OFFICE OF ADVOCACY
U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, DC 20416

August 20, 2003

Via Courier and Electronic Mail

The Honorable Jeffrey R. Holmstead
Assistant Administrator for Air and Radiation
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Control of Emissions of Air Pollution From Nonroad Diesel Engines and Fuel; Proposed Rule (68 Fed. Reg. 28328).

Dear Assistant Administrator Holmstead:

The U.S. Small Business Administration's Office of Advocacy (Advocacy) submits the following comments to the U.S. Environmental Protection Agency (EPA) regarding EPA's Notice of Proposed Rulemaking, *Control of Emissions of Air Pollution From Nonroad Diesel Engines and Fuel*, 68 *Fed. Reg*. 28,328 (May 23, 2003). The proposed rule would require large reductions of oxides of nitrogen (NOx) and particulate matter (PM) emissions from all nonroad diesel applications. **Although the proposed rule appears likely to deliver substantial national environmental benefits at relatively low cost to larger manufacturers and fuel refiners, we are concerned that the proposed rule will impose significant burdens on a substantial number of small entities with little corresponding environmental benefits. Accordingly, EPA should adopt less burdensome regulatory approaches for small entities identified through the Small Business Advocacy Review Panel (SBAR Panel or Panel) process conducted at the pre-proposal stage. In particular, EPA should not require aftertreatment devices for small horsepower engines (75 horsepower or less).**

Advocacy was established pursuant to Pub. L. 94-305 to represent the views of small entities before Federal agencies and Congress. Advocacy is an independent office within the U.S. Small Business Administration (SBA), so the views expressed by Advocacy do not necessarily reflect the views of the SBA or the Administration. The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), gives small entities a voice in the rulemaking process. The RFA requires Federal agencies to consider alternatives to avoid overly burdensome

regulation of small entities.[1] Advocacy is required by Section 612 of the RFA to monitor agency compliance with the RFA.[2] For all rules which would have a significant economic impact on a substantial number of small entities, EPA is required by the RFA to conduct small business review panels to assess small entity impacts and alternatives that would minimize these burdens, then make recommendations on small entity input to the Administrator of EPA.[3]

On August 13, 2002, President George W. Bush signed Executive Order 13272 (E.O. 13272), requiring Federal agencies to implement policies protecting small entities when writing new rules and regulations.[4] E.O. 13272 instructs Advocacy to provide comment on draft rules to the agency that has proposed a rule, as well as to the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget (OMB).[5] E.O. 13272 also requires agencies to give every appropriate consideration to any comments provided by Advocacy. Under the Executive Order, the agency must include, in any explanation or discussion accompanying publication in the *Federal Register* of a final rule, the agency's response to any written comments submitted by Advocacy on the proposed rule, unless the agency certifies that the public interest is not served by doing so.[6]

I. Background.

EPA's proposed rule is designed to reduce emissions from nonroad diesel engines and equipment by setting tighter emission standards and reducing the sulfur content in diesel fuel used by nonroad engines. In order to meet the more stringent emission standards, the proposed rule would require nonroad engines to be equipped for the first time with aftertreatment devices that remove pollutants from the exhaust stream after the exhaust leaves the engine. Conceptually, these aftertreatment devices are analogous to the catalytic converters that are now found on passenger vehicles. EPA estimates that, under its current proposal, the overall cost to comply with the rule between 2004 and 2030 will be about $17 billion.[7]

A. SBAR Panel recommendations.

On October 24, 2002, EPA convened a SBAR Panel consisting of representatives from EPA, Advocacy, and OMB's Office of Information and Regulatory Affairs (OIRA). Pursuant to the RFA, EPA convened the Panel, and the Administrator of EPA was and is

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1 Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164 (1981) (codified as amended at 5 U.S.C. §§ 601-612).

2 5 U.S.C. § 612.

3 5 U.S.C. § 609.

4 Exec. Order No. 13,272 § 1, 67 *Fed. Reg*. 53,461 (Aug. 16, 2002) (E.O. 13272).

5 E.O. 13272, at § 2(c), 67 *Fed. Reg*. at 53,461.

6 *Id*. at § 3(c), 67 *Fed. Reg.* at 53,461.

