



Georgetown University Law Center
Scholarship @ GEORGETOWN LAW

2004

Brief for American Public Health Association et al.
as Amici Curiae Supporting Respondents,
Department of Transportation v. Public Citizen,
No. 03-358 (U.S. Mar. 12, 2004)

Hope M. Babcock
Georgetown University Law Center

Lisa Goldman
Georgetown University Law Center

Docket No. 03-358

This paper can be downloaded free of charge from:
<http://scholarship.law.georgetown.edu/scb/15>

This open-access article is brought to you by the Georgetown Law Library. Posted with permission of the author.
Follow this and additional works at: <http://scholarship.law.georgetown.edu/scb>

 Part of the [Administrative Law Commons](#), and the [Environmental Law Commons](#)

DEPARTMENT OF TRANSPORTATION, et al., Petitioners, v. PUBLIC CITIZEN, et al.

No. **03-358**

SUPREME COURT OF THE UNITED STATES

March 12, 2004

[* * 1] On Writ Of Certiorari To The United States Court Of Appeals For The Ninth Circuit.

BRIEF FOR AMICI CURIAE AMERICAN PUBLIC HEALTH ASSOCIATION, AMERICAN LUNG ASSOCIATION, AND PHYSICIANS FOR SOCIAL RESPONSIBILITY IN SUPPORT OF RESPONDENTS

COUNSEL: HOPE M. BABCOCK, Director, Counsel of Record, LISA GOLDMAN, Staff Attorney, Institute for Public Representation.

GEORGETOWN UNIVERSITY LAW CENTER, 600 New Jersey Avenue, N.W., Suite 312, Washington, D.C. 20001, Phone: 202-662-9535, Fax: 202-662-9634.

Attorneys for Amici American Public Health Association, American Lung Association, and Physicians for Social Responsibility. **[*i]**

[View Table of Contents](#)

[View Table of Authorities](#)

INTERESTS: [*1] INTEREST OF AMICI n1

n1 Pursuant to Supreme Court Rule 37.6, no counsel for any party authored this brief either in whole or in part. No persons other than counsel for the amici made any monetary contributions to its preparation or submission. Both Petitioners and Respondents consented to this filing and letters of consent are being submitted with the brief. This brief was authored by Hope Babcock and Lisa Goldman of the Institute for Public Representation, with the assistance of law student Christopher Reames.

Amici American Public Health Association ("APHA") is the world's oldest and largest organization of public health professionals, representing over 50,000 health care professionals from over 50 health occupations. The APHA concerns itself with a broad set of issues, notably environmental health. Through publication of *The American Journal of Public Health* and *The Nation's Health*, and various advocacy efforts, the APHA strives to improve the overall quality of public health.

The American Lung Association ("ALA"), one of the nation's oldest voluntary health organizations, was founded in 1904. Since the 1960s, the ALA has supported national and local initiatives to combat smoking and reduce air pollution in order to reduce these threats to lung health. Recently, the ALA led initiatives to tighten Environmental Protection Agency ("EPA") regulations to reduce ambient levels of ozone and particulate air pollution, including

tighter emissions standards for diesel trucks and buses and for diesel engines used in construction and other off-road equipment.

Physicians for Social Responsibility ("PSR") is a leading public policy organization of 30,000 members that [*2] works towards a variety of goals, including promotion of a healthy environment. Since the early 1990s, PSR has worked to combat various environmental problems, including smog, airborne pollutants, and the specific threat posed to children by particulate matter pollution.

Amici support respondents' position because of the significant environmental health effects associated with diesel exhaust emissions.

TITLE: BRIEF FOR AMICI CURIAE AMERICAN PUBLIC HEALTH ASSOCIATION, AMERICAN LUNG ASSOCIATION, AND PHYSICIANS FOR SOCIAL RESPONSIBILITY IN SUPPORT OF RESPONDENTS

SUMMARY OF ARGUMENT

Under the National Environmental Policy Act ("NEPA"), federal agencies must consider and disclose to the public the significant environmental effects of their actions. The regulations promulgated by the Federal Motor Carrier Safety Association ("FMCSA") will allow the operation of tens of thousands of heavily polluting Mexican diesel trucks in areas of the United States where they are currently not permitted to operate. Heavy-duty diesel engines, like those in Mexican diesel trucks, emit dangerous pollutants, notably particulate matter ("PM") and oxides of nitrogen ("NO[x]"), which have significant adverse public health effects. These trucks could cause a substantial increase in diesel exhaust emissions with significant environmental impacts, including adverse public health effects, which FMCSA must consider and disclose under NEPA. The effects of these trucks are most likely to be felt in southwestern states that are already facing crushing air pollution problems. The regulations also potentially [*9] impair the ability of these states to comply with their federally required air quality plans under the Clean Air Act ("CAA"). In order to comply with NEPA and the CAA, [*3] FMCSA must prepare an EIS and conduct a conformity analysis of the regulations.

