

**Summary and Analysis of Comments:
Control of Emissions of Air Pollution
from Locomotive Engines and Marine
Compression Ignition Engines Less than
30 Liters Per Cylinder**

**Chapter 8
Administrative Requirements and
Legal Authority**

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

8.	ADMINISTRATIVE REQUIREMENTS & LEGAL AUTHORITY	8-1
8.1	Clean Air Act and Statutory Authority	8-1
8.1.1	General.....	8-1
8.1.2	Energy Security.....	8-1
8.1.3	Achievability/Feasibility of Standards and Lead-time	8-2
8.1.4	State Pre-emption and Regional Programs	8-4
8.1.5	Regulation of “New” Engines.....	8-6
8.1.6	Lead-time and Stringency of the Standards	8-7
8.2	Executive Orders.....	8-10
8.2.1	Environmental Justice and Children’s Health Concerns.....	8-10
8.2.2	Consultation and Coordination with Indian Tribal Governments	8-12

8. ADMINISTRATIVE REQUIREMENTS & LEGAL AUTHORITY

What We Proposed:

The comments in this chapter are centered on the administrative and procedural requirements and legal authority 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 docket for this rulemaking (EPA-HQ-OAR-2003-0190).

8.1 Clean Air Act and Statutory Authority

8.1.1 General

What Commenters Said:

The California Air Resources Board (CARB) commented that it believes that the CAA requires EPA to establish stringent, aftertreatment-based emission standards, and encourages EPA to set and implement such standards as soon as feasible.

Letters:

California Air Resources Board (CARB) OAR-2003-0190-0596.1

Our Response:

As noted in the preamble to the proposed rule, EPA does in fact have authority under the Clean Air Act to set emissions standards for the engines and vehicles being regulated by this rulemaking. We refer the reader to section I.B(3) of the preamble to the final rule for a more detailed discussion on EPA's authority under the Clean Air Act for the locomotive and marine program.

8.1.2 Energy Security

What Commenters Said:

General Electric Transportation (GE) commented that, while it believes that the standards may be technologically achievable in the time frame allowed, it does not believe that the proposal took into account the significant fuel efficiency penalty associated with bringing these units to a Tier 1 level standard. Thus, the commenter stated, the new Tier 0 standard will clearly impact other pollutants and have a negative energy impact. The commenter noted that Clean Air Act (CAA) section 213(a)(5) (42 U.S.C. §7547(a)(5)), which EPA cited as the authority for this

rule, requires any standards applicable to locomotives to be based on achievability, giving appropriate consideration to cost, noise, energy, and safety. The commenter stated that it does not believe that EPA either looked at the effects of the Tier 1 standards for NO_x on other emissions or took the energy impact into account. The commenter urged EPA to consider these effects in establishing the final rule and provide a reasonable estimate of the cost of achieving them.

Letters:

General Electric Transportation (GE) OAR-2003-0190-0590.1

Our Response:

Executive Order (E.O.) 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355 (May 22, 2001)), requires EPA to assess the energy effects for any action identified as a “significant energy action.” This rule’s potential effects on energy supply, distribution, or use have been analyzed and are discussed in detail in section 5.8 of the Final Regulatory Impact Analysis (RIA). As stated in that section, while we project that this rule would result in an energy effect that exceeds the 4,000 barrel per day threshold noted in E.O. 13211 in or around the year 2022 and thereafter, the program consists of performance-based standards with averaging, banking, and trading provisions that make it likely that our estimated impact is overstated. Further, the fuel consumption estimates upon which we are basing this energy effect analysis, which are discussed in full in sections 5.4 and 5.5 of the RIA, do not reflect the potential fuel savings associated with automatic engine stop/start (AESS) systems or other idle reduction technologies. Such technologies can provide significant fuel savings which could offset our projected estimates of increased fuel consumption. Nonetheless, our projections show that this rule could result in energy usage exceeding the 4,000 barrel per day threshold noted in E.O. 13211.