7 U.S. EPA, Draft Regulatory Impact Analysis: Control of Emissions for Nonroad Diesel Engines (April 2003) (RIA) (accessible online at http://www.epa.gov/nonroad/r03008.pdf). This assumes a discount rate of 3% per year.

required to consider the Panel's recommendations.[8] In addition, E.O. 13272 requires EPA to respond in the *Federal Register* to any written comments provided to the agency by Advocacy.[9]

Before beginning the formal Panel process, EPA actively engaged in communicating with entities that would potentially be affected by the upcoming rulemaking. Once potential Small Entity Representatives (SERs) were identified, EPA began having more discussions to better understand the needs of the small entities in more detail. Outreach meetings were held with the potential SERs on September 16, 2002 and November 13, 2002.

The participation of affected small entities helped the Panel to identify two additional regulatory approaches to further control emissions from nonroad diesel engines and equipment while avoiding serious economic injury to small businesses. These two alternative approaches, along with other small entity flexibility provisions, were submitted to EPA Administrator Christine Whitman for her consideration in the Panel report dated December 23, 2002. The two additional regulatory approaches identified by the Panel would either: (a) require no additional emissions limitations on engines below 75 hp; or (b) require some emissions reductions from engines below 75 hp, but would not impose any PM or NOx aftertreatment requirements on engines/equipment below 75 hp.[10] **These two approaches from the Panel Report were presented in EPA's proposed rule as Options 5a and 5b, respectively.**[11]

B. Affected small businesses.

EPA has identified and analyzed the markets which would be affected by the rule's emissions restrictions on nonroad diesel applications. Applying SBA's small business size standards, EPA determined that in the nonroad diesel sector, there were four small business engine manufacturers, 335 small business equipment manufacturers, 26 small business diesel fuel refiners, and an undetermined number of small business fuel distributors and marketers, likely to number in the thousands.[12]

During the Panel process, Small Entity Representative (SER) equipment manufacturers informed the EPA that regulation of engines below 75 hp would likely destroy demand for their equipment and cause significant economic harm.[13] Small business equipment manufacturers and their representatives informed EPA and the Panel that per unit costs associated with PM and NOx aftertreatment for engines below 75 hp would increase the incremental cost of these smaller units to the point where customers would defer

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8 5 U.S.C. § 609.

9 E.O. 13272, § 3(c).

10 Final Report of the Small Business Advocacy Review Panel on EPA's Planned Proposed Rule "Control of Emissions of Air Pollution from Land-Based Nonroad Compression-Ignition Engines," at 12-13 (December 23, 2002) (Panel Report) (copy attached).

11 68 *Fed. Reg*. at 28460. EPA adopted a 75 hp cutoff for this size class, as opposed to the 70 hp cutoff used during the Panel.

12 RIA, at Chapter 11, 4-5, NPRM, 68 *Fed. Reg*. at 28517.

13 *See* Panel Report, at 35-46.

purchases of these units or purchase substitute products such as gasoline-powered equipment.[14]

C. Specific adverse impacts the proposed rule would impose on small businesses.

1. *EPA's proposed PM aftertreatment requirement will impose significant cost burdens on small businesses.*

EPA's Regulatory Impacts Analysis (RIA) indicates that for engines below 75 hp, aftertreatment technology required by the proposed rule will cause per unit costs to rise significantly. These increases in cost are likely to cause consumers to switch to other types of equipment or not purchase new equipment at all. For example, one SER indicated that comparable gasoline-powered substitutes exist for their products, and major increases in price would force them to exit the market due to lost sales.[15] In fact, these SERs indicated that large companies that produce both nonroad diesel and spark ignition applications stand to gain directly from such an outcome, while small entities that are unable to produce engines for both markets will lose market share.[16]

The chart below demonstrates how the proposed PM aftertreatement devices would become a major component of per unit diesel engine costs faced by equipment manufacturers:

EPA's Estimated PM Aftertreatment Engine Costs per Unit

	25-50 hp[17]	**50-75[18]**
Average Unit Value[19]	$2800	$2800
PM Filter Cost Per Unit[20]	$296	$371
PM Filter Regeneration Cost Per Unit[21]	$319	$329
Total PM Aftertreatment Costs Per Unit	$616	$700
Percentage of Unit Cost	22%	25%

