



# Update on US EPA Marine Activities

## CARB Maritime Technical Working Group

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# Overview

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- US EPA Partnerships

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## International Actions

- IMO Ratification Update
  - The White House forwarded the ratification package to the Senate in May 2003
  - No action on the package as of yet, but action is expected once the implementing legislation reaches the Congress
  - To date, the Annex has been ratified by 12 countries representing 54% of the world's merchant tonnage. (Countries: Bahamas, Bangladesh, Denmark, Greece, Germany, Liberia, Marshall Islands, Norway, Panama, Singapore, Spain, and Sweden)

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## IMO Standards

- The US Government plans to propose that the Member States of the IMO consider developing a second tier of more stringent NO<sub>x</sub> and SO<sub>x</sub> limits
  - » Goal is to present this paper at the March 2004 MEPC meeting
- .EPA is also working with Coast Guard to draft guidelines for certifying Exhaust Gas Cleaning Systems (EGCS) for sulfur emissions
  - » Regulation 14 of Annex VI allows ships to use an EGCS instead of 15,000 ppm fuel in SO<sub>x</sub> Emission Control Areas (SECAs)

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## IMO SECA Designation

- Regulation 14 of Annex VI authorizes IMO to designate sea areas, including port areas, as SO<sub>x</sub> Emission Control Areas (SECA)

- » The sulfur content of fuel used in capped at 15,000 ppm
- » Countries wanting to obtain SECA designation for their coastal areas must submit a formal proposal to IMO

EPA is currently preparing a strategy to develop a proposal for US coastal areas, and plan to work with affected states, including California, to obtain the necessary data

### Critical needs

- » Ship activity information (ship populations, shipping patterns, air transport, air quality conditions -- characteristics that are specific to states)
- » Data for the environmental case for the designation



## Clean Air Act Actions

- Marine Lawsuit - Marine Diesel Engines  $\geq 30$  l/cyl
- EPA filed its response on November 5, 2003
- Petitioner's reply is due November 28, 2003
- Oral arguments scheduled for February 20, 2004



## Distillate Marine Fuel Sulfur Requirements

- EPA's nonroad proposal contains a provision that would require 500 ppm fuel for locomotive and marine applications, beginning 2007
  - » Also discusses extending the 15 ppm land-based requirement to marine and locomotive fuels in 2010-12
- **Final rule is anticipated to be signed in April 2004**

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## New Standards: Marine Diesel Engines < 30 l/cyl

- EPA is planning to publish an ANPR for an additional tier of standards for Category 1 and Category 2 marine diesel engines
  - » Standards are likely to require the use of more advanced emission control technology
- **Schedule**
  - » ANPRM: Spring, 2004
  - » NPRM: 2005
  - » FRM: 2006

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## New Standards: Marine Diesel Engines $\geq$ 30 l/cyl

- We made a commitment in our February 2003 FRM to promulgate final Tier 2 standards for large marine diesel engines
  
- FRM: 4/27/07

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## Marine Emission Inventory Update

- As part of the new rulemaking and the U.S. Government's consideration of SECAs, EPA will be reviewing and revising its emission estimates
  
- Of special concern is the Category 2 emission inventory

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## US EPA Partnership



- Large ocean-going demo project
- Help to put on a conference in mid-summer 2004