8.1.3 Achievability/Feasibility of Standards and Lead-time

What Commenters Said:

GE noted that, under CAA section 213(a)(5), EPA is required to set locomotive emissions standards based on technologies that the Administrator determines will be available at the time that compliance is required for such emissions standards. GE further commented that, assuming section 213(a)(5) applies and using its standard, it does not believe that EPA has established that the aftertreatment technologies will be available in 2017 as proposed. The commenter stated that it has significant issues regarding the ability of aftertreatment to reliably achieve the 1.3 gram per brake horsepower-hour (g/bhp-hr) Tier 4 NO_x emission level over the useful life of the locomotive (see OAR-2003-0190-0590.1, Appendix A). The commenter stated that it does not believe that the proposed rule and supporting documents address these concerns. The commenter noted that under *FMC, Corp. v. Train*, 539 F.2d 973 (4th Cir. 1976), even where standards are intended to be technology forcing (in that case, with compliance dates 9 years in the future), EPA cannot rely on conclusory statements regarding the ability to achieve a standard.

(Id. At 981.) GE commented that, applying those principles here, EPA would need to explain why the recent studies—and the only ones using real engine exhaust and the catalyst applicable to locomotive operations—should be rejected in light of older studies conducted in laboratory environments with simulated exhaust.

GE also cited *Tanners' Council of Am., Inc. V. Train*, 540 F.2d 1188, 1191 (4th Cir. 1976), in which the Court noted that EPA's 1983 standards were based on conjectural developments expected, but stated that EPA's action was only justified because the standards were required to be set within one year of enactment - a time period that did not allow for extensive testing - and the standards would be reviewed and revised as appropriate on an annual basis. GE commented that EPA faces no such deadline for issuing the locomotive and marine standards. The commenter further noted that the Court emphasized that if EPA intends to require control technologies that have not been applied, the record must demonstrate "that there is a reasonable basis to believe that the technology will be available by [the compliance date]." (Id. At 1195. See, also, *NRDC v. EPA*, 822 F.2d 104, 115, n.12 (D.C. Cir. 1987).) GE commented that, as EPA determines if a technology will be available in the future to meet a particular environmental standard, EPA is required to do more than present the conclusory statements presented in the preamble to the proposed rule and the Draft RIA. The commenter stated that this is particularly true where commenters have pointed to published papers and other information indicating that the standards will not be able to be achieved throughout the period during which they apply. The commenter noted that while EPA can rely on technologies that are not yet being utilized in practice, there must be a reasoned basis for believing that the technologies will be available and that they will achieve the required levels; and the commenter stated that it believes this reasoned basis is lacking here.

GE commented that it believes that EPA has not met the burden to demonstrate that the locomotive emission standards will be achievable in the timeframe provided, taking into account cost, energy, noise, and safety factors as provided under CAA section 213. The commenter stated that it hopes to be able to work with EPA to reach a common understanding of the data and to consider the options for taking the most recent data into account in establishing the final Tier 4 NO_x standard.

Letters:

General Electric Transportation (GE)OAR-2003-0190-0590.1

Our Response:

CAA section 213(a)(5) directs EPA to adopt emission standards for new locomotives and new engines used in locomotives that achieve the "greatest degree of emissions reductions achievable through the use of technology that the Administrator determines will be available for such vehicles and engines, taking into account the cost of applying such technology within the available time period, the noise, energy, and safety factors associated with the applications of such technology." As discussed further in chapter 10 of this Summary and Analysis of Comments document, section III of the preamble, and Chapter 4 of the Final RIA, EPA has evaluated in detail the available information, including our own testing, to determine the

technology that will be available for locomotives and engines subject to EPA standards, and we have determined that the standards are feasible in the lead time provided.

