Summary and Analysis of Comments

Control of Hazardous Air Pollutants from Mobile Sources

Chapter 7 Administrative and Procedural Requirements

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



United States Environmental Protection Agency EPA420-R-07-003 February 2007

SUMMARY AND ANALYSIS OF COMMENTS: CHAPTER 7 Administrative and Procedural Requirements

| 7. Administrative and Procedural Requirements | 7-2 |
|---|-----|
| 7.1 SBREFA Process/Regulatory Flexibility Act | 7-2 |
| 7.2 Clean Air Act Requirements | 7-2 |
| 7.2.1 Section 202(1)- Requirements for Mobile Source-Related Air Toxics | 7-3 |
| 7.2.1.1 General | |
| 7.2.1.2 On-Board Diagnostics | 7-5 |
| 7.2.1.3 Heavy-Duty Diesel and Small Spark-Ignited Engines | 7-6 |
| 7.2.1.4 Technology Forcing Standards | 7-7 |
| 7.2.2 Section 211(c)(4)- State Pre-emption in Fuels Regulations | 7-9 |
| 7.2.3 Other Clean Air Act Sections | |
| 7.2.3.1 Sections 202(a)(4) and 206(a)(3) | 7-9 |
| 7.2.3.2 Section 211(k)(8) | |
| 7.2.3.3 Section 211(1) | |
| | |

7. ADMINISTRATIVE AND PROCEDURAL REQUIREMENTS

What We Proposed:

The comments in this chapter deal with the administrative and procedural requirements related to the proposed rule. A summary of the comments received, as well as our response to those comments, are located below. For the full text of comments summarized here, please refer to the public record for this rulemaking.

7.1 SBREFA Process/Regulatory Flexibility Act

What Commenters Said:

The Ad-Hoc Coalition of Small Business Refiners commented that it greatly appreciated the opportunity to be involved during the Small Business Regulatory Enforcement Fairness Act (SBREFA) Panel process as well as the efforts made by the members of the Federal Panel and EPA staff to understand their special circumstances.

During the development of the final rule, representatives of the small refiners commented that they believed that the imposing a 1.3 vol% refinery maximum average is a violation of the Regulatory Flexibility Act (RFA), because the Panel did not have the opportunity to review the impacts of such a cap on small businesses. The commenters (citing 5 U.S.C. § 609) stated that they believe EPA would, at a minimum, need to present the maximum average provision to the Panel for its consideration prior to including it as part of a final rule.

Letters: Ad Hoc Coalition of Small Business Refiners OAR-2005-0036-0686

Our Response:

We appreciate the comments regarding the SBREFA process and agree that the Panel process was quite effective and beneficial to all of the small entities that participated in the SBREFA process. We have also provided small refiners continued opportunities to comment throughout the rulemaking (i.e., following the end of the Panel process), both through the public comment process and through direct meetings with agency personnel to discuss emerging issues of concern. (Memoranda of these meetings are included as part of the administrative record for this rule.)

Please see section 4.8.1.4 of this Summary and Analysis document for a greater discussion of the comments, and our response, regarding the assertion that the 1.3 vol% refinery maximum average was adopted without complying with the procedural requirements of the RFA.

7.2 Clean Air Act Requirements

7.2.1 Section 202(I)- Requirements for Mobile Source-Related Air Toxics

7.2.1.1 General

What Commenters Said:

The New York State Department of Environmental Conservation, LRAPA, OR DEQ, NJ DEP, Environmental Defense, Natural Resources Defense Council, U.S. PIRG, American Lung Association, STAPPA and ALAPCO, IL EPA, and FL DEP all noted in their comments that section 202(l) of the Clean Air Act (CAA) requires EPA to regulate hazardous air pollutants from motor vehicle fuels to the "greatest degree of emissions reduction achievable." The commenters all stated that they believe that the proposed annual average benzene standard of 0.62 vol% (along with an ABT program) does not go far enough in reducing fuel benzene levels to meet the CAA mandate. The commenters stated that proven technology is commercially available to reduce benzene content substantially lower than what was proposed.

