

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

August 28, 2001

Ms. Julie Domike
Wallace, King, Marraro & Branson, PLLC
1050 Thomas Jefferson Street, N.W.
Washington, D.C. 20007

Dear Ms. Domike:

This is in response to Mack Trucks and Volvo Powertrain's April 20, 2001, petition for reconsideration of the final rule, "Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements Rule," (66 FR 5002 (January 18, 2001)).

After careful review of all of the issues raised in the petition, the Environmental Protection Agency (EPA) has decided against reconsidering the final rule. EPA did not commit procedural errors, we provided fair notice to the public throughout the rulemaking process, and the final rule is a logical outgrowth of the proposal. In addition, Mack Trucks and Volvo Powertrain have not presented any new evidence that would warrant reopening the rulemaking at this time. The enclosed document presents EPA's comprehensive response to the issues presented in the petition for reconsideration.

This rule, which will significantly reduce harmful exhaust emissions from heavy trucks and buses, is an important public health program. I am committed to ensuring that this program is implemented in a smooth and timely manner. I urge you to reconsider your opposition to certain parts of the program so that we may move forward as partners to make this a reality.

Sincerely yours,

Christine Todd Whitman

Enclosure

RESPONSE TO MACK TRUCKS'/VOLVO POWERTRAIN'S
REQUEST FOR RECONSIDERATION OF THE PHASE 2
FINAL RULE (HEAVY-DUTY ENGINES AND TRUCKS)

I. Introduction

On December 21, 2000, the Environmental Protection Administration (EPA) issued a final rule setting more stringent standards on emissions of oxides of nitrogen (NO_x), nonmethane hydrocarbons (NMHC), and particulate matter (PM) from heavy-duty highway engines and trucks beginning in model year 2007 (the "phase 2 final rule"). The final rule also requires that highway diesel fuel contain lower sulfur levels beginning in mid-2006. The final rule was published in the Federal Register on January 18, 2001 (66 FR 5001).

On April 20, 2001, Mack Trucks, Inc. ("Mack") and Volvo Powertrain ("Volvo") submitted a petition to EPA requesting reconsideration of one aspect of the phase 2 final rule. Specifically, Mack and Volvo requested that EPA reconsider a new provision in its heavy duty engine averaging, banking, and trading ("ABT") regulations that permit, for the three year transition period from model years 2007 to 2009, averaging of emission credits generated from different service classes of heavy duty engines for the purposes of meeting emission limits. Mack/Volvo claim that: (1) EPA failed to provide for adequate public notice and comment on these ABT provisions; (2) the provisions violate the Clean Air Act by creating a competitive disadvantage for certain diesel engine manufacturers and arbitrarily deviate from EPA's past practice; and (3) EPA has failed to demonstrate that the provision will not have an adverse environmental impact.

As discussed in detail below, EPA is denying Mack/Volvo's request for reconsideration. Petitioner has not shown that EPA violated any procedural or substantive provision of the Act in its promulgation of the challenged ABT provisions. Petitioner has also not shown that its objections are of central relevance to the outcome of the rule or provided evidence that EPA would have come to a different outcome had the petitioner been given more time to produce its comments.

II. Statement of Facts

In the Notice of Proposed Rulemaking (NPRM) for the phase 2 rule, EPA proposed new emission standards for heavy duty engines, expressed on a grams per brake horsepower-hour (g/bhp-hr) basis, for NO_x, NMHC, and PM, to take effect beginning in the 2007 model year. As in past EPA programs, EPA divided heavy-duty diesel engines (HDDEs) into three primary intended service classes, light-, medium-, and heavy-HDDEs, depending on the primary service application group for which an engine is designed and marketed (see 40 CFR §86.085-2).

The NO_x and NMHC standards were proposed to be phased in gradually over the model years 2007 through 2010, based on a percent of each manufacturer's U.S. directed production volume in each model year. These proposed percentages were 25, 50, 75, and 100 in model years 2007, 2008, 2009, and 2010, respectively. This phase-in approach was maintained in the final

rule, but the percentages of production were changed to 50, 50, 50, and 100 in model years 2007, 2008, 2009, and 2010, respectively. In both the NPRM and the final rule, EPA did not require any differentiation between service classes in connection with the phase-in. Thus, a manufacturer's compliance with the phase-in requirement is based on an overall percent-of-production basis, without regard to service class. For example, under the final rule provision, a manufacturer that has a U.S.-directed production in model year 2007 of 500 light-HDDEs and 500 heavy-HDDEs could comply by having 300 light-HDDEs, and 200 heavy-HDDEs meet the new NO_x and NMHC standards, with all 1000 HDDEs meeting the new PM standard. The opportunity for cross-service class strategies in complying with the phase-in schedule is readily apparent in the straightforward description of the proposed phase-in and in the proposed regulations, which make no mention of service class distinctions for assessing compliance. The NPRM requested comment on all aspects of the proposed phase-in and on various alternatives.