8.1.4 State Pre-emption and Regional Programs

What Commenters Said:

The National Association of Clean Air Agencies (NACAA) noted that with section 101(a)(3) of the Clean Air Act, Congress vested state and local clean air agencies with “primary responsibility” for the control of air pollution. The commenter noted that this is a responsibility that it takes very seriously. NACAA commented that, as it seeks to achieve and sustain clean, healthful air throughout the country, it must consider the full measure of emission reductions feasible from every source of pollution as quickly as possible. The commenter noted that with respect to locomotive and new marine diesel engine emissions, however, states and localities are preempted from taking regulatory action.

The South Coast Air Quality Management District (SCAQMD) suggested that EPA adopt a regional rule for locomotives used in the South Coast (and other areas that are in need of early reductions). The commenter stated that this would accomplish the dual goals of demonstrating the advanced technology and providing needed assistance in meeting PM_{2.5} standards by 2014 and reducing local exposure to locomotive emissions. The commenter stated that it believes that there is nothing in the Clean Air Act prohibiting EPA from adopting a regional rule—that the Clean Air Act merely requires EPA to adopt standards for new locomotives. The commenter cited that when a statute does not specify the mode of exercising a particular power, any reasonable mode may be selected (*San Diego Gas & Electric Co. V. San Diego County Air Pollution Control District*, 203 Cal. App. 3d 1132, 1144); and further, the determination that EPA is empowered to adopt regional rules would be entitled to deference from the courts (*Chevron U.S.A. Inc. V. Natural Resources Defense Council*, 467 U.S. 837 (1984)). The commenter stated that it believes EPA is clearly empowered to adopt a rule requiring early phase-in of Tier 4 engines; and if such early phase-in is possible, EPA is obligated to require it, under the provisions of the CAA requiring standards to “take effect at the earliest possible date” (CAA section 213(b)). SCAQMD commented that it believes EPA could even adopt requirements that railroads operating in such areas purchase the Tier 4 locomotives when adding to or replacing locomotives in their fleet; and noted that, as held by the U.S. Supreme Court, “standards” refer to the emission characteristics of engines, and can be enforced either against manufacturers or purchasers (*Engine Mfrs. Ass’n. V. South Coast Air Quality Management District*, 541 U.S. 246, 253 (2004)). The commenter stated that it believes that once railroads operating in heavily polluted areas are required to purchase Tier 4 locomotives, they can begin routing such cleaner locomotives to the areas that need them the most, to the extent feasible. Lastly, the commenter noted that there is precedent for the railroads voluntarily agreeing to route the cleanest locomotives into the South Coast region, under an agreement with the California Air Resources Board.

Letters:

Our Response:

State and local governments continue working to protect the health of their citizens and comply with requirements of the CAA, as part of this effort they recognize the need to secure additional major reductions in both diesel PM_{2.5} and NO_x emissions by undertaking numerous state-level actions. Congress has preempted states from regulating new locomotive and marine engines, and EPA has therefore attempted to put in place a program that achieves emission reductions as quickly as feasible from these engines. This final program results in earlier and significantly greater NO_x and PM reductions from the locomotive and marine sector than the proposed program because of the standards for remanufactured marine engines and the two-year pull-ahead of the Tier 4 NO_x requirements for line-haul locomotives and for 2000-3700 kW (2760-4900 hp) marine engines. These changes reflect important efforts by all parties to implement cleaner technology as early as possible.

Regarding the discussion of a regional program, CAA section 213(a)(5) requires technology-based standards to be put in place at the earliest date feasible. EPA standards achieve this requirement for locomotives throughout the United States, and EPA does not believe a mandatory regional program, even if could be reconciled with the language of the statute, could achieve reductions in an appreciably faster time frame, particularly given the fact that individual locomotives by their nature travel widely throughout the country. While this final program will help many states and communities achieve cleaner air, for some areas, such as the South Coast of California, the reductions achieved through this rule will not alone enable them to meet their near term ozone and PM air quality goals. (This was also the case for our 1998 locomotive rulemaking, where the State of California worked with Class I railroads operating in southern California to develop a Memoranda of Understanding (MOU) ensuring that the cleanest technologies enabled by federal rules was expeditiously introduced in areas of California with greatest air quality improvement needs.) We continue to support California's efforts to reconcile likely future growth in the locomotive and marine sector with the public health protection needs of the area, and the final rule includes provisions which are well-suited to encouraging early deployment of cleaner technologies through the development of similar programs.

