

National Clean Diesel Campaign



Progress on CAAAC Clean Diesel Report Recommendations

*MSTRS & Clean Diesel
Workgroup Meetings
October 3-4, 2006*



“Recommendations for Reducing Emissions from the Legacy Diesel Fleet”

- **Clean Diesel Working Group formed under MSTRS to advise EPA on:**
 - How to assess fleets to determine diesel emission reduction strategies' suitability
 - Evaluation of in-use performance of retrofit technology
 - Education of the public on emission reduction strategies
 - How to establish national incentives for cleaner diesel strategies
- **Submitted Report in January, 2006 to the CAAAC**
- **CAAAC submitted Report to Administrator in April, 2006**

Report on Legacy Diesel Fleet

- Six Cross-Sector Recommendations
- Report covered four sectors:
 - Freight, School Bus, Ports, Construction
 - Over 40 individual recommendations for these four sectors
- Reporting today EPA's progress on:
 - Cross-sector recommendations
 - Sector-specific recommendations

Cross Sector Recommendations

- Potential for Cleaning up Existing Fleet is Significant and Worth the Investment
- Deploy Most Feasible Technology for an Application, and Provide Positive Recognition
- Offer Range of Funding Options and Incentives (grants, loans, rebates, tax incentives, etc.)
- Take Full Advantage of the 2005 Energy Act and 2005 SAFETEA-LU Provisions
- Streamline the Agency's Technology Verification Program
- Accelerate Education and Outreach for Maximum Benefit

Potential for Cleaning up Existing Fleet is Significant and Worth the Investment

- Yes, we agree and it's a shared-responsibility
- President's budget a good start
- Need public/private investment
- State programs a must

Take Full Advantage of the 2005 Energy Act and 2005 SAFETEA-LU Provisions

- **EPAct of 2005 - Authorization levels** (1st year)
 - Diesel Emissions Reduction \$200M
(Sometimes called DERA)
 - School buses \$55M
 - Fleet Modernization \$20M
 - Idle Reduction \$30M
- **President's Request:**
 - Proposes \$49.5M for clean diesel activities under DERA
 - Limits funds to grants in nonattainment (NA) areas
- **House level: \$28M (not limited to NA areas)**
- **Senate level: \$20M**
- **Final Appropriation: TBD**

Take Full Advantage of the 2005 Energy Act and 2005 SAFETEA-LU Provisions

- **SAFETEA-LU of 2005**
 - Congestion Mitigation and Air Quality
 - “States and metropolitan planning organizations shall give priority...to...diesel retrofits...”
 - Diesel retrofits defined as “Retrofit Technology, Engine Replacement, Engine Repower, Rebuild”
 - Requirement for EPA to publish emissions reduction guidance

Take Full Advantage of the 2005 Energy Act and 2005 SAFETEA-LU Provisions

- **This cross-cutting recommendation is one of the most important for FY 2007**
- **2005 Energy Act: Diesel Emissions Reduction**
 - Several requirements for EPA under this provision
 - Guidance for obtaining SIP and Conformity credits for projects issued (June, 2006)
 - Guidance for identifying cost effectiveness of certain clean diesel technologies issued (March, 2006)
 - Guidance for implementing DERA currently being drafted (expected one month post-appropriation)
 - Report annually to Congress on emissions reductions
 - Emissions calculator to be completed in October
- **2005 SAFETEA-LU**
 - SIP/Conformity Guidance issued
 - DOT's CMAQ Guidance (DOT lead; EPA being consulted)
 - Outreach to MPOs, states, etc... regarding benefits of clean diesel
 - Guidance for cost-effectiveness of CMAQ-funded projects currently being drafted

Diesel Emissions Quantifier

Enter Fleet Information

Enter the vehicles to be assessed and the emissions reductions technologies to apply. Please note that your data is only being saved for this session and not to a database. On the next screen you have the option to download and save your information to a file.

