

Proposed Amendments to the Airborne Toxic Control Measure for Stationary Diesel Engines



**Air Resources Board
Public Hearing
Sacramento, CA
October 21, 2010**

California Environmental Protection Agency



Air Resources Board

Overview

- **Background**
- **Proposed Amendments**
- **Environmental and Economic Impacts**
- **Conclusions and Recommendation**

Background



Stationary Engine Applications

- **Emergency Standby Applications**
 - Emergency power during electricity outages
 - Pumping water for fire/flood protection
 - Hospitals, schools, office buildings, water treatment facilities
 - Typically operated less than 30 hours per year
- **Prime Applications**
 - Prime power for rock crushers, grinders, cranes, compressors, etc.
 - Variable operation (< 50 to over 5,000 hours per year)

Stationary Engine Airborne Toxic Control Measure (ATCM)

- **Adopted by ARB in 2004**
- **Part of diesel risk reduction program**
- **Applies to emergency standby and prime engines**
- **Implemented by air districts**
- **Established**
 - Emission standards
 - Operating/fuel use/reporting requirements
- **Reduces diesel PM, NOx, hydrocarbons, and CO**



Federal Emission Standards for New Stationary Engines

- **Promulgated in 2006**
- **Key difference between ATCM & NSPS for new emergency standby engines**
 - NSPS does not require after-treatment based standards
 - ATCM requires after-treatment based standards beginning in 2011
- **U.S. EPA analysis concluded after-treatment not cost-effective for emergency standby applications**

ARB Staff Evaluation

- **ARB staff conducted independent analysis**
 - Evaluated feasibility of after-treatment control devices for new emergency standby applications (SCR, DPF)
 - Analyzed costs and cost-effectiveness
 - Investigated availability of “off the shelf” emergency standby engines with after-treatment controls
 - Public health impacts
- **ARB staff findings consistent with U.S. EPA**
- **Recommend closely aligning ATCM with NSPS**

Proposed Amendments



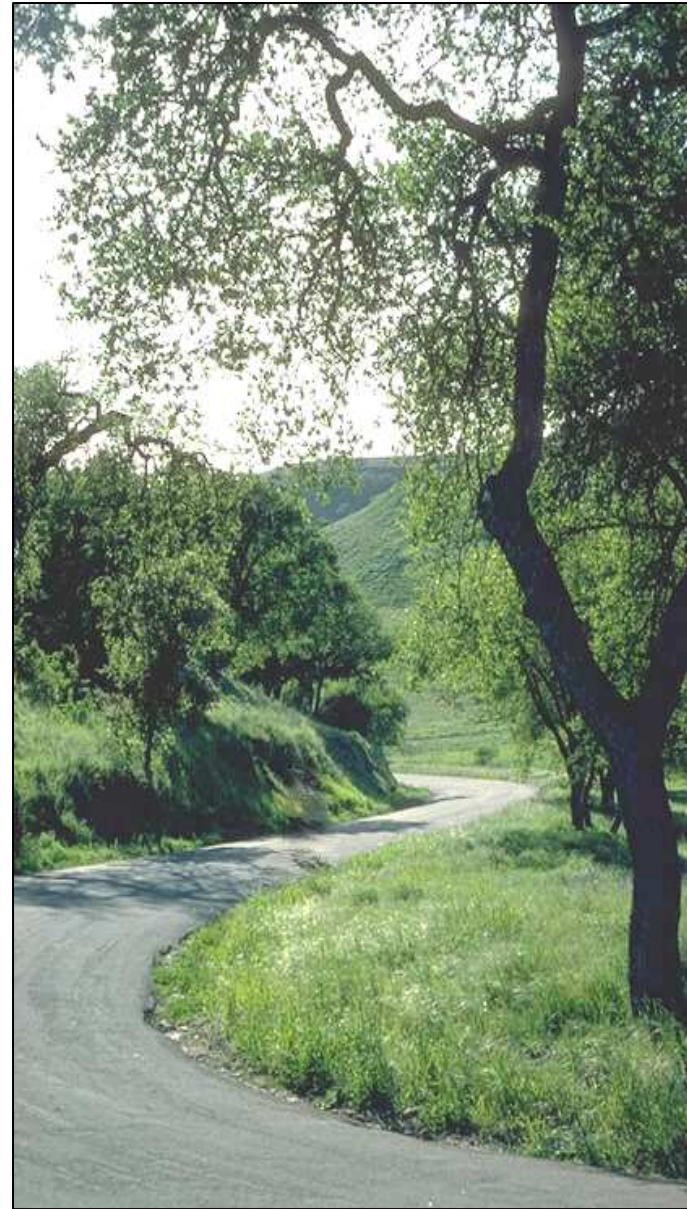
Proposed Amendments New Emergency Standby Engines

- **Closely align with NSPS**
 - Do not require after-treatment based standards for new emergency standby engines
 - Require engines to be certified
- **Retain more stringent PM standards for engines operating >50 hrs/yr**

Other Minor Proposed Amendments

- **Prime Engines**
 - Clarify PM standard
- **Modify “sell-through” provisions**
- **Conforming changes to definitions**
- **Modify reporting requirements for engines operating in demand response programs**