EPA also proposed in the NPRM to maintain the basic elements of the previously established ABT program. Under the ABT program, a manufacturer could certify some engines at emission levels below the standard and generate credits that could be used to certify other engines that emit at levels above the standard. The Agency proposed to maintain this program because it believed that the ABT program generally "would provide manufacturers significant compliance flexibility," and that this flexibility "would be a significant factor in the manufacturers ability to certify a full line of engines in 2007 and would help to allow implementation of the new, more stringent standard as soon as permissible under the CAA."

However, EPA proposed some changes to the ABT program during the initial phase-in period to make the ABT program more consistent with other new provisions in the proposed program, particularly with the gradual percentage phase-in of new emission standards over the years 2007 to 2010. For example, EPA indicated that engines certified through the use of ABT credits should not be allowed to have emissions so high that manufacturers could "use the ABT program to unnecessarily delay the introduction of exhaust emission control technologies," as this would be "contrary to one of the goals of the phase-in program, which is to allow manufacturers to gain experience with these technologies on a limited scale before they are applied to their full production" (65 FR at 35525). The proposal therefore would allow engines subject to the new more stringent NO_x and PM standards to use credits to certify to levels above the standard, but set an upper limit on the level to which manufacturers could certify credit-using engine families. Such engine families could not be certified to levels higher than 0.50 g/bhp-hr for NO_x and 0.02 g/bhp-hr for PM. Similarly, the Agency proposed separate ABT averaging sets during the phase-in period. "In one set, engines would be certified to the 2.4 g/bhp-hr NO_x+NMHC standard (which applies for model years 2004-2006), and would be subject to the restrictions and allowances established for those model years. In the other set, engines would be certified to the proposed 0.20 g/bhp-hr NO_x standard, and would be subject to the restrictions and allowances proposed" in the NPRM. *Id.* Averaging would not be allowed between these "phase-out" and "phase-in" sets within the same model year, as this would be contrary to one of the goals of the phase-in program, which is "to allow manufacturers to introduce engines with ultra-low emission technologies on a limited scale before they are applied to their full production." *Id.* As a part of this restriction of cross-set averaging, EPA also proposed that "banked NO_x+NMHC and PM credits generated from 2006 and earlier engines may not be used

to comply with the stricter standards that apply to 2007 and later engines (unless such credits are generated from engines that meet all of the stricter standards early).” The NPRM did not discuss or propose changes to an existing prohibition on the use of ABT credits generated through emission reductions from HDDEs in one service class to demonstrate compliance with emission standards in another service class (hereafter referred to as “cross-service class credit use”).

In the NPRM, EPA stated its belief that “in some ways the ABT program is intended to serve the same purpose as the phase-in for diesel engines” and therefore specifically invited commenters to “address how [the ABT proposal] fits with the phase-in, and vice-versa.” *Id.*

In response to the NPRM, the Agency received many comments on its proposed approach to a percentage phase-in of the standards. None of the commenters objected to or addressed the allowance for cross-service class compliance with the percentage phase-in provided under the proposed approach. In comments provided by Mack (Statement of Mack Trucks, Inc., August 14, 2000, EPA docket A-99-06, item IV-D-324), concern was raised that the proposed phase-in would not be commercially manageable. Mack explained that it expected the per-vehicle cost of compliance to be so high that there would be no practical way to select customers to bear that additional burden: “If Mack were to select a particular market segment or a particular customer to receive the new engines, Mack would be at a competitive disadvantage to any other manufacturer that chose to offer that market segment or customer lower cost engines that did not meet the lower standard.” Mack went on to request that EPA adopt some alternative to the proposed phase-in that would require all engine manufacturers to “meet the same standards for all of their engine families at the same time,” such as by delaying standards until July 2008 for 100 percent of the fleet. Other commenters suggested alternatives that would also achieve this goal, such as a two-step approach to the standards, with full-fleet compliance required in each step. (See for example comments from the Engine Manufacturers Association (EPA docket A-99-06, item IV-D-251)).