As shown above, even under EPA's conservative cost estimates, PM aftertreatment costs for engines between 50 and 75 hp will amount to approximately one quarter of the cost of these engines. In addition to these per unit costs, equipment manufacturers would have to

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14 *Id*. at 42-46.
15 *Id*.
16 *Id*.
17 For a 1.5L engine.
18 For a 2.0L engine.
19 RIA, at 6-11 (Table 6.2-3).
20 RIA, at 6-31 (Table 6.2-11), 6-34 (Table 6.2-12).
21 SER comments during the Panel process indicated that most smaller engines are indirect injection systems, so Advocacy is using EPA's formula for indirect injection. RIA, at 6-36 (Table 6.2-15).

bear the costs of adapting their equipment to accommodate new engines reconfigured with aftertreatment technology.

Moreover, there is reason to believe that EPA's cost estimates for small horsepower engines/equipment is too low. Other government regulators have devoted significant time and effort to estimating per unit costs for engines below 75 hp. The European Union commissioned a study of the feasibility of requiring PM aftertreatment for these small nonroad diesel engines. This study found that the costs for PM aftertreatment would come to **$1,800** per engine between 25 and 50 hp and **$3,775** per engine between 50 and 100 hp. The same study found that these engine classes currently had mean costs of $2,000 and $3,500, respectively. Thus, the European Union's contractor found that PM aftertreatment alone would amount to 75% of the per unit cost of an engine between 25 and 50 hp, and 92% of the per unit cost of an engine between 50 and 100 hp.[22] This analysis demonstrates that the proposed rule is likely to increase dramatically the cost of nonroad diesel equipment produced by small equipment manufacturers.

Finally, Advocacy does not believe these price increases can be absorbed by the market for nonroad diesel equipment. EPA claims that the vast majority of the costs in the model are pushed through the various markets in the form of higher prices to application producers (users of diesel equipment in the construction, agriculture, and manufacturing sectors) and consumers.[23] Except in the case of very small diesel engines, those under 25 hp, EPA's estimates of market impacts do not appear to consider any substitutes for diesel engine power. In fact, however, spark ignition engines may be a close substitute in many cases, while in other cases users may choose to cut back on diesel equipment by substituting labor, purchasing used equipment to avoid the higher costs of new equipment, or extending the service life of older equipment. Given the price premium the rule will impose on new equipment, approximately 25% increases per unit for engines in the 25-75 hp range, it is not likely that equipment purchasers would simply ignore the higher price and continue purchasing equipment at nearly the same rate they always have.

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[22] VTT Processes, *Feasibility Study on a Third Stage of Emission Limits for Compression Ignition Engines with a Power Output Between 18 and 560 kW*, at 76 (Table 9) (Sep. 17, 2002).

[23] A representative example is that in 2013, EPA estimates that the rule will impose a 5.2% price increase on diesel-powered equipment, with a consequent reduction in quantity purchased of only 0.014%, implying a realized price elasticity of demand for nonroad diesel equipment of nearly zero. RIA, at 10-12 (Table 10.1-2). Advocacy believes this result is an error, because it is uncommon for measured price elasticity to equal or approach zero. For instance, the price elasticity of cigarettes, a product commonly thought to be extremely price inelastic, has been measured at between -0.2 and -0.44 in the short run in recent studies, and between -0.45 and -0.78 in the long run. Sources: Chaloupka, F. "Rational Addictive Behavior and Cigarette Smoking," *Journal of Political Economy*, 99(4): 722-42, August 1991 and Becker, G., Grossman, M., and Murphy, K. "An Empirical Analysis of Cigarette Addiction," *American Economic Review*, 84(3): 396-418, June 1994.

2. *Small entities will be faced with serious technical problems in implementing EPA's proposed standards for PM reduction.*

a. The need for automatic regeneration of PM filters.

