Control of Hazardous Air Pollutants from Mobile Sources

Summary and Analysis of Comments

Chapter 8
Other/Miscellaneous Comments

Assessment and Standards Division Office of Transportation and Air Quality U.S. Environmental Protection Agency

SUMMARY AND ANALYSIS OF COMMENTS: CHAPTER 8 OTHER/MISCELLANEOUS COMMENTS

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8. OTHER/MISCELLANEOUS COMMENTS

What We Proposed:

The items raised in the following comments were not all specifically proposed in the NPRM, and therefore do not necessarily have a corresponding NPRM section. However, for comments concerning other upcoming EPA regulatory programs, please see sections V.D and V.G of the preamble to the proposed rule for more information.

8.1 Public Comment Period

What Commenters Said:

We received comments regarding the length of the public comment period for the MSAT2 rule. Commenters generally stated that they believed that a 60-day comment period was insufficient for a rule of this size with such a highly complex and technical nature. The commenters stated that they would find it difficult to fully review and provide written comments in the timeframe that was provided. Thus, these commenters stated that the comment period should have been extended to 90 days.

The New York State Department of Environmental Conservation (NYDEC) also commented on specific factors that it believes led to need for more time: there was no Advanced Notice of Proposed Rulemaking to allow a prior view of the EPA's intentions, many of the technical documents cited in the DRIA had never been released to the public prior to the March 29, 2006 Federal Register notice (i.e., there was no previous opportunity to study and analyze the reports), and the public docket contained 610 documents as of March 30, 2006.

Letters:

New York State Department of Environmental Conservation (NYDEC) OAR-2005-0036-0362, 0722

Vermont Air Pollution Control Division OAR-2005-0036-0444 American Petroleum Institute (API) OAR-2005-0036-0366, 0367

Our Response:

We appreciate that commenters wanted as much time as possible to adequately review the proposal and be able to provide comments. However, due to the fact that the rulemaking schedule is on a court-ordered timeline, we were only able to provide 60 days for public comments in order for us to then assess those comments and complete the final rule on time. All of these commenters, and many others, provided robust, detailed, pointed, and helpful comments on the proposed rule. EPA does not believe any commenter was prejudiced by the 60-day period for submitting public comment. We also note that pre-publication versions of the proposed rule and preamble were posted on EPA's website on February 28 (the day of the proposed rule's signing), so that commenters had more than 60 days to prepare comments on critical aspects of the proposed rule.

8.2 Comments Outside the Scope of the Proposal

8.2.1 Mileage Standards and Flex-Fuel Vehicles

What Commenters Said:

The Regional Air Pollution Control Agency (RAPCA) commented that it urges EPA to consider raising the mileage standards for automobile fleets, as it believes this would have a positive impact on concentrations of MSATs, energy security, and greenhouse gas emissions. The commenter also urged EPA to consider mandating increased availability of the Flex-Fuel vehicle (FFV) fleet and adequate numbers of bio-fuel pumps at gasoline service stations, as it believes that the increased usage of oxygenates reduce MSATs in exhaust and the oxygenates will help reduce ozone.

Letters:

Regional Air Pollution Control Agency (RAPCA) OAR-2005-0036-0771

Our Response:

These comments are outside the scope of the MSAT2 program. We appreciate the commenter's concern. However, EPA does not have the authority to require such actions. Only Congress has the authority to change mileage standards (Corporate Average Fuel Economy, or CAFE) and mandating increases in FFVs and bio-fuels. Regarding the comments on sparkignited engines, we note that equipment using such engines are not "motor vehicles" and therefore are not subject to section 202(l)(2). In any case, EPA intends to propose regulations for these types of engines by mid-2007.

8.2.2 Spark-Ignited Engines

What Commenters Said:

STAPPA/ALAPCO commented that they urge EPA to capitalize on opportunities to reduce MSATs from nonroad spark-ignited engines in addition to gasoline.

MECA noted that EPA is currently developing the next set of exhaust and evaporative emission standards for spark-ignited engines used in non-handheld equipment. The commenter urged EPA to complete this rulemaking process as soon as possible, and harmonize emission standards for this class of engines with those standards already in place in California for Class I and Class II nonroad engines and California's 2008 exhaust emission standards for sterndrive and in-board marine engines. The commenter stated that it believes that further lowering of hydrocarbon exhaust emission standards for all of these engines can provide additional significant reductions to toxic hydrocarbon emissions across the U.S.

