

## **IDENTITY AND INTEREST OF THE *AMICI***

The State and Territorial Air Pollution Program Administrators (STAPPA) is a national association representing air quality officials from 54 states and territories. The Association of Local Air Pollution Control Officials (ALAPCO) is an association representing air quality officials from over 165 metropolitan areas across the United States. The purpose of both associations is to enhance communication and cooperation among federal, state, and local regulatory agencies, promote good management of air resources, and improve the effectiveness of air quality programs administered by state and local regulatory agencies. Because of STAPPA and ALAPCO's keen interests in the U.S. Environmental Protection Agency's (EPA) diesel emissions control program for heavy-duty vehicles, they participated to the fullest extent afforded a non-party by submitting comments on the proposed consent decrees in these actions on January 12, 1999. *See* Letter from Elston and Baldwin to Schiffer of 1/12/99 (attached as Exhibit 1). After this Court finalized and approved the consent decrees, STAPPA and ALAPCO participated in quarterly public meetings with EPA and the U.S. Department of Justice (DOJ), as well as wrote unsolicited letters to, and had private meetings with, EPA and DOJ on the government's implementation of the consent decrees. During those meetings STAPPA and ALAPCO expressed their concerns about incipient efforts by diesel engine manufacturers, and Caterpillar and Detroit Diesel Corporation (DDC) in particular, to weaken the consent decrees.

## **SUMMARY OF ARGUMENT**

Caterpillar's and DDC's assertions that full implementation of the consent decrees in these cases would be contrary to the public interest is belied by the fact that the so-called "pull-ahead" requirement will result in significant benefits to human health and the environment. No party in these cases disputes that full implementation of the consent decrees will significantly reduce nationwide levels of harmful diesel emissions, which

have been shown to cause premature deaths, as well as substantial respiratory illnesses, hospital visits, and environmental damage. For this reason alone, the consent decrees, as originally entered, are manifestly in the public interest.

In addition, Caterpillar and DDC's requested relief would present serious risks to state and local governments and economies. Elimination or alteration of the decrees' "pull-ahead" requirements would deprive state and local governments, which have limited authority to regulate mobile source emissions, of critical emissions reductions that were to have occurred from federal rules to combat the harmful effects of diesel emissions. Any such amendment would also make it more difficult for states and localities to achieve and maintain National Ambient Air Quality Standards (NAAQS) in the face of rapidly increasing heavy-duty diesel engine (HDDE) emissions, and thereby avoid economic sanctions under the CAA.

## **ARGUMENT**

The United States commenced the above-captioned actions on behalf of EPA on October 22, 1998, in response to defendants' recurrent failures to comply with Sections 203(a)(1), 203(a)(2) and 203(a)(3)(B) of the Clean Air Act (the Act), 42 U.S.C. §§ 7522(a)(1), 7522(a)(2) and 7522(a)(3)(B), respectively, and EPA's implementing regulations. The basis for EPA's lawsuits was that, for more than a decade, defendants (and several other companies) manufactured HDDEs that emitted excessive pollution due to the use of illegal "defeat devices," which allow engines to emit pollution in excess of legal limits, including an estimated 16 million tons of nitrogen oxides (NO<sub>x</sub>). Although the defendants' engines could meet emission standards during testing, the defeat devices allow excessive emissions during regular use, including under normal highway driving

conditions, by disabling the engines' emission control systems. *See generally* United States' Complaints. These excess emissions have had, and continue to have, a significant adverse effect on the ability of states and localities to achieve and maintain statutory clean air goals.