Equipment manufacturers expect that the PM filters on nonroad diesel engines must be capable of regenerating automatically (i.e., they do not have to be frequently opened and serviced) in order to be considered acceptable to consumers. The need for automatic regeneration of PM filters has been noted as one of the most important feasibility issues for small diesel engines by the European Association of Internal Combustion Engine Manufacturers (Euromot).[24] Euromot's report observes that automatic diesel filters are "not currently available at a sufficient level of developmental maturity and commercial viability" for use in nonroad diesel engines.[25]

Similarly, the Southwest Research Institute study cited in the proposed rule preamble concluded that PM filter-equipped 26 hp and 50 hp engines could meet EPA's proposed particulate emission limit with 10 ppm sulfur fuel.[26] However, the study also found that "[u]nder real world applications, steadily increasing exhaust backpressure would require frequent or periodic PM trap servicing to avoid derating or eventually damaging the engine and/or PM trap."[27] The study's authors concluded that "although this work demonstrates that catalyzed traps are highly effective in reducing mass-based particulate matter . . . further effort is needed to ensure proper and reliable operation over time in the field."[28] In the actual tests of the Kubota engine, the transient cycles and steady-state conditions were "each preceded by a forced PM trap regeneration effort."[29] The Lombardi engine was tested "over steady state conditions with each mode preceded by a 10 minute forced regeneration procedure."[30] This text suggests that EPA needs to explain that the backpressure in small engines would require the owners to periodically, or perhaps frequently, manually regenerate and clean out the CDPFs. This is not consistent with EPA's position that it would be possible to automatically regenerate the CDPFs for small engines.

The market viability of products requiring manual regeneration would be significantly imperiled by the lack of an automatic feature since owners are unlikely to buy equipment with such aggressive maintenance requirements. Automatic regeneration is vital to the acceptability of engines/equipment by the end users. If small diesel engines cannot be expected to automatically regenerate, end users of these engines would have to manually

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24 EMA/Euromot, *Investigations into the Feasibility of PM Filters for Nonroad Mobile Machinery*, at 11-18 (Aug. 31, 2002) (accessible online at http://www.euromot.org/download/news/positions/nonroad/NRMM_PM_Filters_310802.pdf) (EMA/Euromot Report).

25 *Id*.

26 Southwest Research Institute, *Nonroad Emissions Study of Catalyzed Particulate Filter Equipped Small Diesel Engines* (Sep. 2001) (SWRI) (copy attached).

27 SWRI, at 19.

28 *Id*.

29 *Id*., at 10.

30 *Id*.

regenerate the filters. Although EPA believes that automatic regeneration systems might be developed by 2013 for engines below 75 hp, based upon similar technology being used today for light-duty vehicles, the availability of this technology in that timeframe is uncertain.

b. Low engine operating temperatures.

EPA has not presented data showing that small engines will operate at the temperatures needed to facilitate proper particulate destruction and catalyst regeneration. In its PM analysis screening results, EPA observed that "some manufacturers have stated that catalyzed diesel particulate filters will work properly in the field if the engine exhaust temperature is at least 250-275 degrees C for about 40-50 percent of the duty cycle... [h]owever, for the lowest power rating at 124 hp, the exhaust temperatures never reached 275 degrees C throughout the entire backhoe cycle."[31] Consequently, EPA has acknowledged that active regeneration systems (e.g., systems that require filters to be periodically opened and serviced by the end consumer) will be necessary for many applications.[32] Likewise, during the Panel process, SERs submitted studies indicating that many nonroad applications below 75 horsepower do not generate the temperatures required for automatic regeneration. For example, on December 4, 2002, the Association of Equipment Manufacturers submitted a study by the Engine Manufacturers Association and Euromot which included actual test results of a number of engine types. The study found that a 75 hp backhoe loader, an aircraft tow tractor, a 60 hp engine in a forklift application, and a 33 hp refrigeration unit each demonstrated insufficient exhaust temperatures for passive regeneration.[33]

c. Ash buildup and filter "plugging."

EPA's Clean Air Act Advisory Committee's report, "Meeting Technology Challenges for the 2007 Heavy-Duty Highway Diesel Rule" states that "further design enhancements of the [PM filters] will be required to minimize ash loading consequences."[34] EPA also acknowledges that ash removal from PM filters is a necessary maintenance requirement for filter applications, even for small-horsepower engines. Maintenance consists of removing, cleaning and replacing the filter. In the absence of this maintenance, the filter will "plug" and adversely affect engine performance. EPA included a cost for ash maintenance in its RIA, but that cost estimate does not reflect the inconvenience to small equipment consumers (e.g., lawn and garden equipment purchasers) of having to periodically remove, clean, and replace a PM filter. EPA should recognize these application-specific concerns when considering whether to adopt a regulatory option including PM aftertreatment for smaller engines.

