The Philadelphia Diesel Difference: A Partnership for Cleaner Air.
Problem in Philadelphia

- Philadelphia ranked 5th worst in the nation for greatest public health risk associated with air toxics.
- Estimated 3,085 cancers caused by diesel particulate.
- Diesel vehicles comprise only 7.5% of the vehicle miles traveled in PA yet contribute 48% of the summertime NO\textsubscript{x} and 65% of fine particulate matter derived from highway vehicles.
Air Quality Impact for Philadelphia

- Diesel particulate (soot)
  - Likely to be in non-attainment for PM$_{2.5}$, of which a significant portion is PM$_{\text{diesel}}$.

- Smog
  - Non-attainment for 1-hour ozone standard.
  - Non-attainment for 8-hour ozone standard.

- Air Toxics
  - Mobile sources most significant.
Health Effects of Diesel Exhaust

- Chronic respiratory diseases.
- Bronchitis.
- Asthma.
- Known carcinogen.
- Children adversely affected.
Clean Diesel Technologies

• Menu of options
  – Hardware
    • Particulate traps/filters
    • Oxidation catalysts
  – Clean Fuels
    • Ultra low sulfur diesel fuel
    • Emulsified Diesel Fuel
    • Bio-diesel
  – Idling Reduction Technology
  – Combination of the above

• EPA and CARB Verified Technologies
Future of Diesel Marketplace

• Mid-2006: Ultra low sulfur diesel is required for all on-road diesel vehicles.
  – Sulfur content of diesel #2 reduced from 500 ppm to 15 ppm.
  – 97% reduction in sulfur content.

• 2007: Original equipment manufacturers produce engines with cleaner exhaust systems.
Societal Costs

- Premature death.
- Asthma related emergency room visits.
- Hospitalizations.
- Heart attacks.
- Lost work days.
- Lost productivity.
- Decreased quality of life.
Challenge

- Diesel engines have a 20-35 year lifespan.
- Existing diesel engines require retrofits to bring them up to newer standards.
- Retrofits can cost up to more than $6,000 per vehicle.
- ULSD not mandatory until 2006.
Philadelphia Diesel Difference

• Supports the voluntary implementation of clean diesel technologies on diesel powered engines.

• Coalition of diverse partners:
  – Public, private, and not-for-profit sectors.

• Working Group of over forty members.

• Outreach and education, funding, technical assistance, non-monetary recognition.
Diesel Difference Charter

• Demonstrates commitment to supporting the Philadelphia Diesel Difference.

• Endorsements include:
  • American Lung Association of Pennsylvania
  • Citizen’s for Pennsylvania’s Future
  • City of Philadelphia, Department of Public Health
  • City of Philadelphia, Managing Director’s Office
  • City of Philadelphia, Office of Fleet Management
  • Clean Air Council
  • Cummins Power Systems
  • Delaware Valley Regional Planning Commission
  • Energy Coop
  • Pennsylvania Department of Environmental Protection
  • Pennsylvania Turnpike Commission
  • Sprague Energy
  • United States Environmental Protection Agency
  • Wissahickon School District
Recognition Program

• Provided to fleets that implement clean diesel technologies on diesel powered vehicles.

• Three “levels” of recognition criteria.
  – Platinum, gold, and silver.
  – Based on overall emissions reductions.

• Recognition may included a press conference, plaque, press release, decal, and/or success story.

• Additional public relations and advertising opportunities.
Corporate Sponsorship Program

• To aid in the facilitation of implementing clean diesel technologies in area diesel fleets.

• Financial and in-kind services welcomed.
  – Include pro-bono public relations and consulting services.

• Donations are tax-deductible, through an account with the Clean Air Council.

• Focuses on presentations to targeted audiences of potential donors.

Clean Air Council
Mobile Source Emissions Reduction Credits

- Aid in cost defrayal from retrofit projects.
- Must be quantifiable, enforceable, permanent, and surplus.
- Sold by a participating retrofitted fleet.
- Purchased by a stationary source in need of offsets.
Outreach and Education

• Partner with the Clean Air Council through a Mobile Source Outreach grant.
  – Website.
  – Outreach materials.
  – Quarterly newsletter.
  – Tabling at public events.
  – Individual consultations.
  – Funding announcements.
  – Registry of interested fleets.
  – Anti-idling promotion.
Accomplishments

• Successful Kick-off event in May 2003.
• Organizational Structure.
• Seven ad-hoc sub-committees.
• Diesel Difference Charter.
• Two winners of PA DEP grant settlement.
• Recipient of $20,000 from EPA Region III for air toxics risk mitigation.
• Created account on behalf of Clean Air Council to accept donations.
Additional Information

- Http://www.epa.gov/otaq/retrofit
- Http://www.cleanair.org/dieseldifference
- Diesel Difference/Corporate Sponsorship:
  - Eric Cheung, Clean Air Council
    - echeung@cleanair.org, (215) 567-4004, Ex. 237