The Agency also received numerous comments on the proposed approach to the ABT program. Most of these comments were from engine manufacturers who expressed concern that the proposed transition ABT program was too restrictive, and offered specific suggestions for changes to make it more flexible. Certain suggestions responded to the NPRM and addressed how the proposed ABT program fit in with the proposed phase-in of standards. For example, several manufacturers requested that EPA drop a proposed prohibition on the use of ABT credits earned by engines subject to the pre-2007 emission standards to help demonstrate compliance of other engines subject to the 2007 standards (see for example written comments submitted by Detroit Diesel Corporation, International Truck and Engine Corporation, and the Engine Manufacturers Association (EMA), of which Mack is a member, EPA docket A-99-06, items IV-D-276, 257, and 251, respectively). The allowance of cross-service class calculations in the percentage phase-in, and the prohibition on cross-service class credit use under the ABT program, were not discussed in the written comments submitted to EPA.

Manufacturers also commented that, as proposed, the flexibility intended by the combined phase-in and ABT provisions was not adequate for a transition to the technology-forcing standards (see for example supplemental comments of Caterpillar Inc., Cummins Inc.,

Detroit Diesel Corporation, Mack Trucks, Inc., and Volvo Truck Corporation (A-99-06, item IV-G-94)).

In evaluating the many comments received on the proposal, including the ABT and standards phase-in provisions, the Agency met several times with engine manufacturers and other commenters following the close of the public comment period on August 14, 2000. These meetings are documented in memoranda to the docket for this rulemaking. (See docket A-99-06 items IV-E-18, 19, 24, 27-31, 34-37, 40-43, 45-48, 52, 58-61, 63, 75, 84-86, 88, 89, 91, and 106.) Mack was present at two of the meetings with EMA (on November 20, 2000 and December 11, 2000) and as a member of EMA was indirectly represented at many of the other meetings by EMA staff. The memoranda to the docket indicate that the ABT program was discussed at some of these meetings, but do not detail specific points of discussion. Industry representatives requested removal of the prohibition on cross-service class credit use in the context of these meetings, along with many other ideas explored by meeting attendees as possible means of improving the proposed program while meeting the Agency's objectives under the Clean Air Act.

In written comments received into the docket for this rule in December 2000 (EPA docket A-99-06, item IV-G-99), Mack requested that EPA "refrain from including provisions in the final 2007 rule that would alter the current prohibition on averaging, banking, or trading across subclasses of heavy-duty diesel engines." Mack's request was based on its concerns that altering this provision: (1) would violate provisions of both the Clean Air Act and the Administrative Procedure Act requiring adequate public notice and opportunity for comment, (2) would be anticompetitive, disadvantaging any manufacturer who does not produce two or more subclasses of heavy-duty diesel engines, especially Mack "which produces only heavy-heavy duty diesel engines"¹, and (3) could have adverse environmental consequences.

The final rule did not fundamentally change the concept underlying the transition to the new NO_x and NMHC standards. However, the Agency made several changes to the proposed program, particularly during the phase-in years, in response to comments. These changes included the restructuring of the percentage phase-in schedule (to 50, 50, 50, and 100 percent in 2007, 2008, 2009, and 2010, respectively), and allowing averaging between engines in the "phase-out" and "phase-in" averaging sets, subject to a 20 percent discounting factor.² In its Response To Comments document (EPA docket A-99-06, item V-C-01), EPA provided a detailed response to comments on its percentage phase-in approach and the 2007 model year phase-in start. (See responses to comments 3.1.4(A) through (G)). Specific to Mack's comments from August 14, the Agency wrote in response to comment 3.1.4(C):

EPA agrees that the proposed phase-in could have created difficulties for manufacturers given that one manufacturer's engines in a given weight class may

¹ However, in its August 14, 2000 written comments, Mack indicated that it also markets a line of medium heavy-duty trucks throughout North America.

² Each gram of NO_x + NMHC credits from the phase-out engines would be worth 0.8 grams of NO_x credits for engines meeting the new standard.

have emission control hardware and another manufacturer's engines may not. This could make it difficult for the first manufacturer to sell its engines given their presumed higher cost. However, it may also make those engines more attractive to some buyers (e.g., city bus fleets). Our final phase-in should provide some measure of control over such a situation given that it becomes more difficult to ignore an entire weight class when 50 percent of engines must comply in 2007 as opposed to only 25 percent under our proposal. Further, with the averaging, banking, and trading provisions we are finalizing, we fully expect manufacturers to equip most, if not all, of their engines with exhaust emission control hardware to take full advantage of the flexibilities provided."