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31 RIA, at 4-66.

32 NPRM, 689 Fed. Reg. at 28369-80 (Sections III.E.1 and III.E.2.a).

33 EMA/Euromot Report, at Section 8.2.

34 EPA Clean Air Act Advisory Committee, *Meeting Technology Challenges for the 2007 Heavy-Duty Highway Diesel Rule*, at 8 (Oct. 30, 2002) (accessible online at http://www.epa.gov/air/caaac/diesel/finalcdirpreport103002.pdf).

d. Fitting the aftertreatment device to the equipment.

EPA has not fully addressed the issue of where manufacturers of compact machines are expected to place aftertreatment devices such as PM filters. Lawn and garden equipment applications have specific packaging concerns as illustrated by comments submitted by small entities to EPA during the SBAR Panel process.[35] EPA has not provided sufficient evidence for its assumption that aftertreatment devices can be made to fit under the equipment hoods of lawn and garden equipment or that equipment packaging concerns could be overcome in meeting EPA's proposed required emissions levels. EPA expects that existing nonroad equipment will have to be redesigned to accommodate aftertreatment devices.[36] How feasible and how costly this type of redesign would be for small business equipment manufacturers remains uncertain.

e. Safety concerns.

EPA has not fully addressed the issue of whether aftertreatment devices on small horsepower engine-powered equipment such as lawn and garden equipment can operate reliably in an environment that involves severe vibration, tight heat, weight, and space constraints, and operation in and around flammable debris. The heat generated by aftertreatment devices may conflict with the stringent product safety requirements that lawn and garden equipment must comply during and immediately after use.[37] EPA observes that mining equipment operating in flammable coal dust situations have been proven safe, but this does not address the potential problem with high temperatures from PM filters that can burn operators, ignite debris, or simply violate consumer product safety requirements.

3. *There are serious technical problems with implementing NOx aftertreatment devices for engines below 75 hp.*

EPA acknowledges that the economic and technical feasibility of requiring NOx aftertreatment devices such as adsorbers on small horsepower engines/equipment is uncertain.[38] Accordingly, no NOx aftertreatment requirements are currently proposed for engines below 75 hp. Advocacy concurs with the decision not to impose such a NOx aftertreatment requirement until such a requirement can be shown to be feasible, cost-effective, and beneficial. EPA and the European Union will independently study the technical feasibility of adding NOx aftertreatment to these small engines over the next five years. Advocacy urges EPA not to impose NOx aftertreatment requirements on smaller engines without first conducting further study on the technical feasibility of such a requirement.

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35 Letter from Outdoor Power Equipment Institute to Tom Kelly, EPA Small Business Advocacy Chair (December 17, 2002) (OPEI Letter) (copy attached).

36 RIA, at 6-55 – 6-60 (Section 6.3).

37 OPEI Letter, at 2.

38 NPRM, 68 *Fed. Reg*. at 28390-91.

II. EPA should exclude smaller engines from further regulation in order to comply with the Regulatory Flexibility Act.

A. EPA has a responsibility under the Regulatory Flexibility Act to reduce small entity burdens.

The RFA requires agencies to include in each final rule:

> a description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.[39]

Thus, EPA must address significant alternatives which would have the effect of minimizing the regulatory burden on small entities. The SBREFA Panel process identified two regulatory alternatives which would significantly reduce small equipment manufacturer burdens – Options 5a and 5b, both of which would exempt engines below 75 hp from aftertreatment requirements.

B. EPA has not demonstrated that regulation of small engine classes is necessary.

1. *The incremental benefits of regulating engines below 75 horsepower do not justify costs imposed on small businesses.*

The relatively small emissions reductions that would be accomplished by requiring PM aftertreatment for engines below 75 hp do not justify the tremendous costs which the PM aftertreatment requirement would impose.