ARGUMENT

I. Pollutants in Diesel Exhaust Emissions Have Significant and Severe Impacts on Public Health.

PM and NO[x], two of the main pollutants in diesel engine exhaust, have numerous adverse health effects, including increased risk of heart attacks and stroke, lung cancer, and premature death. While most current heavy-duty diesel vehicles emit these pollutants in their exhaust, Mexican diesel trucks emit higher average levels of PM and NO[x] than U.S. trucks. See, e.g., J.A. 239-243, 287, 332-339. Therefore, exposure to Mexican diesel exhaust emissions is more dangerous than exposure to similar emissions from U.S. trucks. In 2002 alone, FMCSA's regulations will permit the operation of at least 34,000 Mexican diesel trucks in the U.S. beyond the small border zone where they currently operate. n2 J.A. 67. These trucks will emit significant amounts of dangerous pollutants, including PM and NO[x], in areas, [*10] like Phoenix, Los Angeles, and Houston, that already have serious air pollution problems. J.A. 320, 341-342, 346-347, 427. The increased [*4] PM and NO[x] levels from these emissions could increase the significant adverse health effects associated with those pollutants in the areas where Mexican diesel trucks will operate.

n2 Mexican diesel trucks are currently restricted to operations in a small commercial zone along the U.S.-Mexico border called the border zone. J.A. 61-62, 253. The border zone varies in size, but is normally no more than 20 miles wide, though in certain areas of Texas (the Rio Grande Valley zone) and in San Diego, the zone extends to 70 miles in width. J.A. 61.

A. Health Impacts of PM

According to the EPA, PM is a "mixture of microscopic solids and liquid droplets suspended in the air" and consists of a number of different components including acids, chemicals, metals, soils, dust, and allergens like pollen. Particulate Pollution and Your Health, available at <http://www.epa.gov/airnow/particle/pm-color.pdf> (last viewed 3/10/2004); see also EPA, Air Quality Criteria for Particulate Matter Vol. 1, pp. 3-144, 145, Table 3-15, EPA/600/P-95001aF (1996), **[**11]** available at <http://cfpub.epa.gov/ncea/cfm/recorddisplay.cfm?deid=2832> (last viewed 3/10/2004) [hereinafter PM Criteria]. Diesel engines emit combustion PM in their exhaust. Depending on its size and composition, PM can damage lung tissue, aggravate existing respiratory and cardiovascular disease, decrease lung function, cause cancer, and lead to premature death. Particulate Pollution and Your Health; PM Criteria at 1-11, 2-22; J.A. 211. Particles smaller than 10 [μ] m in diameter, which are further distinguished as either "coarse" (diameter 10 [μ] m-2.5 [μ] m) or "fine" (diameter < 2.5 [μ] m), are the most dangerous to human health. Particulate Pollution and Your Health; PM Criteria at 6-7. Consisting "mainly of combustion particles from motor vehicles and the burning of coal, fuel oil, and wood," fine PM is more troubling from a public health perspective because it is deposited deep in the alveolar region of the lungs and is not cleared efficiently. Francine Laden et al., Association of Fine Particulate Matter from Different Sources with Daily **[*5]** Mortality in Six U.S. Cities, 108 Env'tl. Health Persp. 941, 945 (2000). Coarse PM, by contrast, consists mainly of **[**12]** crustal particles generated from activities like agriculture, transportation, construction, and mining and does not deeply penetrate the lungs. See id. Diesel exhaust particles fall almost exclusively into the fine PM designation, as over 90% of these particles are smaller than 1 [μ] m. California Air Resources Board and Office of Environmental Health Hazard Assessment, Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Executive Summary, at ES-6, available at http://www.oehha.ca.gov/air/toxic_contaminants/pdf1/diesel%20exhaust.pdf (April 22, 1998) (last viewed 3/10/2004); California Air Resources Board and Office of Environmental Health Hazard Assessment, Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Part B: Health Risk Assessment for Diesel Exhaust, at 3-1, available at http://www.arb.ca.gov/toxics/dieseltac/part_b.pdf (April 22, 1998) (last viewed 3/10/2004). Both acute (short-term) and chronic (long-term) PM exposure can cause health problems.

