

Fuel Program Update

Heavy-Duty Engine Oil Classification Panel

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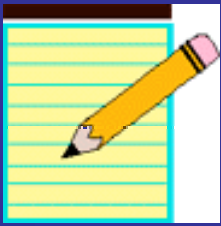
December 8, 2003



Presentation Overview

- Program Implementation
 - Highway Diesel
- Programs in Development
 - Nonroad Diesel
 - Locomotive and Marine



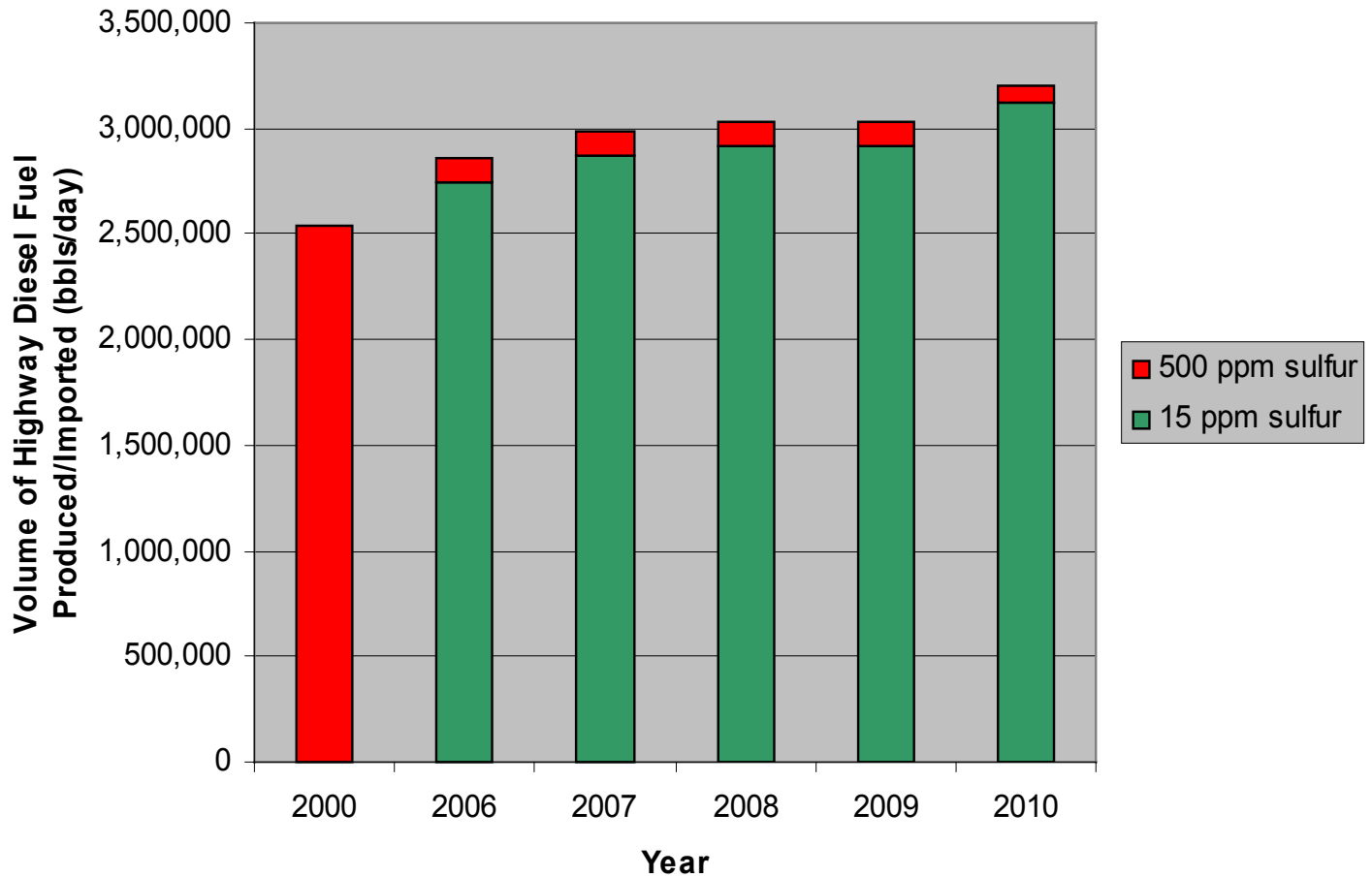


Progress Toward 2007: Highway Diesel Fuel Status

- *Summary and Analysis of the Highway Diesel Fuel 2003 Pre-compliance Reports*
 - Analysis of reports submitted by ~120 refineries
 - Published October 29, 2003
- 3 major findings:
 - Industry is on target to comply with the 15 ppm sulfur highway diesel fuel requirements on time
 - 15 ppm sulfur highway diesel fuel will be widely available
 - Highway diesel fuel supply will be sufficient to cover demand