The Puget Sound Clean Air Agency, Environmental Defense, NRDC, U.S. PIRG, and ALA stated that they understand that section 202(1)(2) requires EPA to look at the costs of the technology. However, the commenters stated that they believe that the capital costs of the MSAT2 program are economically reasonable in contrast to refiners' annual profits (about which the commenters stated "...exuberant profits are consistent among most of the nation's refiners"). The Puget Sound Clean Air Agency further commented that it believes that benefits to human health far outweigh the costs of less than a few cents per gallon.

Environmental Defense, NRDC, U.S. PIRG, ALA, STAPPA/ALAPCO, Illinois EPA, and the Florida Department of Environmental Protection also offered specific comments regarding lower benzene standards (including a per-gallon benzene cap) that EPA should finalize in order to meet the mandates of CAA section 202(l). Environmental Defense, NRDC, U.S. PIRG, and ALA also commented that they do not agree with EPA's statements that a per-gallon benzene cap would not represent the greatest achievable degree of reduction because it would have to be sufficiently high to accommodate all refiners (70 FR 15865). The commenters noted that the operative legal language in section 202(l) is not whether stronger standards would be "challenging," but whether they would be "achievable."

The Independent Fuel Terminal Operators Association (IFTOA) commented that it believes that the proposal is a reasonable and appropriate means to achieve the statutory objectives of the Clean Air Act and the Energy Policy Act.

Letters:

ALA OAR-2005-0036-0365 (hearing comments)
Environmental Defense, Natural Resources Defense Council (NRDC), U.S. PIRG, American Lung Association (ALA) OAR-2005-0036-0868
Engine Manufacturers Association (EMA) OAR-2005-0036-0810
Florida Department of Environmental Protection (FL DEP) OAR-2005-0036Illinois Environmental Protection Agency (IL EPA) OAR-2005-0036-0830

Independent Fuel Terminal Operators Association (IFTOA)
 OAR-2005-0036-1007
 Lane Regional Air Protection Agency (LRAPA)
 OAR-2005-0036-0848
 New Jersey Department of Environmental Protection (NJ DEP)
 OAR-2005-0036-0829
 New York State Department of Environmental Conservation
 OAR-2005-0036-0829
 Northeast States for Coordinated Air Use Management (NESCAUM)
 OAR-2005-0036-0936
 Oregon Department of Environmental Quality (OR DEQ)
 OAR-2005-0036-0987
 Puget Sound Clean Air Agency
 OAR-2005-0036-0780
 STAPPA/ALAPCO
 OAR-2005-0036-0836

Our Response:

We considered a range of average benzene standards, taking into account technological feasibility as well as cost and the other enumerated statutory factors. The commenters supporting a more stringent average benzene standard did not provide data or analysis to address the potential negative effects of different standards that we presented in the proposal, especially in the context of the proposed ABT program. Some of the commenters essentially stated that because lower annual average levels of benzene are attainable, greater emission reductions are achievable, and hence the proposal would not comply with section 202(1)(2) if adopted. The commenters, however, apparently fail to note that "achievable" in section 202(1)(2) is defined not only in terms of technical capability, but also in reference to cost, energy, safety, and lead time (see <u>Sierra Club v. EPA</u>, 325 F. 3d at 379). As discussed at length in the preamble and RIA to both the proposed and final rules, we do not consider a standard with a more stringent annual average benzene standard to be achievable considering costs, especially when costs to individual refineries are taken into consideration.

Some commenters that supported a more stringent annual average standard considered the role of costs and argued that the program does not impose significant costs on refiners in the aggregate, but did not address the wide range of compliance costs for individual refineries that we discuss in the proposal. It is critical to recognize that as more stringent annual average standards are considered, the costs for individual technologically-challenged refineries tend to become more extreme. (Please see section VI of the preamble to the final rule, chapter 9 of the RIA, and section 4.4 of this comment response document for a more detailed discussion of the costs of this program and how EPA considered these costs in determining which standards were achievable.)