The greatest health concern associated with acute exposure to PM pollution is premature death. Committee of the **[**13]** Environmental and Occupational Health Assembly of the American Thoracic Society, Health Effects of Outdoor Air Pollution (Pt. 1), 153 Am. J. Respir. Crit. Care Med. 3, 28-29 (1996) [hereinafter Health Effects of Outdoor Air Pollution Part 1]; PM Criteria at 1-11, 2-22. In particular, PM₁₀ levels (particles less than 10 [μ] m in size, including both fine and coarse particles) have been associated with death from all natural causes in males, David E. Abbey et al., Long-Term Inhalable Particles and Other Air **[*6]** Pollutants Related to Mortality in Non-smokers, 159 Am. J. Respir. Crit. Care Med. 373, 375 (1999) [hereinafter Abbey et al., 1999], and appear to contribute to overall deaths from

cardiovascular and pulmonary disease, see Jonathan M. Samet et al., *Fine Particulate Matter Air Pollution and Mortality in 20 U.S. Cities*, 343 *New Eng. J. Med.* 1742, 1744-1745 (2000) (updated in Francesca Dominici et al., *On the Use of Generalized Additive Models in Time-Series Studies of Air Pollution and Health*, 156 *Am. J. Epidemiology* 193 (2002)). Not surprisingly, since fine PM, particularly from mobile sources like diesel trucks, is of greater concern than coarse PM, see Laden **[**14]** et al., at 944-945, as levels of fine PM from mobile sources go up, daily mortality rates do so as well. See *id.* (finding that each increase of 10 $\mu\text{g}/\text{m}^3$ of mobile source fine PM was associated with a 3.4% increase in daily mortality).

Acute PM exposure has other serious health effects. See *Health Effects of Outdoor Air Pollution Part 1*, at 29-30 (discussing studies showing associations between PM levels and hospital admissions, respiratory symptoms, reduced lung function, and aggravation of asthma attacks); see also *PM Criteria* at 1-11, 2-22. For instance, researchers have observed associations between elevated PM₁₀ levels and increased hospital admissions for cardiovascular and pulmonary disease in year-round and some seasonal analyses of admissions. William S. Linn et al., *Air Pollution and Daily Hospital Admissions in Metropolitan Los Angeles*, 108 *Env'tl. Health Persp.* 427, 429-430 (2000). There are also indications of an association between exposure to elevated PM_{2.5} concentrations and the risk of having a heart attack a few hours to one day following the exposure. See Annette Peters et al., *Increased **[*7]** Particulate Air Pollution and the Triggers of Myocardial **[**15]** Infarction*, 103 *Circulation* 2810, 2814 (2001).

Chronic PM exposure produces significant health impacts as well. Chronic exposure to elevated ambient PM levels over a long period has been associated with decreased lung function in certain groups of people, including children and teenagers. David E. Abbey et al., *Long-Term Particulate and Other Air Pollutants and Lung Function in Nonsmokers*, 158 *Am. J. Respir. Crit. Care Med.* 289, 295 (1998); W. James Gauderman et al., *Association between Air Pollution and Lung Function Growth in Southern California Children: Results from a Second Cohort*, 166 *Am. J. Respir. Crit. Care Med.* 76, 79-80 (2002); Edward Avol et al., *Respiratory Effects of Relocating to Areas of Differing Air Pollution Levels*, 164 *Am. J. Respir. Crit. Care Med.* 2067, 2068-2069 (2001). PM exposure increases the risk of death from cardiopulmonary disease and lung cancer. See Douglas W. Dockery et al., *An Association Between Air Pollution and Mortality in Six U.S. Cities*, 329 *New Eng. J. Med.* 1753 (1993); C. Arden Pope III et al., *Particulate Air Pollution as a Predictor of Mortality in a Prospective Study of U.S. Adults*, 151 *Am. J. Respir. Crit. Care Med.* 669 (1995); **[**16]** reviewed in *Health Effects Institute, Reanalysis of the Harvard Six Cities Study and the American Cancer Society Study of Particulate Air Pollution and Mortality*, at iii-iv (July 2000), available at www.healtheffects.org/pubs-special.htm (last viewed 3/10/04); C. Arden Pope III et al., *Lung Cancer, Cardiopulmonary Mortality, and Long-Term Exposure to Fine Particulate Air Pollution*, 287 *JAMA* 1132, 1137 (2002) (associating each 10 $\mu\text{g}/\text{m}^3$ increase in long-term average ambient PM_{2.5} concentration with an approximately 4%, 6%, and 8% increased risk of death from all **[*8]** causes, cardiopulmonary causes, and lung cancer, respectively); see also Abbey et al., 1999, at 376 (associating long-term PM₁₀ exposure levels with increased lung cancer death rates in males).