Also among these changes was the temporary removal of the prohibition on cross-service class averaging during the 2007 to 2009 standards phase-in period. The final rule added a new paragraph §86.007-15(m)(10) to 40 CFR Part 86, which states:

"For model years 2007 through 2009, to be consistent with the phase-in provisions of §86.007-11(g)(1), credits generated from engines in one diesel engine service class (e.g., light-heavy duty diesel engines) may be used for averaging by engines in a different diesel engine service class, provided the credits are calculated for both engine families using the conversion factor and useful life of the engine family using the credits, and the engine family using the credits is certified to the standards listed in §86.007-11(a)(1). Banked or traded credits may not be used by any engine family in a different service class than the service class of the engine family generating the credits."

There are several important restrictions on credit use contained in this transition provision (it applies only in the phase-in years, it requires the use of consistent calculational parameters, it is limited to use on engines certified to the new standards, and it is limited to same-year/same-manufacturer averaging only). These are unique in the ABT program, and arise from the Agency's view of this provision as part of the transition program and an extension of the percentage phase-in program. The cross-service class credit use provision, with these restrictions, effectively allows the percentage phase-in to be met through use of ABT credit averaging rather than on a strict engine-count basis. This approach provides greater flexibility because it allows a manufacturer to design and certify engines as meeting the "phase-in standards" in these phase-in years that do not fully achieve the new "phase-in standards," because credits can be used to achieve comparable overall emissions from its sales fleet on average. These engines can then be used to meet the percentage phase-in requirement. For example, an engine manufacturer that manufactures 500 heavy HDDEs and 500 light HDDEs can meet the requirements during the phase-in years by certifying all 1000 of its engines to levels somewhere in between the levels of the "phase-in standards" and the levels of the "phase-out standards." The ABT approach requires that credits used for compliance with the NO_x standard under this provision be discounted by 20 percent, thus providing an environmental benefit if the provision is used. We believe that many manufacturers will take advantage of this flexibility because it will "give manufacturers a greater opportunity to gain experience with the low-NO_x technologies

before they are required to meet the final standards across their full production” Response to Comment 7.2.2. See also Response to Comment 3.1.4(C).

In response to Mack’s December comments opposing this cross service category averaging, EPA stated that the “cross-subclass averaging allowance that is being finalized is being adopted in a manner to make it fully consistent with our phase-in, by ensuring that credits are generated and used on a consistent basis. This allowance does not fundamentally alter the nature of the phase-in, but merely provides a small degree of additional flexibility. We do not believe that this allowance will have any adverse environmental impacts, given the 20 percent discount being applied to all credits exchanges from [phase-out] to [phase-in] engines.” Response to Comment 7.4.2(J).

Mack and Volvo’s petition centers on the fact that the cross-service class averaging provision allows emission reductions from engines in one service class to help demonstrate compliance for engines in another class. This same concern would apply to the percentage phase-in requirement, which, in both proposed and final form, freely allows such cross-class compliance strategies. In addition, cross-service class compliance under the percentage phase-in requirement does not requiring anything comparable to the “discounting of credits” built into the ABT program.

III. Standard for Reconsideration

Section 307(d)(7)(B) of the Clean Air Act provides the standard for when EPA is required to convene a proceeding for reconsideration. Under that section, if a “person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.”

Mack/Volvo’s Petition for Reconsideration includes procedural objections regarding EPA’s decision to revise its ABT provisions in the final rule to allow for cross-service class averaging during the phase-in period. For a petitioner to meet the requirements of section 307(d)(7)(B) in the context of a procedural objection, it must first show that EPA committed procedural error. Further, under the Act, an action may be reversed by a reviewing court for procedural error only if:

- i) the failure to observe the procedure(s) is arbitrary or capricious; and
- ii) a specific objection to the procedure employed was raised during the public comment period, or afterwards if the grounds for objection arose only after the comment period and the objection is of central relevance to the outcome of the rule; and
- iii) if the errors were so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made.

Section 307(d)(9)(D) (paraphrasing cited provisions). See *Air Pollution Control District of Jefferson County, Ky v. EPA*, 739 F. 2d 1071 (6th Cir. 1984). The reference to “central relevance” in 307(d)(9)(D)(iii) quoted above is similar to section 307(d)(7)(B)’s language that a petition for reconsideration must be granted only if the objection is of “central relevance to the outcome of the rule.” EPA believes it should apply the same approach under section 307(d)(7)(B).