We reassessed the level of the standard in light of the key factors we are required to consider, and concluded that 0.62 vol% is the appropriate level for the average standard, because it achieves the greatest achievable emission reductions through the application of technology that will be available, considering cost, energy, safety, and lead time. We have also chosen to finalize a maximum average standard. We believe that a maximum average standard at a level of 1.3 vol% accomplishes the reasonable goal of reasonably assuring lower gasoline benzene levels both nationally and regionally (see section 202(1)(2), authorizing EPA to establish "reasonable requirements"), while balancing the negative aspects of more- and less-stringent benzene standards, and avoids the serious drawbacks of a per-gallon cap. As further discussed in section VI of the preamble to the final rule, chapter 9 of the RIA and responses in chapter 4 of this

comment response document, we do not believe that a per-gallon cap would be achievable within the meaning of section 202(1)(2).

7.2.1.2 On-Board Diagnostics

What Commenters Said:

Regarding the mandates of CAA section 202(1), MECA, NESCAUM, and the New Jersey Department of Environmental Protection (NJ DEP) commented that they believe that EPA should support inspection and maintenance (I/M) programs and introduce on-board diagnostics (OBD) for all heavy-duty vehicles (especially those over 14,000 pounds). NESCAUM further commented that it believes that the final MSAT rule should contain a commitment to heavy-duty OBD, as it would allow for optimization of combustion in gasoline engines and reduce excess hydrocarbon emissions. NJ DEP further commented that it believes that EPA's support for I/M programs, through continually updated and comprehensive technical guidance, will help ensure the air toxic reductions projected from national exhaust and evaporative emission standards programs provide the expected benefits.

MECA commented that it believes that the MSAT2 proposal should have also considered a light-duty gasoline aftermarket converter policy that sets higher performance and durability standards (similar to California Air Resources Board's (ARB) interim policy requirements for aftermarket converters used on OBD-equipped vehicles). The commenter noted that, based on surveys that it performed with aftermarket converter manufacturers, significant additional reductions of hydrocarbon emissions, including toxic hydrocarbon emissions, and NOx emissions could be achieved with a national aftermarket converter policy that made use of the same higher performance OBD-compliant aftermarket converters available in California.

Letters:

Manufacturers of Emission Controls Association (MECA) OAR-2005-0036-0808 New Jersey Department of Environmental Protection (NJ DEP) OAR-2005-0036-0829 Northeast States for Coordinated Air Use Management (NESCAUM) OAR-2005-0036-0993

Our Response:

With regard to the comments on including heavy-duty OBD standards as part of this rule, EPA explained at proposal that such standards are being pursued in a separate proceeding (71 FR 15844). EPA in fact proposed OBD requirements for heavy-duty vehicles over 14,000 pounds (72 FR 3200, January 24, 2007). Given the nature of the heavy-duty trucking industry, 50-state harmonization of emissions requirements for these vehicles is an important consideration. To work towards this goal, the Agency signed a Memorandum of Agreement in 2004 with the California Air Resources Board which expresses both agencies' interest in working towards a single, nationwide program for heavy-duty OBD. Since that time, California has established their heavy-duty OBD program, which will begin implementation in 2010. EPA also proposed a 2010 implementation date for its program. We believe that it is far more sensible to continue to

coordinate these requirements by means of an independent rulemaking proceeding, than to disrupt the process by trying to 'shoehorn' heavy-duty OBD requirements into this rulemaking.

Regarding California high-performance OBD-compliant aftermarket converters, we note that vehicles already have an 8 year, 80,000 mile emission warranty with a 100,000 to 150,000 full useful life (FUL) for emissions. Therefore, original equipment manufacturer (OEM) catalysts are already required to be durable and effective for FUL. EPA does not have the authority to require catalyst changes on properly functioning catalysts even after FUL. However, for the small amount of catalyst failures that may occur after 80,000 miles, there is an EPA replacement policy in place that should restore the vehicle to an acceptable emission level.

Finally, with respect to the suggestion to support I/M programs as an aspect of vehicular toxics control, EPA can and does support such programs. However, I/M programs apply principally to existing vehicles, and to the extent that they do, cannot be required under the section 202(1)(2) authority which applies exclusively to new vehicles (<u>Sierra Club v. EPA</u>, 325 F. 3d at 380-82).

