 - New Castle, DE
 - Mercer, NJ
 - Fairfield, CT
 - Suffolk, MA
- Analysis will focus on emissions from:
 - Starts vs. Running Emissions
 - VMT
 - Average Speed Distribution
 - Model Year Distribution

Light Duty Vehicles



Heavy Duty Vehicles



Emission Control Areas (ECA)

- USEPA & International Maritime Organization (IMO) Action
- NO_x and SO₂ requirements on ship near shore
 - 2015: 1000 ppm Maximum Sulfur Fuel
 - 2016: New Engine Standards – Tier 3 (80% reduction)
 - 2010: Existing Engines – 15-20% NO_x reductions
- Provides Significant Air Quality Benefits in the OTR and throughout the Nation.

Current Issues with ECA

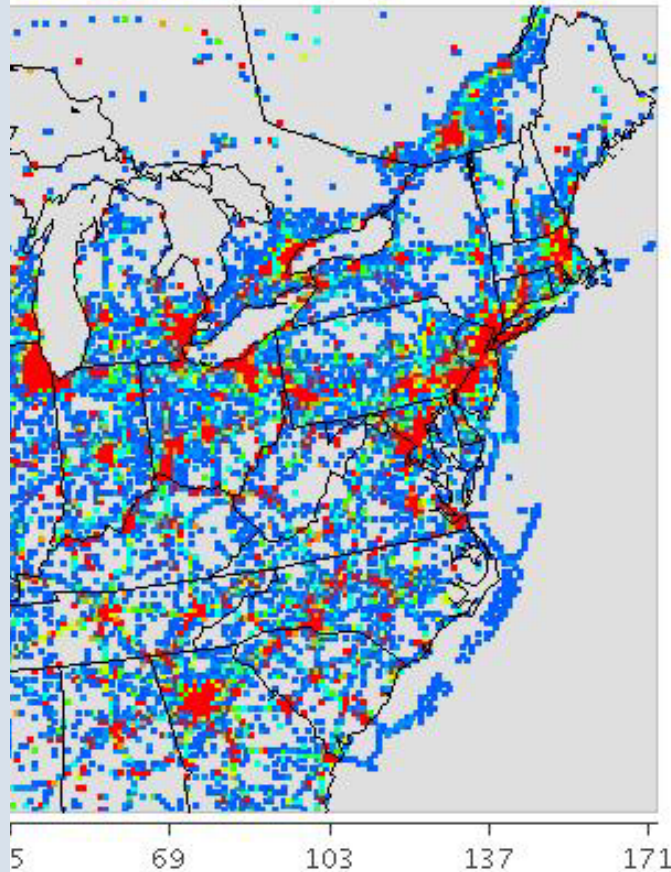
- The Russian Federation is challenging the finding of the market availability of emission control technologies for affected ship;
 - Recommends a five (5) year delay
- U.S. EPA and Coast Guard are pushing back
- Decision will be made March 2014
- Ozone reductions in coastal areas of up to 2ppb in 2020 are at risk