In particular, PM from diesel exhaust poses a potentially high risk of cancer. California has identified diesel exhaust as a carcinogen. [Cal. Health & Safety Code §§ 25249.5](#), 25249.8 (2004); Cal. Code Regs. tit. 22, § 12000(b) (2004); J.A. 235, 383, 405. In fact, 70% of all cancer risk due to ambient toxics in California's South Coast Air Basin is likely attributable to PM from diesel exhaust. South **[**17]** Coast Air Quality Management District, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-II)*, ES-3, available at <http://www.aqmd.gov/matesiidf/es.pdf> (last viewed 3/10/2004); J.A. 383, 405. EPA has

also recognized that diesel exhaust is likely to cause cancer. Diesel Exhaust in the United States, available at <http://www.epa.gov/otaq/retrofit/documents/f02048.pdf> (last viewed 3/10/2004).

B. Health Effects of NO[x]

In addition to PM, diesel exhaust emissions also contain NO[x], a term denoting gases containing nitrogen and oxygen. NO[x] is formed by combustion processes, like those used in heavy-duty diesel engines. NO[x]: how nitrogen oxides affect the way we live and breathe, available at <http://www.epa.gov/oar/noxflidr.pdf> (last viewed 3/10/2004). NO[x] has significant health effects, primarily as a precursor to ground-level ozone, a dangerous pollutant with numerous negative health impacts. Id.

[*9] NO[x] combines with volatile organic compounds ("VOCs") in the presence of heat and sunlight to form ground level ozone. Health and Environmental Effects of Ground-Level Ozone, available at <http://www.epa.gov/ttn/oarpg/naaqsf/o3health.html> (last viewed 3/10/2004) [hereinafter Effects of Ground-Level Ozone]. Acute exposure to ground level ozone can cause chest constrictions, irritation of the mucous membranes, J.A. 211, and, at high concentrations, shortness of breath, aggravation of asthma, emphysema and other respiratory conditions. J.A. 317. Acute exposure also imposes a number of significant health effects on groups like children, who are more vulnerable to air pollution because they breathe more air per pound than adults and have developing respiratory systems. Effects of Ground-Level Ozone. Asthmatics are also more susceptible to ozone pollution. See id.; Health Effects of Outdoor Air Pollution Part 1, at 20 (discussing associations between hospital admissions for asthma and elevated ozone levels). Studies of asthmatics suggest an association between increased respiratory symptoms and episodes of summertime air pollution like ozone. Health Effects of Outdoor Air Pollution Part 1, at 24. Among asthmatics, certain groups may be even more vulnerable to ozone, including children who were born prematurely or with a low birth weight. Kathleen M. Mortimer et al., The Effect of Ozone on Inner City Children with Asthma, **[*19]** 162 Am. J. Respir. Crit. Care Med. 1838, 1842-1843 **[*10]** (2000). Individuals with severe asthma may also face a greater risk of dying on days with higher concentrations of ozone. J. Sunyer et al., Effect of nitrogen dioxide and ozone on the risk of dying in patients with severe asthma, 57 Thorax 687, 691 (2002) (also finding an increased risk of death for severe asthmatics on days with higher levels of nitrogen dioxide).

n3 VOCs are emitted by numerous sources, including motor vehicles, consumer and commercial products like paints, aerosol sprays and cleaners, and various industrial processes. See Effects of Ground-Level Ozone; Sources of Indoor Air Pollution -- Organic Gases (Volatile Organic Compounds -- VOCs), available at <http://www.epa.gov/iaq/voc.html> (last viewed 3/10/2004).

