SUMMARY

Work of the MSTRS Nonroad Workgroup as of August 3, 2001 Meeting

Background

The FACA Mobile Source Technical Review Subcommittee (MSTRS) established and chartered the Nonroad Workgroup (NRWG) at its October 2000 meeting. The NRWG began meeting in January 2001 and it has held several meetings and conference calls since that time. More than eighty interested parties requested to be on a mailing list for the NRWG and over thirty stakeholders are actively participating in the deliberation process. The purpose of the NRWG as stated in the charter is to provide the MSTRS with information, data, analysis and recommendations on topics related to the emissions from nonroad engines which eventually should be helpful to EPA in its formulation of actions to regulate nonroad engines and associated fuels. The first effort was indicated to be directed to nonroad diesel engines.

The NRWG reached consensus on a "Vision Statement" at its June 12, 2001 meeting that envisioned a future program for nonroad diesel powered engines fuels similar to EPA's new onroad diesel program. A list of issues that need to be addressed in implementing such a program were identified. The vision statement also indicated stakeholders needed to know EPA's future intent for diesel engine rules by the end of 2001.

The NRWG has continued deliberations with assistance from subworkgroups on specific recommendations regarding engine standards/timetables, a market based fuels approach and incentives/assurances. At the August 3, 2001 meeting of the NRWG, EPA announced that it was going to issue a white paper in late September regarding regulation of nonroad diesel engines and fuels. In consideration of this action, the co-chairs of the MSTRS felt that the most valuable help the NRWG could be to EPA would be to summarize its work to date and transmit it to the co-chairs who would immediately transmit it to EPA for consideration in their development of the white paper. Summarization of NRWG work has recently been completed and it is presented in the following section.

Summary of NRWG Work as of its August 3, 2001 Meeting

Vision Statement

A vision statement (attachment 1 "visionstatement061301.doc") was unanimously adopted by the NRWG that envisioned use of 15 ppm by weight sulfur diesel fuel to enable the use of on-highway like NOx and PM aftertreatment technologies. Nine issues were identified that the NRWG felt needed to be addressed in implementing such a program.

Engine Standards/Timetable

The Engine Manufactures Association (EMA) and California Air Resources Board (ARB) representatives on the NRWG developed a baseline and seven strawman scenarios for potential engine standards and implementation timetables in response to discussions of the NRWG.

Attachment 2 "dieseltable8R.xls" summarizes the emissions from these scenarios from 2000 to 2020. Attachment 3 "Cl_scenario_matricies8R.doc" contains eight charts with potential engine standards and phase-in dates used to develop the baseline and seven scenarios.

Attachment 4 "diesel_distributionR.xls" indicates the population distribution and emissions for engine size categories as reflected by state of California data. The strawman scenarios were not presumed to be cost-effective or technologically feasible and as of the August 3, 2001 meeting,

the NRWG had not reached any conclusions or recommendations regarding these scenarios. Some more detailed explanation of some the scenarios is contained in **Attachment 5 "Non-Road_CI_Engine_Strawman_Scenarios .doc"** created earlier in the process. At the August 3, 2001 meeting the executive directors of STAPPA/ALAPCO and NESCAUM pointed out that their organizations have consistently advocated nonroad heavy-duty diesel rulemaking parity with new onroad heavy-duty diesel standards. **Attachment 6 "nonroad-mstrsletter-finalletter.doc"** details this position.

Market Based Fuels Approach

The American Petrochemical Institute (API) representative on the NRWG led a subworkgroup that developed information to support a strong viewpoint of the oil industry that a cost effective 15 ppm sulfur diesel fuel program for nonroad engines should initially begin with a market demand approach due to the expected initial large surplus of such fuel from EPA's new regulatory program for onroad diesel fuel. A paper describing this approach and its principles along with means to address misfueling concerns was developed by this subworkgroup (attachment 7 "Nonroad Fuels Approaches Final.doc"). Additionally, a chart was prepared that projected the surplus of 15 ppm onroad diesel fuel through 2028 (attachment 8 "Nonroad Diesel Demand Chart.ppt). A map was also prepared that indicated the location of oil terminals carrying low sulfur diesel fuel that appeared to insure sufficient nationwide coverage to make a market based approach work (attachment 9 "200milemap.zip"). A paper identifying the assumptions used to create the onroad fuel surplus projections and the terminal coverage was also prepared (attachment 10 "Nonroad Assumptions for Charts.doc"). The NRWG discussed this information but did not reach any final conclusion as of the August 3 meeting.

Incentives/Assurances

The Manufacturers of Emission Control Systems (MECA) and Environmental Defense Fund (EDF) representatives on the NRWG led a subworkgroup that addressed possible incentives and assurances to help ensure clean air benefits and fleet turnover for a new nonroad engine and fuel regulatory program that would meet the vision of the NRWG. Seventeen ideas were identified and the NRWG was asked to rate the priority (potential effectiveness) of them. Since only six members responded to the survey it was difficult to draw any definitive conclusion from the survey as to what to recommend. **Attachment 11 "nonroadincentivessummary**.doc" lists the ideas and ranking given by a limited number of NRWG members.

The record for the NRWG includes this report, the attachments, and several other pieces prepared or offered but not yet reviewed by the group. These will all be included on the MSTRS website.

Attachments (11)

ATTACHMENTS

- 1. Vision Statement 2 pages
- 2. Comparison of Diesel Emission Reduction Strategies 3 pages
- 3. Description of 8 Modeled Scenarios 9 pages
- 4. 2010 California Diesel engine Distribution 1 page
- 5. Discussion of Modeled Scenarios 2 pages
- 6. STAPPA/ALAPCO NESCAUM Position Letter
- 7. Nonroad Diesel Fuel Approach Discussion Document 1 page
- 8. Diesel Fuel Demand By Sector 1 page chart
- 9. Terminal Locations with 200 mile ranges 1 page map
- 10. Discussion of Terminal Locations and Q/A document 1 page
- 11. Nonroad Incentives Summary

OTHER DOCUMENTS

- 1. Nonroad Diesel Q/A document
- 2. EMI Paper on Engine/Equipment Issues
- 3. EMA Paper on Sulfate Benefits