EPA estimates the costs of its proposal and the Options 5a and 5b as follows:

	Proposed Rule	***Option 5a***	***Option 5b***
Total Cost (2004-2030)[40]	$16,700,000,000	$12,900,000,000	$14,100,000,000
Total Cost Savings from Proposed Rule (2004-2030)	N/A	$3,800,000,000	$2,600,000,000

EPA has not demonstrated that engines below 75 hp contribute significant amounts of PM emissions to the national pollution inventory. EPA has indirectly provided PM emissions reduction data for the various options for only a few of the 25 years the RIA covers. Based on this data, Advocacy concludes that additional emissions reductions for

[39] 5 U.S.C. § 604(a)(5).

[40] Net present value through 2030 using 3% discount rate. At the 7% discount rate used by OIRA, these figures would be substantially higher. RIA, at 12-82 (Table 12.6-1).

engines below 75 hp constitute a very small portion of the reductions EPA intends to achieve. For example, according to EPA's tables, requiring PM aftertreatment for engines above 75 horsepower in the year 2015 would result in an approximate 44% annual reduction of predicted nonroad PM emissions.[41] Requiring further PM aftertreatment for engines below 75 horsepower, a proposition affecting 55% of the number of engines sold, achieves only an additional 4% reduction in nonroad PM emissions for 2015.[42] Thus, emissions reductions from engines below 75 hp are *far* more expensive per ton than those from engines above 75 hp.[43] As illustrated below, there is very little difference in emissions reductions between EPA's proposed regulatory option, which requires PM aftertreatment on engines between 25 and 75 hp beginning in 2013, and Option 5b, which does not require aftertreatment from engines below 75 hp, but does require diesel oxidation catalyst application. Further, Option 5a, which entails no further PM reductions from the status quo for engines below 75 hp, achieves similar PM emissions reductions.

	Proposal	***Option 5a***	***Option 5b***
Annual Tons Nonroad PM Reductions (2015)[44]	57,000	47,000	52,000
Annual Tons Nonroad PM Reductions (2030)[45]	139,000	112,000	122,000

Advocacy believes that EPA has not provided sufficient evidence to justify imposing the substantial incremental costs of requiring PM aftertreatment for engines below 75 hp. According to EPA's own estimates, these engines do not contribute significantly to the national PM inventory and any aftertreatment requirement would therefore result in little emissions reductions.[46] **Advocacy urges EPA to minimize small business impacts by adopting a final regulatory option which does not include a requirement for PM aftertreatment on engines below 75 hp.**

C. EPA should minimize small entity burdens by adopting either Option 5a or Option 5b, options resulting from in-depth deliberation by the Panel.

As discussed above, Advocacy believes that a large number of small manufacturers of equipment will be negatively affected by aftertreatment requirements for engines below

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41 RIA, at 3-12 (Table 3.1-2b), 12-28(Table 12.2.2.2-1). Advocacy has serious concerns as to the accuracy of EPA's estimate of the reduction in the mortality rate and whether this estimated reduction is properly attributed to nonroad diesel emissions alone. EPA has not provided the public or Advocacy with estimates of the differences in benefits it claims will result from the various options presented, making impossible any analysis of the reduced benefit attributable selection of the various options. RIA, at 9-33 (Table 9-10).

42 RIA, at 3-12 (Table 3.1-2b), 12-28(Table 12.2.2.2-1).

43 EPA has refused to provide the public or Advocacy with its estimated annualized costs for each option proposed or the net present value emissions reductions for each option. This effectively blocks any member of the public from commenting on EPA's estimated effectiveness of the rule for regulated engine classes as measured by cost per ton.

44 RIA, at 12-28 (Table 12.2.2.2-1).

45 *Id*.

46 *Id*.

75 horsepower. Also, Advocacy notes that EPA is within its statutory discretion in reducing emissions for engines above 75 horsepower alone.

Advocacy believes that the information developed during the exhaustive SBAR Panel process supports the adoption of the least burdensome alternatives, Approaches 5a or 5b. Advocacy notes that these alternatives resulting from the SBAR Panel process described above would achieve essentially the same emissions reductions as EPA's proposed regulatory approach while imposing significantly less regulatory burden upon small entity equipment manufacturers. Advocacy recommends that EPA adopt Option 5a or 5b because; (1) the incremental benefits of requiring aftertreatment for smaller engines do not justify the large differences in cost, (2) EPA has not demonstrated the technical feasibility of aftertreatment technology for nonroad diesel engines below 75 hp, and (3) small entities will bear an unfair and disproportionate share of the economic costs associated with this rule.