Additionally, EPA has a number of voluntary programs in place that help enable government, industry, and local communities to address challenging air quality problems. The EPA SmartWay program has initiatives to reduce unnecessary locomotive idling and to encourage the use of idle reduction technologies that can substantially reduce locomotive emission while reducing fuel consumption. EPA's National Clean Diesel Campaign—through the Clean Ports USA program—is working with port authorities, terminal operators, and trucking and rail companies to promote cleaner diesel technologies and emission reduction strategies through education, incentives, and financial assistance. Part of these efforts involves voluntary retrofit programs that can further reduce emissions from the existing fleet of diesel engines. Finally, EPA is implementing a new Sustainable Ports Strategy which will allow EPA to partner

with ports, business partners, communities and other stakeholders to become world leaders in sustainability including achieving cleaner air. This new strategy builds on the success of collaborative work EPA has been doing in partnership with the American Association of Port Authorities (AAPA), and through port related efforts of Clean Ports USA, SmartWay, EPA's Regional Diesel Collaboratives and other programs. Together, these approaches augment the locomotive and marine program and they help states and communities achieve larger reductions sooner in the areas of our country that need them the most.

8.1.5 Regulation of “New” Engines

What Commenters Said:

Clean Air Task Force (CATF) commented that it urges EPA to continue to treat remanufactured engines as new engines, and to require them to meet emissions standards reflecting best available control technology, as required by section 213 (a)(5) of the Clean Air Act. Similarly, Environmental Defense, NRDC, et al. (0592.1) commented that the Clean Air Act requires EPA to apply technology-forcing emission standards to remanufactured locomotive engines, because section 213(a)(5) states that EPA must “promulgate regulations containing standards applicable to emissions from new locomotives and new engines used in locomotives,” and EPA has defined “new locomotive engine” to include an engine which has been remanufactured. The commenters noted that EPA is likewise required to apply technology-forcing emission standards to remanufactured marine diesel engines, as section 213(a)(3) directs EPA to “promulgate (and from time to time revise) regulations containing standards applicable to emissions from those classes or categories of new nonroad engines and new nonroad vehicles (other than locomotives or engines used in locomotives) which in the Administrator’s judgment cause, or contribute to,” air pollution. The commenters stated that Congress took a comprehensive approach in delegating rulemaking responsibility to EPA, calling for the establishment of emission standard that apply to new vehicles and engines, and included language to ensure that remanufactured engines—engines that are functionally new—cannot elude protective emission standards. The commenters noted that such an approach follows inextricably from the statutory text and is essential to carry out the core statutory purpose of section 213—to address emissions from new engines, based on the natural and ordinary understanding of that term, that endanger public health and welfare—and stated that they believe that taking a different approach would be arbitrary and capricious, an abuse of discretion, and contrary to law. The commenters further stated that “a narrow definition of new locomotive engines, limited to freshly manufactured engines, would effectively undercut the ability of the Agency to reduce emissions contribution from this segment of the nonroad inventory.”

Letters:

Clean Air Task Force OAR-2003-0190-0499

Environmental Defense, NRDC, et al.

OAR-2003-0190-0592.1

Our Response:

The emission standards for new locomotives and new locomotive engines were set pursuant to the authority under CAA section 213(a)(5). We previously determined that certain existing locomotive engines, when they are remanufactured, are returned to as-new condition and are expected to have the same performance, durability, and reliability as freshly-manufactured locomotive engines. Consequently we set emission standards for these remanufactured engines that apply at the time of remanufacture (defined as “to replace, or inspect and qualify, each and every power assembly of a locomotive or locomotive engine, whether during a single maintenance event or cumulatively within a five-year period...” (see 61 FR 53102, October 4, 1996; 40 CFR 92.2). This rulemaking adopts new tiers of standards for both freshly manufactured and remanufactured locomotives and locomotive engines.