When reviewing claims of procedural error under both the Clean Air Act and the Administrative Procedure Act, the courts have emphasized that it is appropriate for agencies to learn from comments and other information received or developed after the proposal and to modify or update its position or the evidence it relies on without further notice and comment as long as the final rule is a logical outgrowth of the proposal. See *Appalachian Power v. EPA*, 135 F. 3d 791, 815 (D.C. Cir 1998); *Natural Resources Defense Council v. Thomas*, 838 F. 2d 1224, 1242-43 (D.C. Cir. 1988); *City of Stoughton, WI v. EPA*, 858 F2d 747, 753 (D.C. Cir 1988); *International Fabricare Institute v. EPA*, 972 F. 2d 384, 399 (D.C. Cir, 1992); *Rybachek v. EPA*, 904 F. 2d 1276, 1286-88 (9th Cir., 1990). See also *Connecticut Light and Power Co. v. NRC*, 590 F. 2d 1011, 1031 (D.C. Cir 1978) (“The agency need not renote changes that follow logically from or that reasonably develop the rules it proposed originally. Otherwise the comment period would be a perpetual exercise rather than a genuine interchange resulting in improved rules”); *Community Nutrition Inst. v. Block*, 749 F. 2d 50, 58 (D.C. Cir. 1984) (“Rulemaking proceedings would never end if an agency’s response to comments must always be made subject to additional comments”). To determine logical outgrowth, courts have examined the specific circumstances, including whether and how the final rule changed from proposal to final, how the new information relates to the proposal, the other information in the record, the length of time to comment on the new information, and so on.

IV. Response to Petition

A. EPA Rulemaking Procedures

The rulemaking history shows that the revision of the ABT regulations to allow cross-service class averaging as part of various other changes to the transition program was a logical outgrowth of the proposal and that Mack/Volvo had adequate opportunity to comment on this ABT issue.

The notice of proposed rulemaking provided for a percentage phase-in of the HDDE NOx and NMHC standards, combined with modifications to the prior ABT program imposing certain limits on ABT use during the transition period. With respect to the percentage phase-in, EPA did not require HDDE manufacturers to meet the percentages for the phase-in separately in each service category. The purpose of this proposed percentage phase-in was to allow for a smooth transition into the new technology required by the proposed standards. “With a phase-in, manufacturers are able to introduce the new technology on a limited number of engines, thereby gaining valuable experience with the technology prior to implementing it on the entire fleet.” 65 FR at 35462. The notice requested comments on all aspects of the phase-in and whether a phase-in was appropriate (65 FR 35462, 35466).

Regarding the ABT aspects of the transition program, EPA proposed to continue the basic structure of the ABT program, except that during the phase-in period there would be separate averaging sets for phase-in and phase-out engines, and there would be no averaging between these two sets. “Allowing averaging between the sets would be contrary to one of the goals of the phase-in program, which is to allow manufacturers to introduce engines with ultra-low emission technologies on a limited scale before they are applied to their full production” (65 FR at 35525). EPA requested comment on the need for this restriction. EPA indicated in the proposal that it viewed the ABT and phase-in provisions as closely connected. “[I]n some ways the ABT program is intended to serve the same purpose as the phase-in for diesel engines.” EPA specifically asked commenters to “address how [the ABT provision] fits with the phase-in, and vice-versa” (65 FR at 35525).

The final rule retained the basic structure of the proposal’s transition program, but made certain revisions. First, the percentage phase-in requirements were changed such that instead of a manufacturer needing 25%, 50%, 75%, and 100% of its fleet to meet the new standards from 2007-2010, the manufacturer would need to certify 50%, 50%, 50% and 100% of its fleet to the new standards from 2007-2010. Also, the final rule allowed averaging between phase-in and phase-out engines, but required that credits generated from phase-out engines be subject to a 20% discount. Finally, during just the three years of the transition period, EPA allowed averaging across service categories, also subject to the 20% discount, which “would make the credit exchanges equivalent to the vehicle count phase-in provisions” (66 FR 5110).

The Courts have been clear that the Agency is permitted to revise its proposed regulations in its final rule as long as such revision is a logical outgrowth of the proposal. *Natural Resources Defense Council*, 838 F. 2d 1224, 1242 (“EPA can obviously promulgate a final regulation that differs in some respects from its proposed regulation.... A contrary rule would lead to the absurdity that ... the agency can learn from the comments on its proposals only at the peril of starting a new procedural round of commentary....[T]he agency’s final rule must only be a ‘logical outgrowth’ of its proposed rule.” [citation and internal quotes omitted]); *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F. 2d 506, 547 (“The notice requirement should not force an agency endlessly to repropose a rule because of minor changes, not should a court vacate and remand an otherwise reasonable rule because of a minor procedural flaw”).