7.2.1.3 Heavy-Duty Diesel and Small Spark-Ignited Engines

What Commenters Said:

Environmental Defense, NRDC, U.S. PIRG, ALA, NESCAUM, and NJ DEP commented that they believe that the MSAT2 program does not fulfill the requirements of section 202(1) because EPA should have also promulgated standards for heavy-duty diesels such as in-use highway and nonroad diesel engines and locomotive and marine diesel engines, none of which were regulated by recent diesel standards. The commenters also noted that the full pollution reduction and public health benefits of the highway and nonroad diesel rules will not be realized for twenty years due to the lag in time before the emission standards come into effect and because of the long life spans of these diesel engines. The commenters stated that they believe that retrofitting these highly durable vehicles is important to achieving toxic emission reductions in the near-term. One commenter noted the Urban Bus Retrofit Program, and stated that it believes that expanding this program would greatly reduce toxic emissions from heavy-duty trucks and buses. Environmental Defense, NRDC, U.S. PIRG, ALA further commented that they believe that locomotive and marine engines are two of the most significant sources of the nation's diesel air pollution. The commenters cited many reports and public comments on EPA's Advanced Notice of Proposed Rulemaking for locomotive and marine diesels (August 30, 2004).

However, the Engine Manufacturer's Association (EMA) noted that the highway and nonroad diesel programs will reduce emissions of both NOx and PM by more than 90 percent. The commenter further stated that it agrees with EPA's assessment that cleaner-burning diesel fuel, engine improvements, and the addition of diesel particulate filters and other aftertreatment devices will significantly reduce MSAT emissions from new diesel engines. The commenter also cited studies which show that emissions of MSATs from today's advanced diesel engines are significantly lower than those observed in prior studies. The commenter stated that it believes that these studies demonstrate that EPA's aggressive rulemaking efforts for PM and other emissions are already reducing MSAT emissions to the greatest extent feasible. The commenter thus stated that it believes that the implementation of these stringent (and technology-forcing) standards for diesel engines, including the upcoming locomotive and marine rule, there clearly is not a need for additional engine, vehicle, or fuel controls to reduce MSAT emissions from diesel engines.

Additionally, EMA commented that it believes that EPA's upcoming proposed regulations small spark-ignited engines will result in significant emissions reductions for all pollutants, including MSAT emissions. The commenter stated that, because the emission reduction technologies that will be employed to reduce criteria pollutant emissions from these other mobile source sectors are also the best available technology to reduce MSAT emissions, the commenter believes that no additional controls are needed, or indeed are available, to control MSAT emissions from those sources. The commenter stated that it believes that EPA correctly avoids duplicate or redundant regulation of small spark-ignited engines by relying on upcoming small engine regulation to reduce MSATs; and thus EPA is justified in not proposing specific controls on small engines in the MSAT proposal.

Letters:

 Environmental Defense, Natural Resources Defense Council (NRDC), U.S. PIRG, American Lung Association (ALA) OAR-2005-0036-0868
 Engine Manufacturers Association (EMA) OAR-2005-0036-0810
 New Jersey Department of Environmental Protection (NJ DEP) OAR-2005-0036-0829
 Northeast States for Coordinated Air Use Management (NESCAUM) OAR-2005-0036-0993

Our Response:

With regard to comments that EPA did not fulfill the CAA requirements because of the omission of in-use highway and nonroad diesel engines, locomotive and marine engines, and small SI engines, we note first that CAA section 202(l) applies to "motor vehicles and motor vehicle fuels." Nonroad diesel engines, locomotive and marine engines, and equipment using small SI engines are not "motor vehicles" (see CAA section 216(2), definition of "motor vehicle"). Second, the commenter may well be correct that retrofits of existing diesel engines could achieve significant emission reductions. However, again, section 202(l)(2) provides no authority to compel those retrofits since it does not apply to in-use engines (Sierra Club v. EPA, 325 F. 3d at 381-82). Finally, for those diesel engines which are included within the scope of section 202(l), we adhere to our findings that existing vehicle-based controls represent the greatest emission reductions achievable. We further agree with the EMA comment making essentially this point. With respect to diesel fuel, we also adhere to our findings at proposal that the existing controls on sulfur levels represent the greatest achievable reductions.

