



August 24, 2004

EPA Docket Center (Air Docket),  
U.S. Environmental Protection Agency,  
1200 Pennsylvania Avenue, N.W.,  
Mail Code: 6102T,  
Washington, DC 20460.

Attention: Docket #OAR 2003-0190

**Re: Comments from Santa Barbara County Air Pollution Control District regarding  
Advanced Notice of Proposed Rulemaking: Control of Emissions of Air Pollution  
from New Locomotive Engines and New Marine Compression-Ignition Engines Less  
Than 30 Liters per Cylinder.**

The Santa Barbara County Air Pollution Control District (SBCAPCD) appreciates the opportunity to review and comment on the EPA's *Advanced Notice of Proposed Rulemaking: Control of Emissions of Air Pollution from New Locomotive Engines and New Marine Compression-Ignition Engines Less Than 30 Liters per Cylinder* published in the Federal Register (69 FR 39276, June 29, 2004). This proposed rulemaking offers an excellent opportunity to develop standards that will provide long-term air quality benefits from marine and locomotive sources.

SBCAPCD has identified emissions from marine vessels as a large part of our emission inventory, and has been working to reduce these emissions for over 10 years. In that time, we have implemented voluntary incentive programs that provided funding for local maritime businesses to repower their vessels with newer, cleaner engines (Category 1 and 2 engines). We have also conducted numerous emission tests as a prerequisite for the program, initiated an outboard engine repower grant program, and have developed detailed emission inventories for the large ocean-going vessels that pass along our coastline.

Locomotives also represent a significant part of our county's emissions. Like marine vessels, locomotive engines have a long life, operate on dirty fuel, represent an under-regulated emission source, and if prospective regulations are not tightened they will represent a progressively larger percentage of the county's emission inventory. Below are our comments asking EPA to take a more aggressive stance in addressing emissions from marine and locomotive sources.

## **MARINE**

### **1. Early introduction of Ultra Low Sulfur Diesel (ULSD – 15 ppm)**

We recommend the proposed 2012 introductory date for ULSD be advanced to 2007 or 2010 (consistent with EPA non-road standards) at the latest. This will reduce SOx and

PM emissions and allow for the early use of aftertreatment devices (e.g., DOC, DPF, etc.) that require low fuel sulfur levels to be effective. Since EPA will be requiring the use of ULSD in 2006 and 2010 for On-road and Non-road sources, respectively, we believe that the fuel will be available to justify this advance.

**2. Proposed rulemaking needs to identify and encourage incentive programs to reduce emissions from the existing fleet**

With the slow turnover rate of engines in the maritime industry, the benefits of regulating new engines should be considered long-term. Additional focus needs to be placed on achieving near-term emission reductions by reducing emissions from in-use engines through rebuilding, repowering or retrofitting with aftertreatment devices. In Santa Barbara we have repowered 71 diesel marine engines (Categories 1 and 2) through a combination of our local incentive programs and California's Carl Moyer Program. This voluntary incentive based approach has resulted in near-term reductions of 122 tons of NOx/year, with a weighted average cost effectiveness of approximately \$2,200/ ton of NOx. The EPA should consider implementing voluntary programs similar to this on a national level to achieve significant, near-term emission reductions.

**3. More stringent standards for category 3 engines**

Category 3 marine engines will be subject to a second tier of regulations that will be developed by April 27, 2007. While we realize that this ANPRM does not address these engines, we see this as an opportunity to emphasize the need for stricter emission limits on foreign flagged and domestic vessels with Category 3 engines. We also suggest that EPA work along with the International Maritime Organization (IMO) to pursue stricter international emission standards. The vessels that are powered by these engines are the biggest threat to our local air quality, and jeopardize our chances of meeting and maintaining state and federal health-based air quality standards.

**4. In-use testing for marine engines**

SBCAPCD supports EPA's plan to develop an in-use testing program and procedures. We have conducted emissions tests for all the vessels that have qualified for funding through our incentive program. Through this testing process we have encountered engines that were both cleaner as well as dirtier than we expected. In-use testing strongly indicates that generalizations of an engine's emission's characteristics based on model year, and power are not always accurate, as maintenance procedures, activity, and duty cycle can vary significantly in the marine industry. This testing has proven to be the best way to ensure "real", cost-effective reductions.

**5. Future Tier 3 emission standards for new category 1 and 2 engines**

EPA should develop a third tier of standards that are more stringent for new category 1 and 2 engines. The development of aftertreatment devices (e.g., DOC, DPF, etc.) and advances in combustion modifications should be considered when developing these standards as they increase the potential for greater emission reductions. Stricter standards will also encourage research and development of cleaner engines and new aftertreatment devices.

## LOCOMOTIVE

1. **Early introduction of Ultra Low Sulfur Diesel (ULSD – 15 ppm)**

As stated under our marine comments, ULSD will be readily available in the 2007-2010 timeframe. Therefore, EPA should advance the introductory date for locomotive use to 2007 or 2010 (to be consistent with non-road requirements) at the latest. This will allow for early emission reductions and use of aftertreatment devices.

2. **Anti-idling technologies**

Locomotives spend a substantial amount of time idling. This produces emissions that threaten local air quality, as well as the health of the nearby communities. EPA should develop regulations requiring locomotives to implement anti-idling technologies.

3. **Tougher emission standards for existing or remanufactured locomotives**

Locomotive engines, like their marine counterparts, have a long service life and therefore a slow-turnover rate. EPA needs to address the emissions from existing locomotives by developing more stringent emission standards for remanufactured locomotive engines. These standards should reflect the technological advances and availability of aftertreatment devices.

We appreciate the opportunity to review and comment on this ANPRM and look forward to working with the EPA in developing these regulations. If you have any questions please feel free to contact Anthony Fournier, of my staff, at (805) 961-8874.

Sincerely,

Terry Dressler  
Air Pollution Control Officer

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