Environmental and Economic Impacts

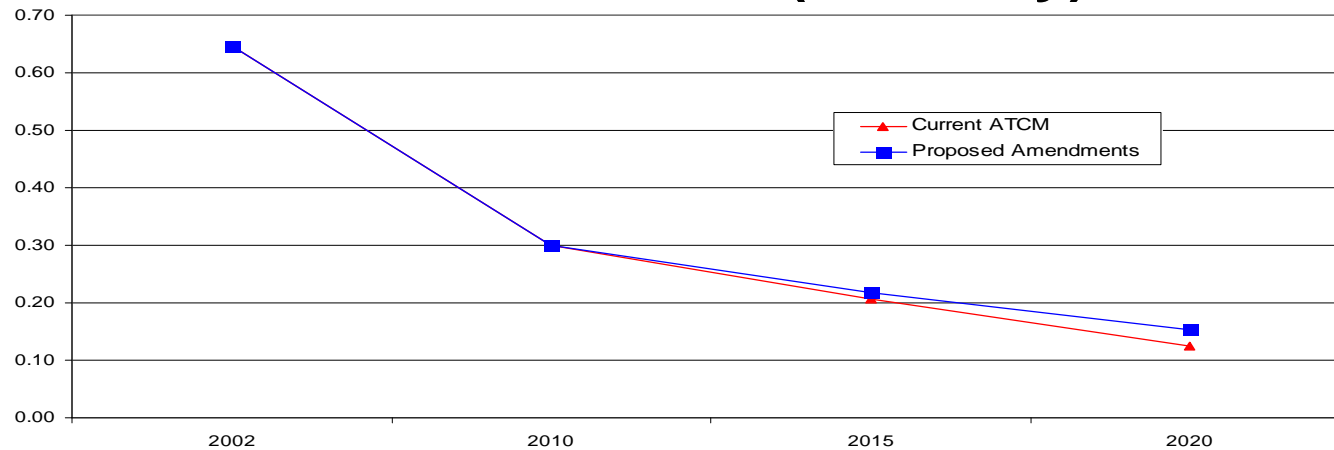


Maintains Public Health Protection

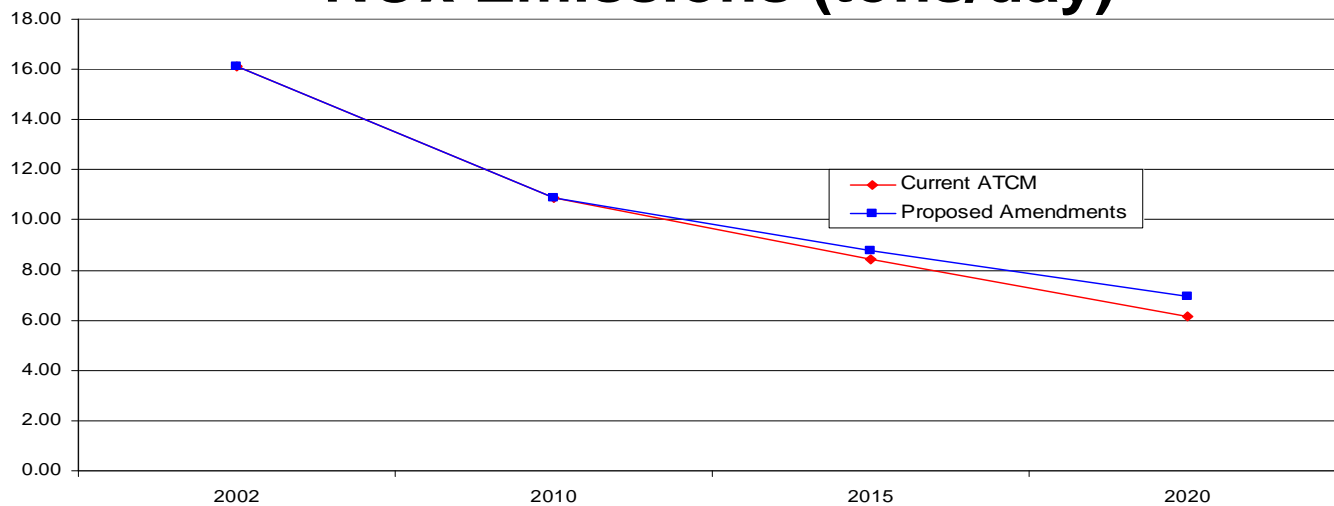
- **Substantial emission reductions retained**
 - Emissions continue to decline over the next decade
- **Unique situations effectively managed**
 - ATCM includes provisions to allow additional controls on site-specific basis
 - Existing programs act in concert with the ATCM to mitigate risk
 - ✓ District New Source Review
 - ✓ Hotspots Program (AB 2588)

Proposal Maintains Substantial Emissions Reductions

PM Emissions (tons/day)



NOx Emissions (tons/day)



Economic Impacts

- **Proposed amendments result in significant cost savings**
- **\$46 million saved annually through 2020**
- **Savings are split about equally between business and public agencies**

Conclusions

- **Proposal continues to protect public health**
- **Proposal provides significant cost savings**
- **Proposal represents Best Available Control Technology for emergency standby applications**

Recommendation

- **ARB staff recommends the Board adopt the proposed amendments**
- **Recommend Board direct staff to issue Implementation Advisory**