7.2.1.4 Technology Forcing Standards

What Commenters Said:

The Energy Future Coalition (EFC) commented that it believes that EPA failed in its statutory duty to set standards that control hazardous air pollutants from motor vehicles to the maximum extent that is reasonably achievable. The commenter believes that EPA ignored an available option that is cost-effective and in use today – the replacement of aromatic compounds in gasoline with liquid biofuels. The commenter stated that it believes that EPA's approach of only reducing benzene emissions from gasoline is a limited measure that does not satisfy the requirements of the Clean Air Act, which it stated requires ("at a minimum") reductions in emissions of benzene and formaldehyde plus additional reductions in other air toxics that reflect the "greatest degree of emissions reductions achievable through the application of technology which will be available," taking cost, noise, energy, safety, and lead times into account. The commenter stated that the CAA requirements do not mandate the least costly degree of emission reduction; rather, it mandates the greatest degree of reduction possible, taking costs and other factors into account. The commenter also noted that the CAA provision is "technology-forcing" because it requires, not just the best current technology can do today, but the best that it can do in the future.

The American Petroleum Institute (API) and the National Petrochemical and Refiners Association (NPRA) commented that they believe that the EFC's comments primarily rest upon the premise that the operative portion of the Clean Air Act section 202(1) is that the standard should achieve "the greatest degree of emissions reduction achievable through the application of technology which will be available" and that the section is a "technology-forcing" provision. The commenters noted that in section 202 Congress required regulations to contain "reasonable requirements to control hazardous air pollutants from motor vehicle fuels" through "standards for such fuels or vehicles or both, which...reflect the greatest degree of emissions reduction achievable through the application of technology which will be available, taking into consideration...the availability and costs of the technology, and noise, energy, safety factors, and lead time." The commenters stated that they believe that the EFC has taken a selective reading of the legislation and fails to recognize the fact that EPA is to take all of these items into consideration. The commenters also noted that this same argument was raised in a legal challenge to the MSAT1 rule, and that in response to this argument, the court stated: "...petitioners point out that section 202(1) is 'technology-forcing,' so that the agency must consider future advances in pollution control capability...The statute also intends the agency to consider many factors other than pure technological capability, such as costs, lead time, safety, noise and energy." Thus, the commenters noted that, contrary to the EFC's assertion regarding the mandates of section 202(1), the Court of Appeals for the DC Circuit has ruled that this is but one of several factors that the Agency must consider when promulgating standards under section 202(1).

Letters: API & NPRA OAR-2005-0036-1015 Energy Future Coalition OAR-2005-0036-0840

Our Response:

As explained in detail in section VI of the preamble, chapter 9 of the RIA, and other

comment responses in chapter 4 of this document, there are strong reasons not to adopt controls on aromatics as part of this rulemaking. In this regard, we find persuasive points raised by the petroleum industry in its reply comments on this issue.

7.2.2 Section 211(c)(4)- State Pre-emption in Fuels Regulations

What Commenters Said:

The New York State Department of Environmental Conservation noted that Clean Air Act Section 211(c) only allows states some flexibility in regulating fuels, and that it does not believe that it should be preempted from the regulation of gasoline benzene content. The New Jersey Department of Environmental Protection further noted that states are preempted by section 211(c)(4) from taking additional action in regulating gasoline benzene, and it urged EPA to maximize the opportunity to glean the greatest benzene reductions possible.

In contrast, Marathon Petroleum Company (MPC) and the National Petrochemical and Refiners Association (NPRA) commented that they believe that the Clean Air Act federal preemption provisions help preserve the national motor fuel supply because states are precluded from adoption of unique specifications unless EPA grants a waiver.