NO_x Emissions

August 3, 2007

Total All Sector NO_x

Level 3

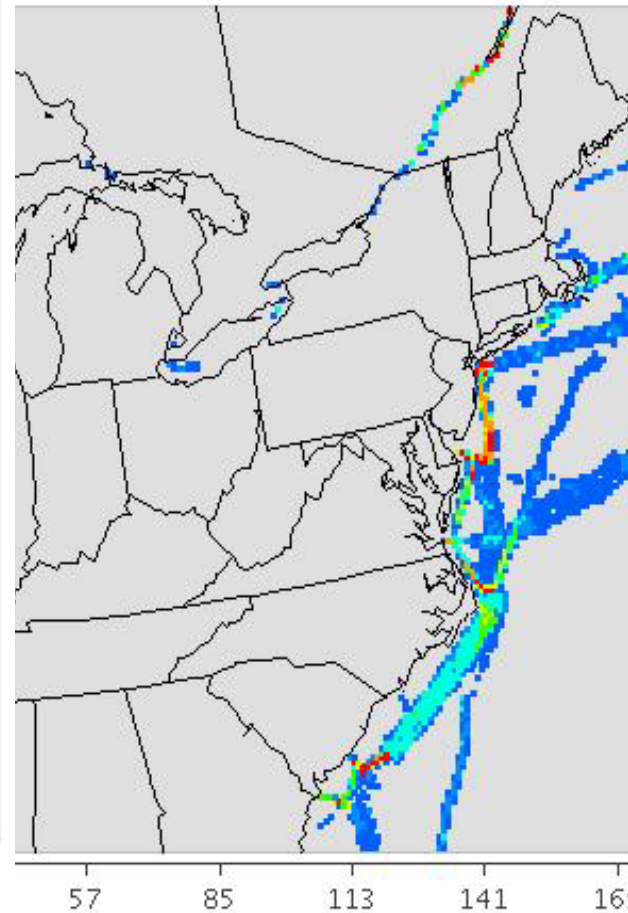


August 3, 2007

Min (5, 1) = 0.0000, Max (138, 102) = 0.0314

Category 3 Marine NO_x

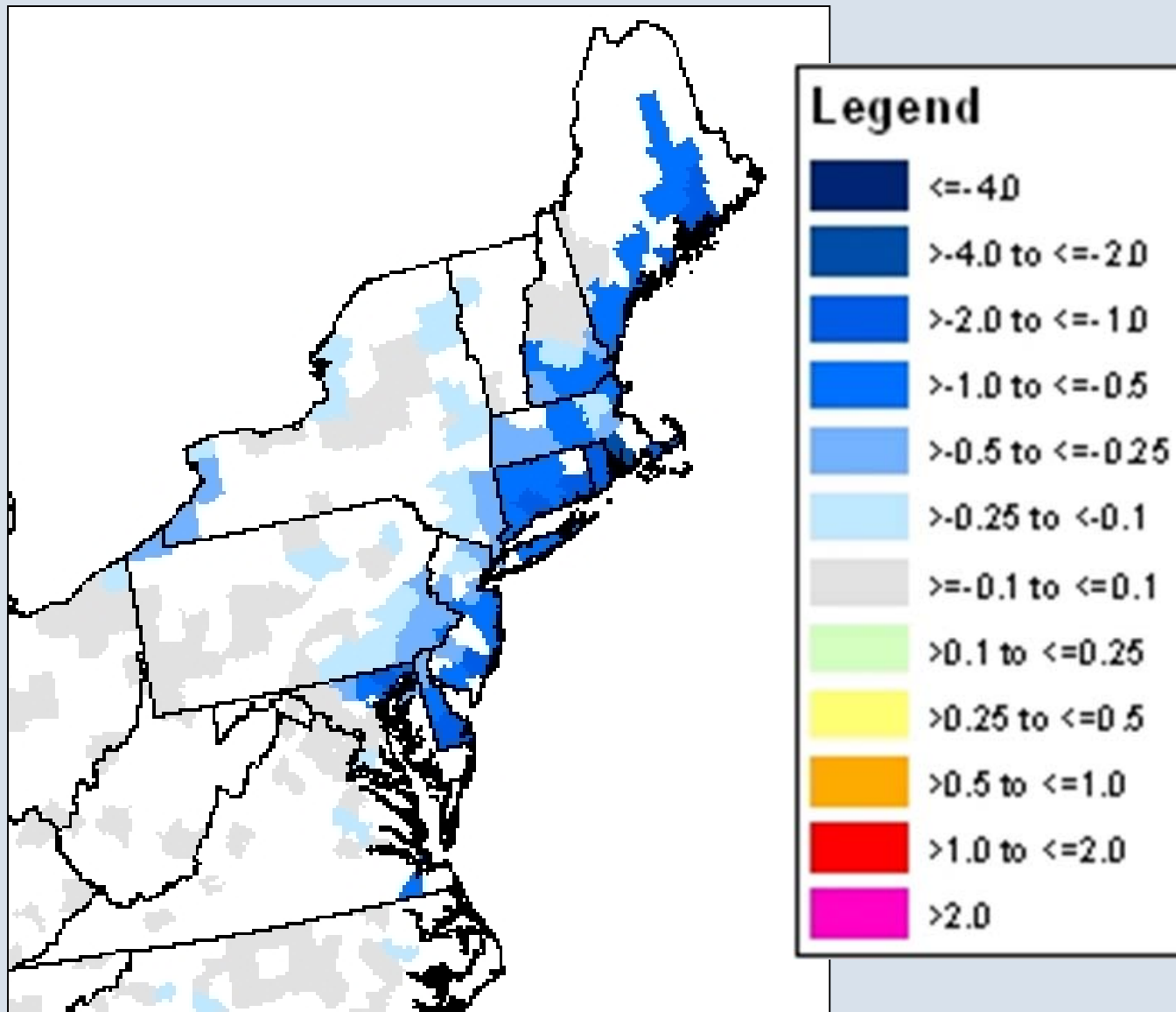
Level 3



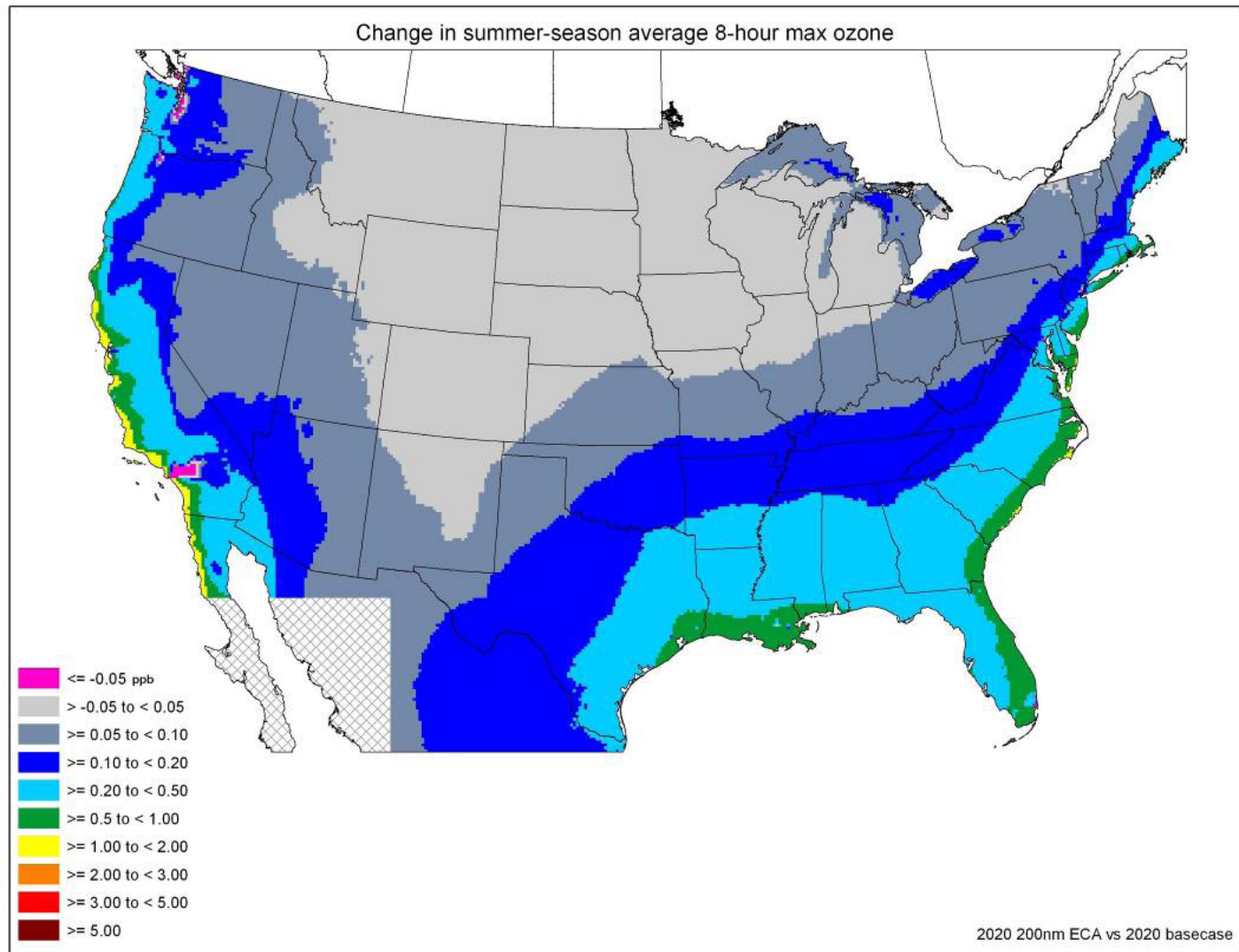
August 3, 2007

Min (57, 1) = 0.00000, Max (139, 99) = 0.00054

Emission Control Area – Ozone Benefits in 2020



Improvement in Summertime Average 8-hour Average Ozone Concentrations in 2020 Resulting from the Proposed Emission Control Area



Tier 4 Nonroad Engines

- EPA rules require that replacement engines be of the highest Tier available (Tier 4 currently)
- **Issue:** T4 engines do not always fit into older engine compartments, thus limiting opportunities for repowering
- EPA proposed a rule and issued a direct final rule on May 9, 2013 to enabling the use of lower Tier engines

Summary of the Next Steps

- Aftermarket Catalytic Converters - Update technical support document with cost information
- Other Topics
 - Heavy Duty Diesel I/M
 - Continue collaboration with the USEPA on data needs and associated work plan
 - Emissions Inventory Analysis w/ 2020 MOVES
 - Goods Movement
 - Additional Transportation Strategies