The final rule is a logical outgrowth of the proposal here. The changes made to the transition program in the final rule are basically adjustments to the proposed transition program. The final transition program modified the percentage phase-in schedule, making it more stringent early in the program, but reduced the restrictions on averaging across averaging sets and service categories during the phase-in, with a 20% discount on credits. These adjustments responded to comments and better facilitated the transition program on an industry-wide basis. The temporary allowance of cross service category averaging helped to coordinate the transition program by making the averaging program consistent with the percentage phase-in on this point. However, these changes did not change the basic parameters of the transition program and did not significantly change the competitiveness issues that were clear in the proposal.

EPA's proposal raised and commenters were aware of the broad issues associated with the transition to new standards in the proposed combination of a percentage phase-in and ABT programs, including the competitiveness issues associated with these provisions. Mack commented specifically on the competitiveness issues arising from the proposal, particularly on the proposed phase-in. However, Mack did not raise any particular objection to the cross-service class aspect of the phase-in; nor did any other commenter object to that aspect of the proposal. Where Mack did object generally to the phase-in based on competitiveness concerns, EPA explicitly responded in the Response to Comments document See Issue 3.1.4.(C) (noting that some difficulties could arise because some manufacturers with engines with emission control hardware will be competing against manufacturers without emission control hardware, but that engines with such hardware may be comparably attractive to some buyers and noting that changes to the final phase-in and ABT program will decrease the likelihood that manufacturers to build an entire weight class without engines that have emission control hardware).

Moreover, approximately three weeks prior to the promulgation of the final rule, Mack had actual notice of EPA's intention to change its ABT regulations to allow cross-service class averaging during the phase-in period. See Petition for Reconsideration at 4. See *Union Oil Company of California v. EPA*, 821 F. 2d 678, 682-83 (D.C. Cir. 1987) (Court rejected procedural argument regarding lack of notice where "petitioners received actual notice sufficient to permit them to present their objection to the Agency."); *NRDC*, 838 F.2d. 1224, 1243 (EPA warning of change in NSPS approach, coming two weeks before final rule signed, gave industry petitioners at least a limited opportunity to focus direct attack on NSPS.); *Appalachian Power*, 135 F. 2d 791, 815 (no procedural error where EPA provided early versions of emissions model for comment and produced final results two-and-a-half-weeks prior to signature). Mack provided comments to EPA based on this information. The comments raised basically the same issues raised in this petition for consideration. EPA responded to those comments in the Response to Comments document (See Issue 7.4.2(J)).

Mack/Volvo therefore had an opportunity to comment on the basic issue of whether cross-service class flexibilities during the transition period created competitiveness or environmental problems, that Mack/Volvo in fact was aware three weeks prior to the end of the rulemaking that EPA was contemplating the specific change now objected to, that it provided its objection to EPA, and that EPA responded in the final Response to Comments to Mack's concerns. Given this record, EPA committed no procedural error because Mack/Volvo had an adequate opportunity to comment and the final rule was a logical outgrowth of the proposal.

B. Equity Concerns

In its petition, Mack/Volvo expresses the view that the temporary cross-service class credit use provision creates inequity because it confers a substantial competitive advantage on certain manufacturers, at a substantial cost to others, especially to small manufacturers and those, like Mack, that produce only one service class of diesel engines. The petition raises no such objection to the percentage phase-in, which is also not restricted by service class.

The goal of the transition program, both in the proposal and in the final rule, is to allow the stringent standards promulgated in the rule to be implemented as expeditiously as possible while providing a short period of time during which manufacturers can transition into the new standards. EPA believes that the program provides the proper level of flexibility needed by manufacturers during this critical initial period. The modifications to the ABT program during the transition period align it with the percentage phase-in, and like the phase-in are based on a recognition that manufacturers can use extra flexibility during this period to gain experience with the new technologies needed to meet the new standards.

The Agency recognizes that flexibilities in the transition program (the combination of a percentage phase-in and ABT provisions) can tend to competitive pressures because one manufacturer may be able to take better advantage of the flexibility than another. However, such issues can arise whenever new regulations are established, regardless of whether or not flexibility is provided. For example, simply setting stringent new emission standards to take effect on a certain date may give an advantage to those manufacturers better able to invest and develop new emission control technology. On the other hand, manufacturers with a large, diverse product offering may be disadvantaged by the need to redesign multiple product lines compared to a manufacturer with a small, focused offering.