The Diesel Emission Quantifier should not be used for the calculation of any emission reductions to be incorporated in a State Implementation Plan (SIP) or conformity determination. If you wish to calculate emission reductions for a SIP or conformity determination, you should review the appropriate SIP and conformity guidance document and consult with your EPA Regional Office. For long-duration idle reduction, the SIP and conformity guidance ("Guidance for Quantifying Long Duration Truck Idling Emission Reductions in State Implementation Plans and Transportation Conformity", January 2004) can be found [here](#). For retrofit projects, the SIP and conformity guidance ("Diesel Retrofits: Quantifying and Using Their Benefits in SIPs and Conformity - Guidance for State and Local Air and Transportation Agencies", June 2006) can be found [here](#). For emission reduction strategies not covered by those guidance documents, please consult with your EPA Regional Office.

[Click here to view the DEQ User Guide](#) | [Go back to Welcome](#) | [Jump to Current Vehicle Group Listing](#)

Enter New Vehicle Group Information

Enter or edit information about this Vehicle Group.

Selected State: MI
Select type: On-Highway
Select sector: School Bus
Vehicle or Equipment: School Bus
Quantity: 100
Model Year: 2002
Retrofit Year: 2006
Select fuel type: Regular Diesel (ULSD)
Enter fuel volume: 1 gal/yr for group
Calculated fuel volume: 1 diesel gal/yr for group
Vehicle miles traveled: 13000 miles/vehicle/year
Idling hours (including hours saved): 0 idle hours/vehicle/year

Apply a Technology to New Vehicle Group

Enter or edit information about the Emissions Reduction Technology.

Select technology type: Emissions Control Devices
Select technology: Diesel Particulate Filter
Apply technology to: 100 vehicles in this group

Pollutants:	NOx	PM	HC	CO	CO2
Reduction:	<input type="text"/> %	85 %	90 %	90 %	<input type="text"/> %

Unit cost: \$
Installation cost: \$

Note that the percent reduction associated with a particular retrofit technology may vary by manufacturer and application and may change as more information becomes available. Please refer to EPA's [verified technology web page](#) for the latest detailed information on verified emission reductions from retrofit technologies. Some of the technologies listed here are not yet verified by EPA or the California Air Resources Board (CARB).

Technology Actions

Save New and Add Another

Save New

Streamline the Agency's Technology Verification Program

- **Objectives**

- Gain Efficiency – For EPA & Manufacturers
- Evaluate technologies efficiently and accurately
- Reduce time to verify
- Increase available technologies
- Be certain technologies are performing properly in the field

- **Actions**

- Several consultative meetings with Industry, ARB & Others
- New Guidance, enhancing web presence
- Accept ARB verified mobile source technologies
- Initiated Conditional Verifications
- Flexibility Outside of ETV Process
- In-use Data to Increase Confidence

Accelerate Education and Outreach for Maximum Benefit

- **Clean School Bus program**
 - Collaboration with Scholastic on **Magic School Bus book** for children
 - National **Idling Reduction Campaign** materials created
 - Piloted this summer, launching this fall
- **SmartWay Partnership**
 - 2:1 private match in ads for funds. Total donated value: ~\$1.7M
 - Placements in Forbes, Business Week, Kiplinger's, 1200 truck stops, etc.
 - Upcoming spot on "Trick my Truck" (Country Music TV channel show)
- **Outreach to Communities**
 - Clean Diesel web site revamped
 - Case Studies for sector-based projects highlighted
 - Expanded and More Comprehensive Clean Construction USA website
 - Program Info Kits, NCDC Progress Report
- **Outreach at numerous industry and regional conferences, workshops, etc...**
- **SmartWay awards this month**

School Bus Sector: Recommendations and Responses

- **Develop an Outreach and Education Program**
 - Magic School Bus book
 - National Idling Campaign
 - Continuing to reach out to organizations, school districts, governments about available funding
- **Focus on older buses, cost-effective solutions**
 - Grant criteria and awards reflect recommendation
- **Reach out to smaller/rural/less affluent districts**
 - Of 35 grants, 13 are whole or in part in such districts
 - Striving to make process simpler so more districts can participate

