EPA’s Proposal for Nonroad Diesel Engines & Fuel

May 2003

U.S. Environmental Protection Agency
Office of Transportation and Air Quality

Scope of the Proposal

- Proposal applies to nonroad diesels of all sizes, from 3 to 3,000 hp
  - Used in a diversity of applications—construction, farming, mining, industrial
- Proposed fuel provisions apply to fuel used in nonroad diesels, locomotives, and marine engines
  - But not to home heating fuel
  - Nonroad fuel is not currently regulated by EPA
- Proposal addresses serious health and welfare impacts from nonroad diesel fuel and equipment—
  - Ozone, fine PM
  - In addition, diesel exhaust is likely to be carcinogenic to humans
- These sources currently contribute 44% of total mobile source diesel PM and 12% of total mobile source NOx nationwide.
  - Their contributions range even higher in many urban areas and will grow in the future.
Proposal Overview

- A systems approach of reducing nonroad fuel sulfur levels to enable advanced emission control technology
  - similar to 2007 diesel truck and fuel rule

- 500 ppm maximum sulfur nonroad diesel fuel in 2007
  - based on substantial health benefits from sulfate and PM reductions

- 15 ppm nonroad fuel in 2010
  - to enable engine standards

- Engine standards representing reductions of >95% PM and ~90% NOx
  - Standards phase in starting in 2008, fully phased in by 2014

- Enhanced certification test requirements to ensure in-use emissions reductions

Proposed Engine Standards Program

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<td>&gt;25</td>
<td>Tier 1</td>
<td>PM (reduction w/oxidation catalyst or engine-based control)</td>
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<td>PM: 100%</td>
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Percentages indicate portion of sales required to meet advanced emission control technology standards.