Projected Highway Diesel Fuel Production





Nonroad Proposal Overview

- Same systems approach as the highway program
- Engine standards represent reductions of >95% PM and ~90% NO_x - Starting in 2011, fully phased in by 2014
- Enhanced testing requirements to ensure in-use emissions reductions
- 500 ppm maximum sulfur nonroad, locomotive and marine diesel fuel in 2007
- 15 ppm sulfur nonroad diesel fuel in 2010



Distillate Fuels



Home heating, etc. 17%
not covered



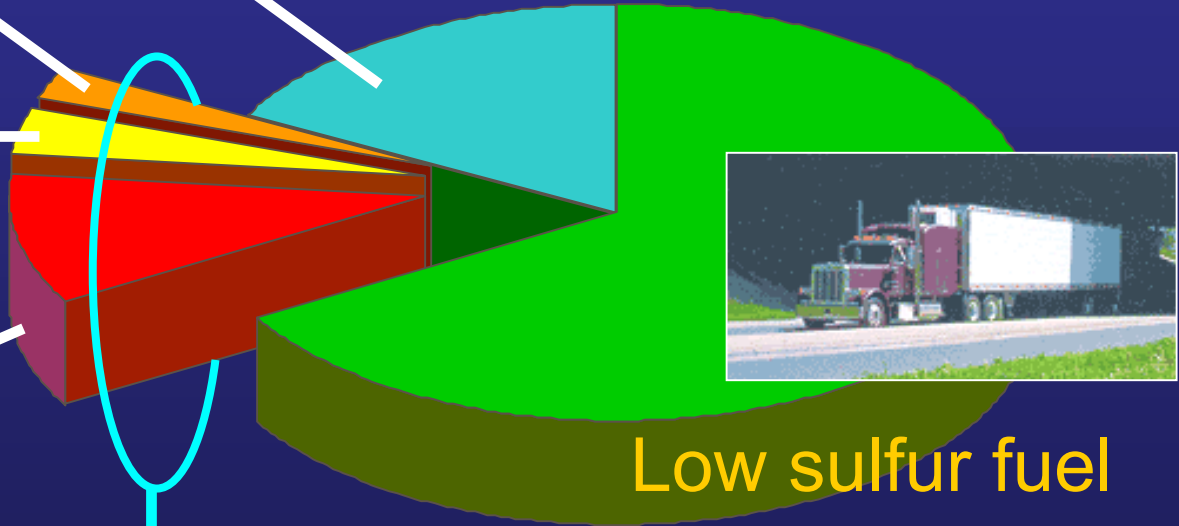
Marine 2.5%



Locomotive 3.5%



Nonroad equipment
10%



Low sulfur fuel
(highway) 67%
regulated since 1993

Covered by the proposal

Nonroad Feedback

- Published May 23, 2003
- 3 Public Hearings (NY, Chicago, LA)
- Comment Period Closed August 20
- ~150,000 Written Comments
- ~120 Substantive
 - States, Enviros, Labor, Farming, Fuel Industry, Engine/Equip Industry, Construction, Mining, Rail
- Overall Very Positive
- Widespread support for Standards and Timing
- Many comments received on
 - Large engine standards
 - Fuel program design
 - 15 ppm sulfur standard for locomotive and marine diesel fuel
- Comments received on many other specific technical issues
- Plan to issue FRM ~next April





Locomotive and Marine Diesel Standards



- Considering systems approach for future marine diesel and locomotive standards modeled after land-based nonroad
- Loco/marine diesel fuel sulfur control options discussed in the land-based nonroad proposal
 - Recent nonroad proposal would extend 500 ppm fuel sulfur cap to locomotive and marine diesel engines
 - Considering extending 15 ppm sulfur cap as well
 - Ocean going vessels (Category 3, >30 l/cyl) must use low-sulfur fuel (<15,000 ppm) or use SO_x scrubbers in designated SO_x Emission Control Areas in the United States
- Next Steps: ANPRM planned for Spring 2004 within the same timeframe as the nonroad diesel FRM





For More Information...

- 2007 Highway Diesel Program:
 - <http://www.epa.gov/otaq/diesel.htm>
- Nonroad Diesel Proposal:
 - Copy of proposal and supporting documents are available from:
www.epa.gov/nonroad/
 - Submitted comments are available at:
www.epa.gov/epahome/edocket/