Letters:

Manufacturers of Emission Controls Association (MECA) OAR-2005-0036-0808 STAPPA/ALAPCO OAR-2005-0036-0836, -0378

Our Response:

Nonroad engines are not "motor vehicles" as defined in section 216(2) of the CAA, and so are not within the scope of section 202(l)(2). (See also section 216(10) defining nonroad engines as "an internal combustion engine ... that is not used in a motor vehicle".) This comment is consequently beyond the scope of this proceeding.

8.2.3 Stage I Controls

What Commenters Said:

STAPPA/ALAPCO, the Florida Department of Environmental Protection, and the Illinois EPA commented that they are very concerned with regulation of mobile source air toxics emissions and encouraged EPA to consider additional measures for controlling fugitive emissions in the gasoline distribution system. The commenters urged EPA to consider making Stage I controls mandatory at gasoline stations to reduce emissions from the refueling of underground storage tanks.

Letters:

Florida Department of Environmental Protection, Bureau of Air Monitoring and Mobile Sources OAR-2005-0036-0770

Illinois Environmental Protection Agency (IL EPA) OAR-2005-0036-0830 STAPPA/ALAPCO OAR-2005-0036-0836, -0378

Our Response:

Stage I controls are pipes and hoses installed to collect and transfer vapors (which are generated during the loading of gasoline into an underground tank, or exist in the tank and are displaced out a vent to the air) back into the tank truck tank. Then, the vapors travel back to where the truck is loaded and the vapors are recovered or destroyed. Stage I vapor balance systems are used in ozone non-attainment areas to reduce volatile organic compound emissions. EPA has evaluated the use and need for Stage I vapor balance system for air toxics, including the recovered product value. EPA proposed standards (71 FR 66064, November 9, 2006) that would require that service stations in urban areas to use submerged fill pipes to reduce the amount of gasoline vapor generated during the loading of the storage tank. In the proposal, EPA specifically requested public comment on the need to require vapor balancing. Additionally, emission controls are being proposed for the other facilities that transfer and store gasoline between the refinery and end user. These controls were proposed under the authority of Clean Air Act sections 112(c)(3) and (k)(3)(B).

8.2.4 Fuel Quality

What Commenters Said:

The Alliance of Automobile Manufacturers (Alliance) commented that EPA has not addressed the role that fuel quality plays in NMHC emissions and vehicle performance. The commenter stated that due to vehicle hardware considerations coupled with the high variability in fuel quality, compliance with the proposed 20° F NMHC standard will be a greater challenge than the low temperature CO standards. The commenter stated that the high variability in winter and shoulder season gasoline volatility, and variability in gasoline parameters (e.g., RVP, T10, and T50) could drive significant hardware changes in some engine families; further; manufacturers may also find it difficult to calibrate vehicles to strict cold temperature emissions standards as a result. The commenter noted that the auto industry commented on how poor volatility increases NMHC emissions in its 1999 petition to EPA, which urged the Agency to cap the Distillation Index (DI) at 1200 and enforce a minimum T50 limit of 170°F.

The commenter stated that it believes EPA should consider regulatory action to control the variability of gasoline during the winter months and shoulder seasons impacted by the MSAT2 rulemaking. The commenter further stated that a 1200 DI cap is needed to ensure that vehicles and fuels work more effectively as a system, and also that some type of volatility control would be needed for this proposed standard. The commenter stated that it believes that increased control of cold-start toxic emissions will be difficult for some packages absent stricter gasoline volatility standards. The commenter lastly stated that additional research is needed on the proper winter fuel volatility before the proposed NMHC standard can be adopted, and there is a chance that emissions could increase rather than decrease if this is not done.

The Alliance also commented that EPA should update the fuel additive regulations under CAA section 211(l), and that controlling distillation, sulfur, and detergency should be accomplished at the federal level.