The parties resolved the lawsuits on October 22, 1998, by voluntarily agreeing to negotiated settlements, which this Court approved and entered as consent decrees on July 1, 1999. Among other requirements, the consent decrees ordered defendants to accelerate to October 1, 2002 emission-reducing changes to new engine models, and subjected the defendants to non-compliance penalties (NCPs) should they fail to meet that deadline. The essence of the deal struck between the defendants and the United States was that, in exchange for an allowance of four years to phase in the elimination of their alleged "defeat devices," the defendants would exceed the otherwise applicable EPA emissions standards in the period between October 1, 2002 and January 1, 2004, thereby "recouping" a portion of their alleged unlawful emissions. This key provision is known as the "pull-ahead" requirement because it accelerates by fifteen months the date by which the defendants would have to satisfy the "NO<sub>x</sub> plus non-methane hydrocarbon (NMHC)" emissions standard included in EPA's 2004 HDDE Rule ("2004 Rule").<sup>1</sup> *See* Control of Emissions of Air Pollution from Highway Heavy Duty Engines, 62 Fed. Reg. 54694 (October 21, 1997); Control of Emissions of Air Pollution from 2004 and Later Model Year Highway Engines and Vehicles, 65. Fed. Reg. 59896 (October 6, 2000) ("re-

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<sup>1</sup> The consent decrees also require the defendants to accelerate, to October 1, 2002, their compliance with a closely related standard, known as the "Not to Exceed" (NTE) standard, which was part of EPA's proposed 2004 Rule. Although EPA ultimately did not include the new NTE standard in the 2004 Rule, the agency has included that standard in a separate rule scheduled to take effect in 2007.

affirming” the standards adopted in the rule published on October 21, 1997). Just four years after agreeing to this “pull-ahead” requirement, and less than three months before the provision is scheduled to take effect, Caterpillar and DDC now ask to be released from this obligation.

As described below, implementation of the “pull-ahead” requirement is manifestly in the public interest because it will result in important health and welfare benefits nationwide by requiring stringent and enforceable standards that will significantly reduce harmful diesel emissions.<sup>2</sup> Further, these emissions reductions will significantly aid states and localities in complying with federal, health-based, air quality standards, and in avoiding the financial and economic penalties that would result from non-compliance.

**I. Reduction in Diesel Emissions Contemplated by the “Pull-Ahead” Requirement Will Provide Significant Benefits to Public Health and Welfare**

Almost 35 million people in the United States reside in areas of the country that violate the health-based, one-hour NAAQS for ozone, while over 80 million people reside in areas that monitor violations of the new, more protective, eight-hour ozone NAAQS. U.S. EPA, *Latest Findings on National Air Quality: 2000 Status and Trends at 5* (bar graph) (September 2001) (excerpt attached as Exhibit 2). Seventy-five million people reside in areas that, based on the most current ambient air quality monitoring data available, violate the new fine particulate matter (PM<sub>2.5</sub>) NAAQS; further, when monitoring for PM<sub>2.5</sub> is complete, more areas of the country may be found to have

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<sup>2</sup> The importance of rejecting any attempt to weaken the consent decrees becomes even more apparent when one realizes that, even if fully implemented, the “pull-ahead” and other requirements of these and related consent decrees would still fall nearly 12 million tons short of recovering all of the NO<sub>x</sub> emissions attributable to Caterpillar’s, DDC’s, and the other defendants’ defeat devices. *See* Exhibit 1, at 2. (STAPPA and ALAPCO’s July 12, 1999 comments on the proposed consent decrees).

excessive levels of PM<sub>2.5</sub>. *Id.* Emissions of NO<sub>x</sub> play a significant role in the formation of ground level ozone, *see* 62 Fed. Reg. at 54694, and secondary particulate matter (PM), *see* 62 Fed. Reg. at 54699, 65 Fed. Reg. at 59905. HDDEs, such as those produced by Caterpillar and DDC and subject to the consent decrees in these cases, are one of the largest sources of NO<sub>x</sub> and PM emissions. *See* Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, 66 Fed. Reg. 5002, 5011 (January 18, 2001) (EPA projection that by 2007, heavy-duty vehicles, which are predominantly diesel-powered, will account for 15% of total NO<sub>x</sub> emissions, 28% of mobile source NO<sub>x</sub> emissions, and 20% of mobile source PM emissions, nationwide).

Elevated levels of ozone and PM (including PM<sub>2.5</sub>) have dire human health and environmental consequences. Indeed, EPA's 2004 Rule, the substance of which has been incorporated into the consent decrees' "pull-ahead" requirements, was developed to provide significant health benefits by reducing NO<sub>x</sub> and PM emissions. *See generally* 62 Fed. Reg. 54694. The preamble accompanying EPA's publication of the 2004 Rule identifies premature deaths, increased hospital and emergency room visits, and a myriad of harmful respiratory effects as consequences of exposure to ozone and PM. 62 Fed. Reg. at 54696, 54699.

