

EPA's Proposal for Nonroad Diesel Engines & Fuel



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

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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 NO_x nationwide.
 - Their contributions range even higher in many urban areas and will grow in the future.

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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

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Proposed Engine Standards Program

hp	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
<25	Tier 1			500 ppm NR fuel PM (reductions w/oxidation catalysts or engine-based control)										
25-75	existing Tier 2			500 ppm NR fuel PM (reduction w/oxidation catalysts or engine-based control)					15 ppm NR fuel PM: 100% NOx					
75-175	existing Tier 2			existing Tier 3				PM: 100%		NOx: 50%		50%		100%
175-750	existing Tier 2			existing Tier 3				PM: 100%		NOx: 50%		50%		100%
>750	Tier 1			existing Tier 2				PM & NOx: 50%		50%		50%		100%

Percentages indicate portion of sales required to meet advanced emission control technology standards

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