Letters:

Alliance of Automobile Manufacturers (Alliance) OAR-2005-0036-0881

Our Response:

We did not propose any changes to gasoline fuel quality other than benzene content. Although we discussed the potential for sulfur and/or RVP changes to generate reductions in MSAT emissions, we did not discuss potential changes in other fuel properties such as volatility. The commenter did not provide any information indicating that compliance with the 20° F NMHC standard cannot be attained without greater controls on gasoline volatility, nor did it provide any indication that new controls on volatility or DI would generate cost-effective reductions in MSATs. Any impacts of new controls on volatility, DI, or detergents on emissions of other pollutants or on fuel-vehicle system efficiency is outside the scope of this rulemaking.

We believe that manufacturers can design their vehicles to accommodate the variation in fuel quality for in-use fuels while still meeting the cold temperature NMHC standard in this final

rule. The commenter provided no conclusive data to the contrary. For a further discussion on this comment, see section 4.7 of this Summary and Analysis document.

8.2.5 Remote Sensing Program for "Super-emitters"

What Commenters Said:

RAPCA commented that it believes that new vehicle standards have little effect on "super-emitters" (mobile sources that are old or ill-maintained, or both) which have a disproportionate impact on the MSAT problem. The commenter stated that one of the difficulties of inspection and maintenance (I/M) programs is their patchwork application and perceived inequities. The commenter thus urged EPA to promulgate a national remote sensing program to identify and mitigate the impact of these "super-emitters."

Letters:

Regional Air Pollution Control Agency (RAPCA) OAR-2005-0036-0771

Our Response:

Although this is an interesting comment, it is essentially beyond the scope of this rulemaking. Section 202 (l) provides no authority over vehicles already on road (<u>Sierra Club v. EPA</u>, 325 F. 3d at 380-82), and so cannot prescribe controls over the "super-emitters" of concern to the commenter.

8.3 Other Comments

What Commenters Said:

NESCAUM commented that it does not believe that EPA has completed the analysis which was outlined in the 2001 MSAT rule (MSAT1). For improved understanding of effectiveness and costs of control strategies, the commenter believes EPA needs to consider fully all cost-effective control measures for the final rule.

Anchorage commented that though it promotes block heater use through federally-funded advertising and block heater installation, Anchorage air is significantly impacted by cold-start vehicle emissions. The commenter noted that the 2000 carbon monoxide (CO) inventory attributes as much as 43% of CO in some Anchorage neighborhoods to cold start emissions during the morning period. The commenter also noted that sampling at State and Local Air Monitoring Stations (SLAMS) in past winters shows a close correlation between benzene and CO concentrations, and that CO is a useful indicator of other products of incomplete combustion including such pollutants as 1,3-butadiene, acrolein, and polycyclic aromatic matter. Lastly, the commenter stated that occasional winter periods of poor atmospheric mixing can hinder dispersion of these emissions.

Letters:

Municipality of Anchorage, Department of Health and Human Services (Anchorage) OAR-2005-0036-0976

National Petrochemical Refiners Association (NPRA) OAR-2005-0036-0809

New York State Department of Environmental Conservation (NYDEC) OAR-2005-0036-0722

NESCAUM (Northeast States for Coordinated Air Use Management) OAR-2005-0036-0993

Our Response:

With regard to comments regarding data gaps noted by EPA in the MSAT1 rulemaking, EPA has conducted extensive analyses of toxic emissions from nonroad compression and spark ignition engines to meet commitments as part of the technical analysis plan (albeit these engines would not be covered by any section 202(1) since they are not associated with "motor vehicles", as noted above). Section 2.3 of the RIA discusses recent nonroad emission test programs and plans to integrate data from these programs into the NMIM model. In addition, EPA has made substantial progress in better characterizing air toxics exposure in microenvironments, as well as the total range of exposures, and the Agency's progress in this area is discussed in Chapter 3 of the RIA. The national scale analyses conducted for the final rule use the new HAPEM6 model, which models better accounts for elevated near road exposures. In addition, EPA has comprehensively evaluated potential vehicle and fuel controls under its section 202(1)(2) authority, and the result of these analyses have been the fuel benzene and cold temperature hydrocarbon emission standards adopted in this rule. As previously noted, EPA is addressing toxic emissions from small spark ignition engines, and locomotive and marine engines under separate statutory authorities, and in the future will continue to work on finding additional strategies to further reduce mobile source air toxics.

With regard to the comment on cold start emissions in Anchorage, we note that the emission control approaches that will be used in vehicles to meet the finalized MSAT2 NMHC standards are expected to also result in reductions in CO and other products of incomplete combustion.