

Public Meeting Regulatory and Non-Regulatory Fuels Activities

July 27, 2004

California Environmental Protection Agency



Air Resources Board

Agenda

- ✦ **Introductions**
- ✦ **Implementation Discussions**
 - Phase 3 RFG
 - Diesel Fuel Lubricity
- ✦ **Potential Regulatory Activities**
 - Changes to the CaRFG regulations
 - Diesel fuel for locomotive and marine diesel engines
 - Diesel engine lubricating oils
 - Biodiesel
- ✦ **Presentations by Others**
- ✦ **Open Discussion**
- ✦ **Closing Remarks**

Implementation Issues

Implementation of Phase 3 RFG Regulation

Oxygen Range and Oxygenates

- ✦ Oxygen Range for 1.8% to 2.2% oxygen content is evaluated at 2.0% and for 2.5% to 2.9% is evaluated at 2.7%.
- ✦ Staff has been asked to investigate the practicality of creating a similar procedure for oxygenate content.
- ✦ To ensure that there is no loss in benefits, it is necessary to validate the CARBOB Model.

Implementation of Diesel Regulation

Diesel Fuel

Amendments to the Diesel Fuel Regulations

- ✦ Approved July 24, 2003
- ✦ Executive Officer signed on May 10, 2004
- ✦ Submitted to OAL on June 1, 2004
- ✦ Final rulemaking package approved by OAL and filed with the Secretary of State on July 15, 2004
- ✦ Regulation will become effective on August 14, 2004
- ✦ Staff is proposing an interim policy to allow interested parties the option to comply with the equivalent alternative limits, prior to August 14, 2004

Diesel Fuel Lubricity

ARB Diesel Fuel Lubricity Standard Phase I Implementation

- ✦ ASTM standard, identical to ARB Phase I standard, to become effective January 1, 2005
- ✦ ARB lubricity standard will defer to ASTM standard when DMS adopts and enforces
- ✦ Fuel producers and pipeline operators are meeting individually to address implementation issues
- ✦ Is there a need for a stakeholder workshop on implementation issues?

Potential Regulatory Activities

Potential Modifications to the CaRFG Regulations

Proposed Changes to CaRFG Regulations

- ✦ Revise requirements for documentation for transfer of denatured ethanol for use in California gasoline
- ✦ Revise restriction on blending CARBOB with other products
 - Add protocol provision for blending transmix into CARBOB terminal tanks
 - Add protocol provision to allow blending of limited amounts of California gasoline containing ethanol
 - Add provision to allow protocols for other situations

Proposed Changes to CaRFG Regulations

- ✦ Revise RVP compliance requirements for CA gasoline transported to South Coast by marine vessel
 - Proposed that the fuel shall be subject to the regulatory control periods for production and import facilities identified in section 2262.4(b)(2)(A)

Proposed Changes to CaRFG Regulations

- ✦ Draft of proposed amendments posted on website <http://www.arb.ca.gov/fuels>
- ✦ Interim policy pending completion of rulemaking
 - Contact Mark Stover, ARB's Enforcement Division

Potential Further Modifications to the CaRFG Regulations

Potential Further Amendments to the CaRFG Regulations

- ✦ New SIP Commitments:
 - October 2003 SIP Hearing
 - Additional Emissions Reductions needed to meet ozone goal.
- ✦ Include examination of gasoline specifications
- ✦ Report to the Board by the end of 2004

Potential Further Amendments to the CaRFG Regulations

With the development of advanced emission control technologies there may be opportunity to increase synergies between the California gasoline specification and the new emission control technologies.

Staff would also like to consider whether there are possible changes that could be made to the CaRFG regulations that could increase efficiencies within the California Refinery industry while preserving existing benefits and enforceability.

Potential Further Amendments to the CaRFG Regulations

- ✦ Panel discussion on Wednesday, July 28, 2004
 - Involve a broad range of stakeholders in our efforts to identify potential revisions to the CaRFG program for further evaluation. .

Diesel Engine Lubricating Oils

APBF-DEC Lubricants Workgroup

- ✦ Test program completed
 - NO_x absorber catalyst aging with an array of lubricant formulations
- ✦ Data analysis underway
- ✦ Results and reporting expected end of 2004 or early 2005

Diesel Fuel for Locomotive and Marine Diesel Engines

CARB DIESEL FUEL USE WITH INTRASTATE



MARINE

LOCOMOTIVE



USEPA and CARB Diesel Fuel Regulations

<u>TYPE</u>	<u>SULFUR*</u>	<u>DATE</u>
On-Road	500	1993
On/Off-Road-CARB	500	1993
On-Road	15	2006
On/Off-Road-CARB	15	2006
(includes ATCM for stationary sources)		
Non-Road**	500	2007
Non-Road	15	2010
Marine/Loco	15	2012

* ppmw-parts per million by weight.

** Includes marine and locomotives.

Note: CARB aromatics content limit 10% by volume or designated alternative limit. USEPA aromatics content limit maximum - 35% by volume.

ARB BOARD DIRECTION

<u>EVENT</u>	<u>DATE</u>	<u>DIRECTION</u>
Board Hearing	July 2003	ULSD Regulations
Board Meeting	October 2003	Develop Proposal
SIP Summit	January 2004	Develop Proposal
Board Hearing	November 2004	Regulatory Proposal

Why CARB Diesel?

- ✦ Typically older vessels and locomotives
 - Harbor craft ~25 years
 - Locomotives ~35 years
- ✦ Fuel could provide immediate NO_x (5-7%) and PM (10-20%) emission reductions
- ✦ ULSD could enable retrofit of older engines

ARB Staff Key Efforts to Date

- ✦ Statewide Harbor Craft Survey Final Report (March 2004)
- ✦ Statewide Intrastate Locomotive Survey (May 2004)
- ✦ Workshops and Individual Meetings with Stakeholders (Ongoing)

Status of ARB Staff Evaluation

COLLECTING AND ANALYZING DATA:

- ✦ Costs
- ✦ Feasibility
- ✦ Alternatives with similar or better emission benefits
- ✦ Fuel consumption and operational data
- ✦ Quality of fuel supplied to marine and locomotive operators.

Work to be Done

- ✦ Assess availability of CARB diesel fuel
- ✦ Complete harbor craft emission inventory
- ✦ Complete intrastate locomotive survey
- ✦ Prepare emission and cost-effectiveness analyses
- ✦ Prepare staff report by September 2004.

Evaluation Schedule

- ✦ Workshop Schedule:
 - early September
 - mid-October
- ✦ Staff report publication
 - October 1, 2004
- ✦ Board Meeting Date
 - November 18-19, 2004

ARB Websites and List Serves

[Http://www.arb.ca.gov/msprog/offroad/](http://www.arb.ca.gov/msprog/offroad/)

- ✦ Marine Vessels -(marinevess/marinevess.htm)
- ✦ Locomotives - (loco/loco.htm)

ARB Staff Contacts

✦ Harbor Craft:

– Peggy Taricco, Manager (916) 327-7213

- Email: ptaricco@arb.ca.gov

– Paul Milkey, Staff (916) 327-2957

- Email: pmilkey@arb.ca.gov

✦ Intrastate Locomotives:

– Erik White, Manager (916) 324-8029

- Email: ewhite@arb.ca.gov

– Harold Holmes, Staff (916) 327-5607

- Email: hholmes@arb.ca.gov

Biodiesel

Presentations by Others

Open Discussion

Closing Remarks