See section 9.5 of this Summary and Analysis of Comments document for comments (and associated responses) concerning EPA’s legal authority to set standards for remanufactured marine diesel engines.

Regarding the definition in section 216(3), that is the definition of “new motor vehicle.” While EPA has generally followed that definition for determining “new” in the context of nonroad engines and nonroad vehicles, and believes it generally to be an appropriate guide, EPA has made clear in the past, with regard to locomotives, and now, with regard to larger marine diesel engines, that the remanufacturing process for such engines, which stay in service much longer than typical motor vehicle engines, is so thorough as to return the engine to as-new condition, and thus should make the engine subject to section 213. Please see section I.B.(3) of the preamble to the final rule for a more detailed discussion regarding our rationale for treating “remanufactured” marine engines as “new” engines.

8.1.6 Lead-time and Stringency of the Standards

What Commenters Said:

EMA commented that the CAA expressly recognizes the fundamental importance of regulatory lead-time. The commenter particularly noted that section 202(a)(3)(C) mandates a 4-year lead-time period for any emission standards applicable to heavy-duty vehicles or engines (42 U.S.C. §7521(a)(3)(C)). The commenter also noted that section 213(b), the statutory section pertaining to the types of nonroad emission standards at issue in this rulemaking, mandates that the effective date for any such standards must be set “considering the lead-time necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period, and energy and safety.” (42 U.S.C. § 7547(b)) EMA commented that, in light of these controlling provisions of law, it typically seeks a minimum of 4-years’ lead-time for any new engine emission standards that EPA seeks to implement. The commenter further stated that the CAA also requires a sufficient period of regulatory stability (the period of time between each new level or “Tier” of emission standards that becomes applicable to a given type of engine). EMA commented that, with respect to heavy-duty on-highway (HDOH) engines, section 202(a)(3)(C) mandates a 3-year stability period (42 U.S.C. §7521 (a)(3)(C)); thus, the commenter typically seeks a minimum 3-year

stability period for any new engine emission standards promulgated by EPA.

EMA commented that, depending on the timing of the finalization of this rulemaking, it is concerned that the effective date could provide less than one year of lead-time for smaller marine engines, which typically would amount to a violation of the CAA's lead-time requirement. The commenter additionally stated that, for commercial marine engines rated between 1400-3700 kW, the proposed Tier 4 standards could follow the implementation of the proposed Tier 3 standards by less than three years, which it believes would typically amount to a violation of the CAA's stability requirement.

Environmental Defense, NRDC, et al. noted that section 213 of the Clean Air Act governs EPA's exercise of its delegated rulemaking responsibility to address emissions from nonroad engines and nonroad vehicles. The commenters noted that CAA sections 213(a)(3) and 213(a)(5) mandate that EPA has a legal duty to establish emission standards that "shall achieve the greatest degree of emission reduction achievable" considering relevant statutory factors. The commenters stated that this legal standard is further illuminated by the statutory mandate for EPA to "first consider standards equivalent in stringency to standards for comparable motor vehicles or engines." (CAA section 213(a)(3)) The commenters further noted that section 213(b) pointedly addresses - and constrains - the phase-in of emission standards under section 213 by instructing EPA to establish standards that "shall take effect at the earliest possible date" considering various statutory factors. The commenters stated that the statute thus establishes a comprehensive protective bar for evaluating EPA's promulgation of rules for these engines and vehicles by mandating standards that secure the greatest degree of emission reduction achievable at the earliest possible date considering first the stringency of standards for onroad vehicles and engines. The commenters also commented that they believe the text firmly and inescapably embodies Congress' mandate for swift, protective EPA action. The commenters thus stated that they believe that any delay in implementing the proposed standards or in adopting standards that do not reflect the greatest degree of emission reduction achievable would be contrary to law by running afoul of EPA's delegated regulatory responsibilities under the Clean Air Act.