Certain aspects of the transition may reduce adverse impacts concerning Mack. For example, by increasing the first year phase-in requirement to 50%, EPA made it less likely that a manufacturer could shield an entire weight class from the phase-in requirements. Also, the increased flexibility of the final ABT program should increase the likelihood that manufacturers will equip substantially more than 50% of their fleets with advanced emission control hardware (aftertreatment). Manufacturers are expected to certify some of their phase-in engine families to levels above the phase-in standards, and will therefore need to meet more stringent levels for their phase-out engine families, which, along with the 20% discount, would lead to more use of emission control aftertreatment technology on the phase-out engines. See Response to Comments 3.1.4(C), 3.1.4(F). Finally, the substantial restrictions that EPA placed on the temporary use of cross service class credits mitigates the concerns Mack/Volvo has with this provision.

EPA does not believe it is appropriate to change the transition program, and thus risk a delay in the expeditious transition to the new standards, by trying to insulate certain manufacturers from potential competitive problems.³ Several other manufacturers indicated that

³ Mack's initial comments suggested that EPA should postpone the standards until July 2008 and then require that the standard be met by 100% of the fleet. This approach would avoid the competitiveness concerns raised by Mack but would effectively delay introduction of the standards for two model years (EPA would have to initiate the program in the 2009 model year, rather than the 2007 model year). Also, manufacturers would lose many of the flexibilities of the program in the initial years of implementation, including the ability to introduce new technology while meeting less stringent standards through averaging, banking and trading. Several manufacturers indicated that they were opposed to an immediate introduction of the 0.2 gram standard for the reasons discussed in the main text above.

a gradual introduction to the final standards was necessary to allow manufacturers to, among other things, learn the best methods of incorporating the new technologies into their engines. Our final transition program modified the percentage phase-in and ABT provisions in response to these comments. The resulting transition program is designed to provide adequate time and flexibility to transition the entire industry's production to new more advanced emissions control technology as expeditiously as reasonably possible. Revisions to the transition program that would reduce these flexibilities could undermine this expeditious transition. The temporary cross service class aspect of the transition program in particular allows manufacturers to use the flexibilities of the program throughout their product line, and increases the chances that manufacturers with a small number of engine families in one service category will be able to use the flexibilities of the program for these engine families.⁴

It is important to note that the basic goal of adopting provisions such as the phase-in and ABT programs are to further the air quality improvement goals of the Clean Air Act, not to benefit or protect the competitive position of individual manufacturers. Section 202(a)(3) of the Act requires that EPA set standards for heavy-duty trucks that reflect the greatest degree of emission reduction achievable through the application of technology which we determine will be available for the model year to which the standards apply, giving appropriate consideration to cost, energy and safety factors. The phase-in to the new engine standards, ABT provisions, and similar flexibilities, are integral to the Agency's efforts to meet this requirement. The transition flexibilities provided in the rule give the entire industry greater opportunity to meet the stringent new standards in the final rule in an expeditious and reasonable manner, recognizing that there is a significant change in technologies contemplated by the new standards. Although EPA tries to avoid introducing competitive advantages or disadvantages when it establishes new emissions control programs, it is not a result we can ensure; nor is that the primary goal for EPA under the statute. Given the factors discussed above, we do not believe that the competitiveness concerns raised by Mack/Volvo are significant enough to reconsider the rule on this issue. Mack/Volvo has provided no significant evidence or arguments on this issue beyond what was considered by the agency during the rulemaking.

Mack/Volvo claims that EPA has reversed its prior position against cross service class averaging. However, the prior rulemakings cited by Mack/Volvo concern whether EPA should allow cross service class averaging indefinitely and without restriction. By contrast, the temporary provision promulgated in this rule is a very limited provision, lasting only three years and subject to several restrictions. The provision was not intended to create permanent cross service class averaging. Rather, the provision was intended to make the averaging program consistent with the cross-service class aspect of the phase-in during the three year transition period. See Response to Comment 7.4.2(J).

⁴ It is worth noting that in Mack's comments on the proposal, Mack indicated that it was manufacturing engines in two service classes, not one. Though it is not clear whether this is still the case, for a manufacturer with a small number of medium-heavy duty engines, a measure that includes cross service-class averaging would be especially useful because it would put less pressure on its smaller medium-duty fleet to have to meet the standard without being able to use the averaging provisions.