III. EPA possesses regulatory discretion under the Clean Air Act to comply with the requirements of the Regulatory Flexibility Act.

Sections 213(a)(3) and (a)(4) authorize EPA to regulate nonroad diesel NOx and PM emissions, respectively. Section 213(a)(3) directs that "the Administrator ***shall***…promulgate (and from time to time revise) regulations" to reduce emissions of certain pollutants, of which NOx is one.[47] The word "shall" imposes a positive duty on the part of EPA to regulate certain chemicals, including NOx. By contrast, EPA is not required by the CAA to regulate PM emissions. Section 213(a)(4) of the CAA, pertaining to PM emissions, closely follows Section 213(a)(4), with the important difference that instead of "shall" language, the section reads that "the Administrator ***may*** promulgate (and from time to time revise) such regulations ***as the Administrator deems appropriate….***"[48]

EPA possesses statutory discretion to apply emissions standards which minimize negative economic impacts on small businesses. Since Advocacy believes that EPA is not required by law to adopt specific emissions restrictions, the agency may indeed adopt less burdensome alternatives as envisioned by the RFA. Advocacy believes that in light of the inconsequential emissions reductions and serious economic burdens and technological hurdles that would be imposed on small businesses through any PM aftertreatment requirement for engines below 75 hp, EPA must adopt either Option 5a or Option 5b.

IV. EPA's proposed small business flexibilities.

Advocacy appreciates EPA's efforts to create small business flexibilities for small engine and equipment manufacturers, as well as small refiners. However, Advocacy believes

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[47] Clean Air Act, § 213(a)(3), Pub. L. No. 101-549, 104 Stat. 2399 (1990) (codified as amended at 42 U.S.C. §§ 7401 et seq.) (CAA) (Emphasis added.).

[48] CAA, § 213(a)(4) (Emphasis added.)

that these flexibilities will not suffice on their own to appropriately minimize the regulatory burdens on small entities. During the statutory SBAR Panel, Small Entity Representatives informed EPA, Advocacy, and OIRA that the flexibilities EPA considered there and later placed in the proposed rule would not result in reduced regulatory burden.[49] Equipment manufacturers noted that although EPA would allow some equipment to be sold which did not approach the new emissions controls, engine manufacturers would not produce or sell such equipment.[50] EPA hasn't shown that substantial numbers of small businesses have taken advantage of previous small business flexibilities, or that small businesses would be able to take advantage of the flexibilities under this rule. Finally, although EPA has provided for delayed full compliance by small manufacturers with the more stringent emissions controls requirements, small business manufacturers eventually will be required to produce equipment that meets the requirements.[51] Thus, Advocacy believes that EPA's proposed small business flexibilities will not adequately minimize regulatory burdens as envisioned by the RFA.

V. Conclusion.

In conclusion, Advocacy urges the EPA to adopt either Option 5a or 5b in order to minimize burdens on small entities pursuant to the RFA and the President's Executive Order 13272. Advocacy appreciates the opportunity to comment on EPA's proposed emissions standards for nonroad diesel engines. Thank you for your consideration and please do not hesitate to contact Keith Holman at (202) 205-6936 (keith.holman@sba.gov), or Michael See at (202) 619-0312 (michael.see@sba.gov), if you need clarification of these comments.

Sincerely,

/s

Thomas M. Sullivan
Chief Counsel for Advocacy

Cc: Acting Administrator Marianne Lamont Horinko, U.S. Environmental Protection Agency
Dr. John D. Graham, Administrator, Office of Information and Regulatory Affairs, Office of Management and the Budget
Docket ID No. A–2001–28, EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, DC 20002

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[49] OPEI Letter, at 3 ("EPA's Regulatory Flexibility Programs Will Not Produce Any Meaningful Relief for Small Businesses").

[50] *See id*.

[51] NPRM, 68 Fed. Reg. 28478-81.