Since the 2004 Rule was published, additional research has expanded the catalog of adverse health effects, which includes chest pain, coughing, and shortness of breath (affecting people with compromised respiratory systems most severely); acute respiratory problems; aggravation of asthma; significant temporary decreases in lung function in some healthy adults; inflammation of lung tissue; changes in lung tissue and structure;

impairment of the body's immune system defenses that increase susceptibility to respiratory illnesses; and chronic bronchitis. 66 Fed. Reg. at 5012, 5018. (providing updated discussion of health effects, in support of even more stringent HDDE emissions limits to take effect in 2007).

Further, certain segments of the population are especially susceptible to these adverse health impacts. For example, children and outdoor workers are at greater risk because they are likely to be exposed to elevated ambient levels of ozone during physical exertion. *Id.* at 5012. Due to the geographic distribution of diesel emissions, urban areas, low-income populations, and minority groups also suffer a disproportionate share of these impacts. *See* Comments of STAPPA and ALAPCO on EPA's June 2, 2000 Notice of Proposed Rulemaking on Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, at 6 (August 14, 2000) (excerpt attached as Exhibit 3); *see also* 66 Fed. Reg. at 5011, 5028-29.

In addition to human health effects, NO<sub>x</sub> emissions contribute substantially to environmental problems such as acid deposition, overgrowth of algae (or eutrophication), nitrification, and regional haze, *see* 62 Fed. Reg. at 54696; 66 Fed. Reg. at 5025-26, and PM causes damage to commonly used building materials, outdoor statues, and works of art, and is a major cause of substantial visibility impairment in many regions of the country. *Id.* at 5018. To cite only a few examples of these phenomena, acute eutrophication and nitrification in the Chesapeake Bay and Long Island Sound have killed hundreds of thousands of fish, *see Thousands of Fish Die in Chesapeake Bay Area*, N.Y. Times, July 3, 1999, at A6 (attached as Exhibit 4); Comments of N.Y. Atty. Gen. Eliot Spitzer on Control of Air Pollution from New Motor Vehicles, at 3 (August 14,

2000) (“N.Y. Comments”) (excerpt attached as Exhibit 5), and acid rain has rendered hundreds of Adirondack lakes too acidic for fish survival, caused trout loss in over 1,350 streams in the Mid-Atlantic region, and degraded high-elevation spruce forests along Appalachian Mountain ridges. 66 Fed. Reg. at 5025; *see also* N.Y. Comments at 3.

The United States, Caterpillar, and DDC all agree that the consent decrees’ “pull-ahead” requirements actually will result in significant reductions in HDDE emissions, beyond the reductions that will result from the 2004 Rule alone. The government projects a reduction of 1.27 million tons of NO<sub>x</sub> (plus NMHC) due to the “pull-ahead.” *See* U.S.’s Opp. to Caterpillar Inc.’s Mot. for Judicial Review and Consent Decree Modification at 31; U.S.’s Memorandum in Opp. to Detroit Diesel Corp.’s Mot. to Amend the Consent Decree and to Resolve Pull-Ahead Dispute at 35. Even Caterpillar and DDC, which criticize the government’s methodology, regard as credible studies that project a reduction of about 440,000-450,000 tons of NO<sub>x</sub>. *See* Caterpillar Inc.’s Statement of P. & A. in Support of Mot. for Judicial Review and Consent Modification at 10, n. 8; DDC’s Mem. in Support of Mot. to Review Dispute and Amend Consent Decree at 27. In addition, because NO<sub>x</sub> contributes to the secondary formation of nitrate particles in the atmosphere, the reductions in NO<sub>x</sub> emissions will result in significant reductions in PM, especially in parts of the country with relatively high levels of ammonia, which reacts with NO<sub>x</sub> to form ammonium nitrate particles. *See* 62 Fed. Reg. at 54699, 65 Fed. Reg. at 59905.