Environmental Defense, NRDC, et al. commented that, to satisfy EPA's legal responsibilities the technologies and whether or not the resulting standards are "equivalent in stringency" to those adopted for highway engines and vehicles. The commenters stated that there is no question that the proposed emission standards and implementation timetable are in fact considering relevant statutory factors, as shown by the comments of the emissions control and engine manufacturers (the commenters cited statements by MECA and EMA). The commenters stated that, based on the acknowledgements by both the emissions control and the engine makers (and EPA's own technology assessments), they believe that the proposed standards for locomotive and marine engines are achievable within the proposed time frame. They further stated that the emission limits are achievable, as demonstrated by the MECA and EMA comments along with a body of experience in the highway sector. Environmental Defense, NRDC, et al. commented that the implementation timeframe and the level of the standards are subject to the protective legal mandates under section 213 of the CAA, and that they vigorously oppose any weakening or delay of the proposed standards. The commenters stated that they believe such backsliding would cause EPA to fall short of its mandatory duty to

establish technology-forcing standards for locomotive and marine engines under the terms of the statute.

SCAQMD commented that, as stated by EPA, Tier 4 locomotive standards are feasible using today's technology; and it thus believes there is no need to delay implementation of the standards to await development of technology. The commenter also noted that EPA is required to adopt standards which "take effect at the earliest possible date," per CAA section 213(b). The commenter stated that it thus believes that the Tier 4 technology must be required as quickly as manufacturers can gear up to produce it. SCAQMD suggested that if such technology cannot be rapidly deployed on a nationwide basis, EPA should either adopt a regional rule or (at a minimum) require manufacturers to phase-in Tier 4 technology as early as possible nationwide, by starting with some level of production. The commenter requested that this occur no later than 2012, with full implementation as quickly as possible.

Letters:

Engine Manufacturers Association (EMA) OAR-2003-0190-0575.1

Environmental Defense, NRDC, et al. OAR-2003-0190-0592.1

South Coast Air Quality Management District (SCAQMD) OAR-2003-0190-0558.1

Our Response:

EPA notes that unlike the provisions of section 202(a)(3) applicable to standards for certain emissions from on-highway heavy-duty engines, section 213 of the Clean Air Act contains no requirement for a specific amount of lead time for standards and contains no requirement that standards remain stable for any amount of time. Indeed, as some commenters point out, section 213(b) explicitly requires that standards "take effect at the earliest possible date considering the lead time necessary to permit the development and application of the requisite technology..." As discussed in section 3.2.1.2 of this Summary and Analysis of Comments document, we agree with the approach suggested by manufacturers of large engines that engines 2000-3700 kW could meet Tier 4 NO_x in 2014 (two years earlier than proposed), if the Tier 3 NO_x+HC standard, did not have to be met. We believe this approach is feasible, and would have very little detrimental effect on NO_x reductions in 2012-2013, while providing significant additional NO_x reductions thereafter. However, we believe that extending this change below 2000 kW is not appropriate because these smaller engines are more similar to their land-based nonroad counterparts, and therefore should be able to meet Tier 3 NO_x levels without extensive redesign,; but, these engines would be more difficult to equip with aftertreatment on an early schedule due to vessel packaging constraints and other factors.

We note that EMA's point that less than one year of lead time is provided for small marine engine standards is expressed in the context of a statement that the proposed implementation dates are at the limit of feasibility and should not be shortened. We agree and believe that the 2009 start date provides appropriate lead time for the reasons discussed in preamble section III.B(2)(a). Likewise, EMA's point regarding the stability period between Tier 3 and Tier 4 for 1400-3700 kW is expressed in the same context. We note too that we have revised our final standards for engines in this group in response to manufacturer comments about

lead time and need for flexibility, as described in section III.B(2)(a) of the preamble to the final rule.