Ports Sector: Recommendations and Responses

- **Share Best Practices: Educational Materials and Tools**
 - New case studies and technology workshops
 - Held EPA Executive-level Ports workshop in Long Beach to pool experience, resources
- **Develop Emissions inventory**
 - Have budgeted for this project, starting this fall
- **Coordinate with other Federal agencies to address infrastructure needs that accommodate growth in an environmentally beneficial way**
 - EPA partnering in Winter 2007 International Ocean Going Vessel Conference
 - Participated in MARAD sponsored meetings such as the Cold-Ironing ISO workgroup meeting Sept 2006

Construction Sector: Recommendations and Responses

- **Investigate and assess operational modifications that have emissions benefit**
 - Working with AGC on an EPA Report on low-cost emissions reduction strategies for construction sector. Will be released in late 2006.
- **Coordinate with stakeholder communities regarding grant programs**
 - Outreach to AASHTO, AGC, ARTBA, APWA, NARC, AMPO
- **Establish ongoing outreach and educational initiatives-including website**
 - Expanded Clean Construction USA website- new case studies this fall
 - Developing clean construction video
- **Accelerate the process for verifying nonroad retrofit technologies**
 - First conditional verification with first nonroad engine upgrade kit

Freight Sector: Recommendations and Responses

- **Create national and state/local capitalization programs**
 - National environmental loan program with the Small Business Administration for small trucking companies to purchase technologies – available soon
 - Oregon State Infrastructure Bank program with Cascade Sierra Solutions
 - Looking into multi-state State Infrastructure Bank programs along the I-95 and I-5 corridors and developing innovative apportionment strategy
 - More states are interested in financial programs for freight (e.g., Tennessee, Michigan)
 - Integrate public and private financing to buy down interest rates, guarantee loans and extend terms
- **Verify effectiveness of technology bundles (fuel savings & emission reductions)**
 - Developed Technology Calculator to help evaluate fuel savings
 - New test results on technologies will be presented at Oct. SAE conference
 - Awarded \$300,000 grant to evaluate upgrade kits under real-world conditions