It should be apparent to all involved – and neither Caterpillar nor DDC has disputed – that these additional emissions reductions will accelerate and enhance the benefits of the 2004 Rule to human health and the environment. Similarly, the

defendants' accelerated compliance with the 2004 Rule will help to alleviate the considerable social and medical costs – such as the costs of premature deaths, hospitalizations, and decreased employee productivity – that states and localities bear as a result of HDDE emissions. *Cf.* 66 Fed. Reg. at 5105 (categorizing and quantifying costs avoided by more stringent diesel emissions rule). Furthermore, the benefits of the “pull-ahead” will extend well beyond the fifteen-month interval between October 2002 and January 2004 because HDDEs sold during that period will provide sustained emissions reductions over the full lives of the engines.

Because the “pull-ahead” will accelerate and enhance the benefits of the 2004 Rule, full implementation of the consent decree, as Caterpillar and DDC originally agreed, is manifestly in the public interest. This Court should reject Caterpillar's and DDC's self-serving arguments to the contrary, which completely ignore the public benefits of the “pull-ahead” requirements.

## **II. States and Localities Rely Heavily on *Federal Mobile Source Emissions Limitations, Including the “Pull-Ahead” Provisions, to Achieve Compliance with National Ambient Air Quality Standards***

States, as *parens patriae*, have a paramount interest in protecting public health and the environment within their jurisdictions, *see Georgia v. Tennessee Copper Co.*, 206 U.S. 230, 237 (1907), as do local governments. Moreover, the Clean Air Act (CAA) “makes ‘the States and the Federal Government partners in the struggle against air pollution.’” *See Engine Mfrs. Ass'n. v. EPA*, 88 F.3d 1075, 1078 (D.C. Cir. 1996) (*quoting General Motor Corp. v. United States*, 496 U.S. 530, 532 (1990)) (“The basic structure of this partnership has not changed.”). States are primarily responsible for protecting air quality within their borders by developing State Implementation Plans

(SIPs) to assure attainment and maintenance of health-based NAAQS. Although states and localities can control emissions from stationary sources and post-purchase mobile sources, only the federal government, with the exception of California, is permitted to control emissions from new motor vehicles, including HDDEs.<sup>3</sup> *See* 42 U.S.C. § 7543(a). Thus, if federal regulations and enforcement actions fail to reduce excessive mobile source pollution, the constraints of the CAA will compromise the ability of states to protect air quality and public health within their borders.

Likewise, the ability of states to control mobile source emissions from out-of-state vehicles that enter their jurisdictions is very limited. Yet, as EPA has recognized in approving revisions to California's CAA regulations, "national and international mobile sources are increasingly significant components of the ozone problem . . . ." *Approval and Promulgation of Implementation Plans: California – Ozone*, 62 Fed. Reg. 1150, 1152 (January 8, 1997). Accordingly, even when states exercise their limited regulatory options under the CAA, they face additional difficulties in dealing with a significant and growing segment of pollution sources traveling across state borders. *See* 66 Fed. Reg. at 5015 (finding that in 10 nonattainment areas "even if all shortfalls were filled by the States, there is some risk that at least some of the areas will not attain the standards . . . .").

Given these significant limitations on their regulatory authority, states and localities that are finding it increasingly difficult to attain and maintain existing ozone and PM NAAQS, *see* 66 Fed. Reg. at 5014-5020 (January 18, 2001) (EPA analysis in connection with HDDE standards to take effect in 2007), and to plan for the challenges

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<sup>3</sup> California is the only state that is permitted to promulgate its own motor vehicle regulations. *See* § 209(a), 42 U.S.C. § 7543(a). Other states are permitted to adopt California's standards and be deemed in compliance of federal regulations under the Clean Air Act. *See* § 177, 42 U.S.C. § 7507.

presented by new NAAQS for ozone and fine PM, *see generally*, Presidential Memorandum, Implementation of Revised Air Quality Standards for Ozone and Particulate Matter, 62 Fed. Reg. 38421 (July 18, 1997). The “pull-ahead” requirements, by offsetting to some degree the adverse emissions impacts of the defendants’ defeat devices, will assist states and localities in meeting these challenges. Since EPA published the final 2004 Rule in October 1997, states have incorporated the projected emissions reductions into their air modeling and consider them to be an “important component” of their SIPs. 65 Fed. Reg. at 59902. Similarly, states are fully aware of the “pull-ahead” requirements, and also can be expected to have incorporated into their SIPs the additional emissions reductions that would result from implementation of the “pull-ahead.”