The evidence provided in section III.C of the preamble to the final rule and chapter 4 of the RIA indicates that the stringent emission standards we are setting for newly-built and remanufactured locomotive and marine diesel engines are feasible and reflect the greatest degree of emission reduction achievable (per CAA sections 213(a)(3) and (5)) through the use of technology that will be available in the model years to which they apply. We have reviewed and given appropriate consideration to cost, cost-effectiveness, energy (including fuel efficiency), safety, and noise factors in setting these standards.

As discussed in section III.C of the preamble, further review of the test data previously available, and of new test data made available since the proposal (added to the public docket for this rulemaking), does support the argument for earlier implementation of Tier 4 NOx controls. Consequently, after considering this data and industry comments regarding feasibility, we have concluded that the progress made in the development of NOx aftertreatment technology has been such that this proposed allowance to defer NOx control is not consistent with our obligation under CAA section 213(a)(3) to set standards that “achieve the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the engines or vehicles, giving appropriate consideration to cost, lead time, noise, energy, and safety factors associated with the application of such technology.” We are therefore not adopting this allowance for deferred NOx control in 2015-2016 Tier 4 locomotives, effectively advancing the Tier 4 NOx standard for locomotives by two years. Besides meeting our obligation under the Clean Air Act, this change will simplify the certification and compliance program for all stakeholders by providing a single step for Tier 4 implementation. It will also provide substantial additional NOx reductions during years that are critical to the states for state implementation plan (SIP) development, thus helping to address this concern.

As discussed further in section 10.2.1 of this Summary and Analysis of Comments document, we considered the time required to complete the necessary research, design, development, and validation activities, and we have concluded that 2015 is the most reasonable date for the introduction of the technologies we describe in Chapter 4 of the Final RIA.

8.2 Executive Orders

8.2.1 Environmental Justice and Children’s Health Concerns

What Commenters Said:

Environmental Defense, NRDC, et al. noted that EPA concluded in the NPRM that the proposed rule is not subject to Executive Order 13045 “Protection of Children from Environmental Health Risks and Safety Risks,” which requires the Agency evaluate the environmental health or safety effects of the planned rule on children, if children may be disproportionately affected. The commenters stated that they believe EPA incorrectly defended

this decision based on an assertion that “the Agency does not have reason to believe the environmental health risks or safety risks addressed by this action present a disproportionate risk to children” (63 FR 16039). The commenters also noted that a review of the environmental health and safety effects of locomotive and diesel emissions on children was included in the DRIA.

Environmental Defense, NRDC, et al. commented that they appreciate EPA evaluating these effects in the DRIA; and stated that they also believe that such review is in fact called for under the plain terms of the Executive Order. The commenters noted that there is an extensive body of scientific evidence demonstrating that children are more vulnerable to the adverse health effects of diesel than adults because of the immaturity of their lungs and the protective metabolic enzyme systems, the larger lung surface area relative to body weight (children breathe 50% more air per kilogram of body weight than adults), and children spend more time outdoors and are more active than adults. The commenters thus requested that that EPA both acknowledge and evaluate the rule’s serious and disproportionate effects on children’s health arising from the suite of airborne contaminants in diesel exhaust that have been shown to place a heavy burden on children. The commenters also requested that EPA address that burden by taking final action on the proposal, as they believe that the most effective way for EPA to in fact address the disproportionate burden on children’s health is to promptly issue a final rule that puts in place rigorous emission standards.

NRDC also commented that it believes that locomotive and marine diesel pollution disproportionately affects the people and communities who live closest to the rail yards and ports. The commenter stated that in those communities, exposure to these emissions is likely to be far greater; and many of these communities are low-income and/or communities of color, giving rise to significant environmental justice concerns that underlie its interest in this rule-making.

The Oregon Environmental Council (OEC) stated that it believes that diesel emissions disproportionately impact vulnerable populations, such as children, elderly populations, and people of color.