Letters:

Marathon Petroleum Company LLC (MPC) OAR-2005-0036-1008
 National Petrochemical & Refiners Association (NPRA) OAR-2005-0036-0809
 New Jersey Department of Environmental Protection, Division of Air Quality (NJ DEP) OAR-2005-0036-0829
 New York State Department of Environmental Conservation (NYDEC) OAR-2005-0036-

Our Response:

0722

Since the implementation of the RFG program, several states and localities have made their own unique fuel property requirements in an effort to further improve air quality. As a result, by summer 2004 the gasoline distribution and marketing system in the U.S. had to differentiate between more than 12 different fuel specifications when storing and shipping fuels between refineries, pipelines, terminals, and retail locations. These unique fuels decrease nationwide fungibility of gasoline, which can lead to local supply problems and amplify price fluctuations. We believe that a nationwide benzene standard can help to alleviate the problems that tend to occur with proliferation of "boutique fuel" programs.

7.2.3 Other Clean Air Act Sections

7.2.3.1 Sections 202(a)(4) and 206(a)(3)

What Commenters Said:

The New York State Department of Environmental Conservation commented that it believes that EPA did not utilize information that is, or should be, available to the Agency through reporting under CAA sections 202(a)(4) and 206(a)(3).

Letters:

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

Our Response:

EPA believes that it has comprehensively examined and analyzed existing data relevant to all of the standards adopted in the rule, as well as to other potential standards.

7.2.3.2 Section 211(k)(8)

What Commenters Said:

The New York State Department of Environmental Conservation commented that they do not believe that EPA can eliminate the conventional gasoline (CG) anti-dumping provisions as proposed because Clean Air Act section 211(k)(8) prohibits EPA from eliminating these provisions. The commenter noted that in the preamble (71 FR 15871) it was stated that the proposed rule would preempt state regulation of gasoline benzene content; the commenter stated, however, that it does not believe that EPA can use preamble language to preempt state authority to regulate.

Letters:

New York State Department of Environmental Conservation

OAR-2005-0036-0722

Our Response:

We note that EPA is not eliminating these requirements—the statutory anti-dumping requirements remain. EPA continues to find, however, that the anti-dumping requirement is met by satisfying the final MSAT2 rule (along with satisfying gasoline sulfur requirements from the Tier 2 Gasoline Sulfur rule). Thus, the anti-dumping requirements will be met by these rules (and EPA therefore will continue meeting the mandates of section 211(k)(8) in issuing regulations that implement statutory anti-dumping requirements). In this sense, the final MSAT 2 rule implements not only section 202(l)(2), but section 211(k)(8) as well.

7.2.3.3 Section 211(l)

What Commenters Said:

The Alliance of Automobile Manufacturers (the Alliance) commented that it believes that EPA should update the fuel additive regulations under section 211(l) of the Clean Air Act, to

achieve the additional MSAT reductions sought in this proposed rule, to further control deposits in the port fuel injector area, intake valve area and combustion chamber. The commenter noted that section 211(l) requires EPA to establish specifications for additives that will provide sufficient detergency in gasoline "to prevent the accumulation of deposits in engines or fuel supply systems," which can have a pronounced impact on emissions at 20°F (and other temperatures) and vehicle performance. The commenter noted that EPA adopted requirements in 1995 to help control deposits on port fuel injectors (PFID) and intake valves (IVD); the commenter believes that the requirements need to be updated because they are based on 1986 vehicle technology, and are inconsistent with more stringent emissions standards adopted since 1986. The commenter also cited Coordinating Research Council (CRC) studies of commercial gasoline in Florida, which have shown substandard levels of detergency based on poor PFID additive performance and that the additive levels required by EPA's regulations are inadequate to provide optimum emission performance.

Letters:

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

Our Response:

The commenter did not maintain that additive controls would result in any further emission reductions than would be achieved under the vehicle-based cold temperature NMHC standard we are adopting in this rule. The comment is more directed at shifting the burden by which that standard would be satisfied. The potential need for EPA's gasoline deposit requirements to be amended is beyond the scope of this rulemaking; however, to the extent that such an amendment may be needed, it will be considered in another rulemaking.