Although Caterpillar and DDC seek to minimize the significance of the emissions reductions attributable to the “pull-ahead,” these reductions, whether calculated as 1.27 million tons of NO<sub>x</sub> or 450,000 tons of NO<sub>x</sub>, are actually of enormous significance to jurisdictions currently violating the NAAQS or in danger of violating them. State and local agencies labor on a daily basis to find *single tons* of NO<sub>x</sub> emission reductions to help them in their quest for attainment. *See* Statement of S. William Becker on behalf of STAPPA and ALAPCO before the U.S. Dept. of Justice and the U.S. EPA at a Public Meeting on Implementation of the Heavy-Duty Diesel Consent Decrees, at 2 (July 25, 2002) (attached as Exhibit 6). In the Washington, D.C. metropolitan area, for example, where the ozone pollution problem is due largely to motor vehicle emissions, the NO<sub>x</sub> shortfall is only 5 tons per day. The State of Maryland is responsible for making up 2.5 tons per day of this shortfall; to do so, it will have to spend \$40 million over the next

three years. Similarly, in the Baltimore ozone nonattainment area, the NO<sub>x</sub> shortfall is 6 tons per day. The burden of making up this shortfall could likely fall on the shoulders of small “mom and pop” businesses. *Id.*

This Court should reject the defendants’ requests to modify the consent decrees because any relaxation of the limitations on HDDE emissions would undermine – and potentially derail – the state and local plans to comply with the NAAQS.

### **III. Accelerated HDDE Emissions Reductions Will Help States and Localities Avoid the Economic Consequences of Noncompliance with the CAA**

Caterpillar and DDC have alleged doomsday scenarios concerning the economic effects of the “pull-ahead” requirements on the trucking industry. However, this Court should be mindful of the indirect economic effects that elimination of the “pull-ahead” requirements may impose on states and localities.

States’ and localities’ successful development of, and compliance with, SIPs depend on their ability to attain and maintain NAAQS. 42 U.S.C. § 7410. States and localities that fail to develop approvable SIPs or comply with SIPs face the loss of millions of dollars in highway funds, *see* 42 U.S.C. § 7509(b)(1), and requirements to offset emissions from new or expanded facilities by at least a 2:1 ratio, *see* 42 U.S.C. § 7509(b)(2). This latter sanction could make it difficult for states and localities to attract new businesses. Moreover, stationary sources will be subject to fees if they are located in severe and extreme ozone nonattainment areas that fail to meet their NAAQS attainment deadlines. 42 U.S.C. § 7511d.

As described above, states and localities depend upon federal efforts to control mobile source emissions – including the 2004 Rule and the “pull-ahead” requirements of the consent decree – as an essential part of their SIPs. If emissions limits on mobile

sources such as HDDEs are relaxed, states and localities in need of further emissions reductions to satisfy the NAAQS may be faced with a choice between absorbing the fiscal and economic costs of sanctions, or turning to already-burdened stationary sources. Some of the stationary sources may simply choose to relocate, thereby causing even more serious disruptions to state and local economies.

### **CONCLUSION**

Caterpillar and DDC should be held accountable not only for their past violations of the CAA, which have degraded air quality in states and localities around the country, but also for the promises they made in the consent decrees – both to the United States and to the states and localities that are ultimately accountable for compliance with the NAAQS – to provide accelerated emissions reductions in the future. STAPPA and ALAPCO fully agree with the United States that to amend the “pull-ahead” requirements of the consent decrees would be contrary to the public interest because it would needlessly abandon significant reductions in harmful NO<sub>x</sub> and PM emissions, to the detriment of the public interest and to the states and localities whose responsibility it is to protect the public health and the environment.

Respectfully submitted,

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