Letters:

Environmental Defense, NRDC, et al.	OAR-2003-0190-0592.1
Oregon Environmental Council	OAR-2003-0190-0652
Natural Resources Defense Council (NRDC)	OAR-2003-0190-0489

Our Response:

In regards to the comments related to the populations who live near rail yards and ports, particularly with regard to environmental justice concerns, EPA has appropriately addressed these items in sections II, IX.G, and IX.J of the preamble to the final rule, and Chapters 2 and 6 of the Final RIA. In short, EPA recently conducted an initial screening analysis of selected marine port areas and rail yards to begin to understand the populations living near rail yards and marine ports. This screening analysis indicated that at the 40 marine ports and 37 rail yards

studied, at least 13 million people, including 3.5 million children and a high percentage of low-income households, African-Americans, and Hispanics, living near these facilities, are being exposed to elevated levels of diesel particulate matter. These populations will benefit from the controls being finalized by the rule because it increases the level of environmental protection for all affected populations.

EPA has evaluated several regulatory strategies for reductions in emissions from locomotive and marine diesel engines, and we believe that we have selected the most stringent and effective control reasonably feasible at this time (in light of the technology and cost requirements of the Clean Air Act). The programs being finalized today address both new engines and existing fleets of engines which will benefit the populations, including children, minority, and low-income populations, who live in proximity to marine ports and rail yards. In fact, the emission reductions from the stringent new standards finalized in the locomotive and marine diesel rule will have large beneficial effects on communities in proximity to port, harbor, waterway, railway, and rail yard locations, including children, low-income, and minority communities. In addition to stringent exhaust emission standards for new and remanufactured engines, the final rule includes provisions targeted to further reduce emissions from regulated engines that directly impact low-income and minority communities such as the mandatory idle reduction provision (see preamble section III.C(1)(c) for a detailed discussion on this provision), and emission standards for newly-built switch locomotives (which are major sources of pollution in urban rail yards).

With regard to the comment that EPA incorrectly stated that the proposed rule was not subject to Executive Order 13045 decision based on an assertion that the “the environmental health risks or safety risks addressed by this action present a disproportionate risk to children”, we would like to clarify that we stated that we believed that the rule itself was not subject to Executive Order 13045 because the proposed standards would have a positive effect on children’s health. Further, as noted in the NPRM and the Draft RIA, much of the analyses performed on the pollutants regulated by this rule were done in prior rulemakings. However, upon further study of the Executive Order, we do believe that the rule is subject to the Executive Order because the rule is economically significant and it “concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children.” We have thus evaluated the environmental health or safety effects of these risks on children, as discussed above, and in the preamble to the final rule (sections II and IX.G) and in the Final RIA (Chapter 2).

8.2.2 Consultation and Coordination with Indian Tribal Governments

What Commenters Said:

The Northwest Environmental Defense Center commented that EPA should reconsider the conclusion that the proposed rule has no tribal impacts under Executive Order 13175 (72 FR 16039), and that EPA should act to fulfill its tribal consultation duties under the Executive Order. The Puget Sound Clean Air Agency also commented that, under EPA’s Nation-to-Nation

consultation responsibilities with the Tribal Nations, EPA has the ability within this rulemaking to be responsive to the concerns of these four Tribal Nations.

Letters:

Northwest Environmental Defense Center OAR-2003-0190-0593.1

Puget Sound Clean Air Agency OAR-2003-0190-0484 (hearing)

Our Response:

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments”, requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” The final rule does not have tribal implications, as specified in Executive Order 13175, as the rule will be implemented at the Federal level and imposes compliance costs only on locomotive manufacturers, locomotive engine manufacturers, locomotive operators, locomotive remanufacturers, marine engine manufacturers, and marine vessel manufacturers. Tribal governments will be affected only to the extent they purchase and use the regulated engines and vehicles; thus, Executive Order 13175 does not apply. However, EPA did solicit additional comment on this rule from tribal officials. A comment was received from one tribal government; that comment is available in the rulemaking docket, and is summarized and addressed in other sections of this Summary and Analysis of Comments document.