Mack/Volvo also claim that EPA's decision to allow cross-service class averaging is contrary to the Clean Air Act. However, Mack/Volvo's sole evidence of this is the language in section 206(g) of the Act dealing with nonconformance penalties. Under that provision, EPA must "remove any competitive disadvantage to manufacturers whose engines or vehicles achieve the required degree of emission reduction." The 'competitive disadvantage' language in the nonconformance penalty provision is not analogous to this situation. Nonconformance penalties involve manufacturers selling vehicles that do not meet the appropriate standard. It is designed to address concerns over technological laggards in the industry. Once EPA sets an NCP schedule, any manufacturer can pay the penalty and produce nonconforming engines. Given the overarching purpose of the Clean Air Act to ensure that emission standards achieve expeditious reductions in harmful emissions, it is quite reasonable that the Act requires that NCPs be set at a level such that competitive financial incentives do not encourage manufacturers to pay NCPs instead of meeting the emission reduction requirements of the standards promulgated under the Act.

By contrast, ABT provisions do not excuse any manufacturer from meeting the emission reduction requirements in the regulations. ABT provisions merely allow manufacturers the ability to meet these requirements in more ways than would occur without such provisions. There is no inherent loss of emission reduction in ABT programs, and the 20% discount that manufacturers must pay under the program in this rule helps to ensure against any inadvertent environmentally negative impacts. Moreover, ABT provisions are promulgated under section 202(a)(3) of the Act as part of its standard-setting process. Unlike section 206(g), section 202(a)(3) contains no language regarding competitive effects and Mack/Volvo have provided no evidence that the cross-service class averaging provision violates section 202(a)(3).⁵

C. Environmental Impacts

The Mack/Volvo petition expresses the belief that the cross-service class credit use provision is likely to have adverse environmental impacts that the Agency has not adequately addressed. The basis for this view is the lack of prorating factors in the ABT program to account for lifetime emissions differences between larger and smaller engines.

Mack/Volvo provide no evidence that the cross-service class credit use provision would have adverse environmental impacts, nor do Mack/Volvo rebut EPA's statement in the Response to Comments that EPA "do[es] not believe that this allowance will have any adverse environmental impacts, given the 20 percent discount being applied to all credits exchanges from [phase-out] to [phase-in] engines." Response to Comment 7.4.2(J). EPA believes that to the extent that the cross-service class credit use provision is exercised in place of a simple percentage phase-in, a modest net environmental benefit would be expected because of the 20 percent

⁵ Mack/Volvo state in a footnote that they are not challenging EPA's authority to establish an ABT program, but they do not explain how the cross-service class provision is any more problematic under the Act than any other ABT provision. As noted above, ABT provisions generally will provide more flexibility to companies with several engine families than to companies with fewer engine families.

discount applied to credit use. EPA did not develop prorating factors for the cross-service class credit use provision because it did not do so for the standards percentage phase-in provision, of which it is an extension.

Moreover, the environmental effect of the specific ABT provisions should not be viewed in a vacuum. The cross-service class averaging provision, along with other ABT provisions, the three year phase-in, and other flexibilities in the regulations are in integral part of the broader standard setting process. In particular, the provisions for model years 2007-2009 were designed to provide an expeditious transition to new standards. EPA recognizes that emission reductions during the transition years are smaller than those after the standards are fully phased in, but in determining what standards for heavy-duty engines “reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which the standards apply, giving appropriate consideration to cost, energy and safety factors,” EPA determined that the most expeditious and reasonable approach to achieving those emission reductions was to include the transition program. Mack/Volvo has not shown that EPA would have achieved greater overall emission reductions, taking into account feasibility, cost, energy and safety factors, if it had used a different approach. In fact, as noted in footnote 2, Mack’s initial alternative program would have sacrificed two years of emission control and would have required immediate compliance with the standards thereafter, compromising both the emission reductions of the final program and the flexibilities that other manufacturers commented were important in meeting the final standards.

EPA therefore does not believe Mack/Volvo has provided sufficient evidence or argument to justify reconsideration of the rule on this point.

V. Conclusion

For the reasons discussed above, EPA is denying Mack/Volvo’s Petition for Reconsideration. Mack/Volvo have not shown that their arguments are of central relevance to the outcome of the rule. The grounds for mandatory reconsideration under section 307(d) have not been met, and no good grounds have been shown that would otherwise warrant the granting of this petition.