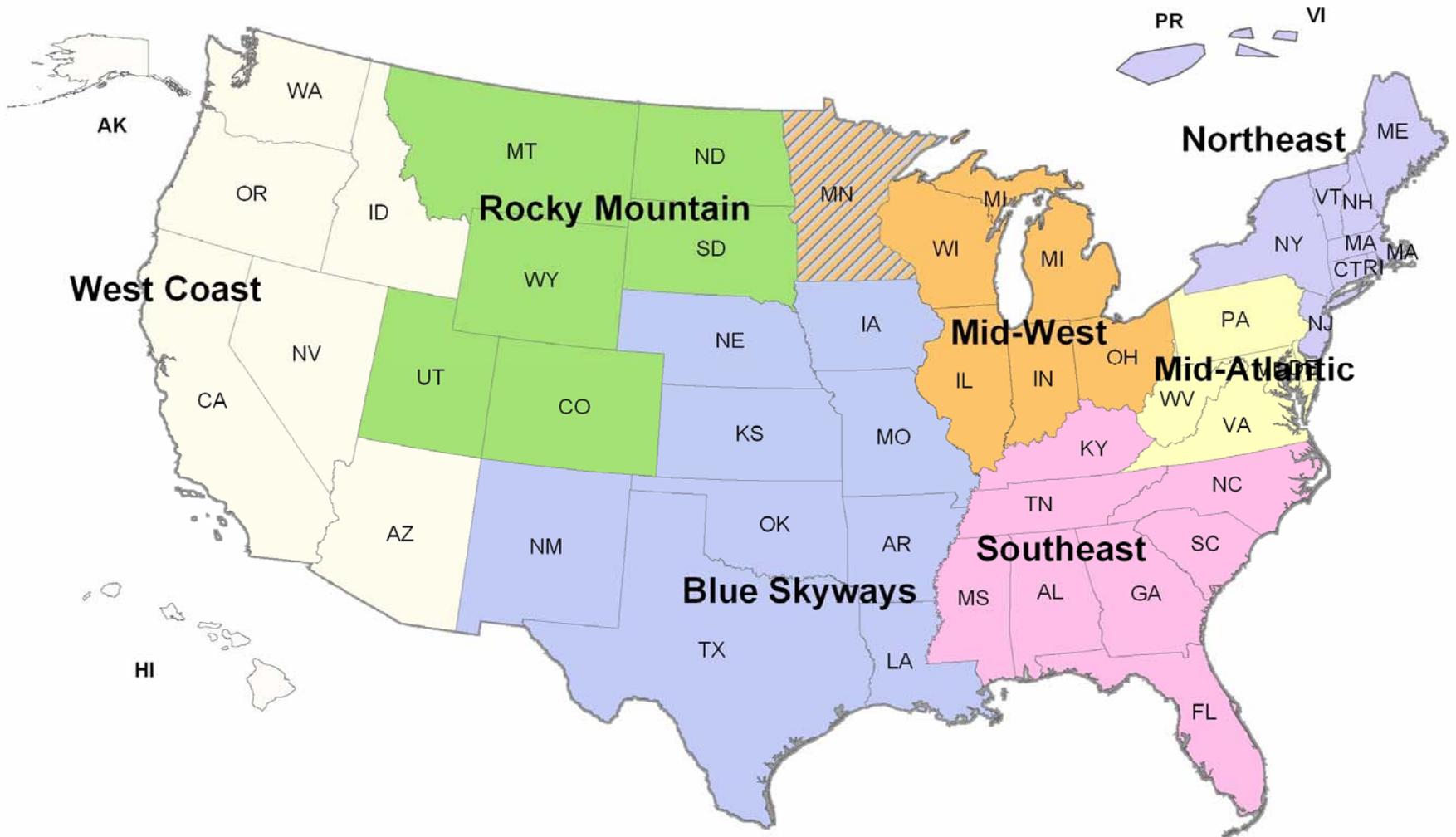
Freight Sector (cont.)

- **Increase demand for cleaner, more efficient freight**
 - Continued recruitment of partners and outreach to industry through PSAs, articles, SmartWay Excellence Awards
- **Create a SmartWay truck labeling program**
 - Developing environmental criteria for labeling trucks
 - Developing fuel economy test procedures for heavy-duty trucks
- **Create weight waivers for technologies**
 - 400 lb weight exemption for idle reduction technologies included in Energy Policy Act of 2005
 - DOT interprets language as optional, so currently only Oregon has publicly adopted waiver

EPA is Working Collaboratively to Accelerate Progress of Diesel Retrofits

- Northeast Diesel Collaborative (Regions 1, 2)
 - Ports, Large infrastructure projects, urban fleets, construction
- Mid-Atlantic Diesel Collaborative (Region 3)
 - Highlighting urban fleets, Philadelphia area and school buses
- Southeast Diesel Collaborative (Region 4)
 - Agriculture, school buses, construction
- Midwest Clean Diesel Initiative (Region 5)
 - School buses, rail, freight corridors, ports, agriculture
- Blue Skyways Collaborative (Regions 5, 6, 7)
 - Onroad, nonroad, air, water, rail
- Rocky Mountain Clean Diesel Collaborative (Region 8)
 - Public fleets, school buses, agriculture
- West Coast Collaborative (Regions 9, 10, w/Canada and Mexico)
 - Public fleets, freight, ocean going vessels, construction

Regional Clean Diesel Collaboratives



For More Information

Visit EPA's National Clean Diesel
Campaign Website

www.epa.gov/cleandiesel