Chronic ozone exposure results in significant negative health effects. Prolonged exposure to ozone may lead to decreased lung function in the general population. Health Effects of Outdoor Air Pollution Part 1, at 26-27. See also Audrey Galizia & Patrick L. Kinney, Long-Term Residence in Areas of High Ozone, 107 Env'tl. Health Persp. 675 (1999), available at <http://ehp.niehs.nih.gov/members/1999/107p675-679galizia/galizia-full.html> **[*20]** html (finding that people living in communities with high levels of ozone may have an increased risk of diminished lung function and incidence of respiratory symptoms). Children who spend large amounts of time playing sports outdoors in high ozone areas may also be particularly vulnerable to ozone. See Rob McConnell et al., Asthma in Exercising Children

Exposed to Ozone: A Cohort Study, 359 *The Lancet* 386, 388-389 (2002) (finding an association between children playing multiple team sports and the development of physician-diagnosed asthma). Even children with well-controlled asthma may be especially vulnerable to ozone exposures at levels below EPA standards. See Janneane F. Gent et al., Association of Low-Level Ozone and Fine Particles With Respiratory Symptoms in Children With Asthma, 290 *JAMA* 1859, 1865 (2003) (finding daily ambient ozone levels to be associated with increased risk of respiratory symptoms and increased use of rescue [*11] medication in children with asthma severe enough to require maintenance medication).

C. Economic and Social Welfare Impacts of Diesel Exhaust

Relying solely on data concerning hospitalizations and deaths understates the [**21] true adverse impact of exposure to diesel exhaust from Mexican truck emissions because such exposure imposes costs on society beyond deaths, reduced health, and decreased quality of life. Health care costs will rise, compared with what they would be otherwise, as a result of the health impacts associated with diesel exhaust from Mexican trucks. See J.A. 436-437 (stating that adverse health effects attributable to increased fine PM from Mexican truck emissions "can be expected to" lead to increased health care costs). Additionally, the health problems caused by these increased emissions will likely lead to "thousands of days of lost work and tens of thousands of days of restricted activity" each year in cities like Houston, which are likely to see increased Mexican truck traffic. See J.A. 446.

Diesel exhaust pollutants produce other serious social and economic impacts, like lost school days. See Frank D. Gilliland et al., The Effects of Ambient Air Pollution on School Absenteeism Due to Respiratory Illness, 12 *Epidemiology* 43, 47-48 (2001) (finding an association between ozone and illness-related (particularly respiratory-based) absences from school). Such school absences are costly [**22] to students, educators, and parents. Students who miss school are likely to suffer academically and to frustrate educators' efforts to teach them. Parents of children who are too sick to go to school often face a dilemma between [*12] missing work in order to care for their children, leaving their sick children home alone, or locating childcare, a resource that is already extremely scarce and costly. When school absences and other serious impacts of air pollution related illnesses are examined, the potential health effects of diesel exhaust exposure grow even more significant.

FMCSA has estimated that its regulations would lead to 34,000 Mexican trucks operating beyond the border zone in 2002 alone. n4 J.A. 67. This would likely expose vast numbers of Americans to increased levels of diesel exhaust pollutants and their corresponding health risks. As noted above, acute and chronic exposure to PM and NO[x], two of the pollutants in Mexican diesel truck exhaust, can lead to adverse health effects and death. Acute and chronic exposures to these pollutants can also impose high social welfare costs in the form of increased health care expenditures, lost work days, and increased school [**23] absences.

n4 The government's reference to the number of applications filed by Mexican commercial motor carriers for operating authority in 1995, Pet. Brief at 8 n.3, does not indicate how many trucks those applications would have covered, as an application for operating authority may be submitted on behalf of a number of trucks. For example, FMCSA has estimated that 10,900 Mexican commercial motor carriers would operate 72,000 trucks in the U.S. under the regulations (38,000 in the border zone, 34,000 beyond the border zone). J.A. 67. Therefore, the number of applications for operating authority, by FMCSA's own

admission, is smaller than the expected number of trucks.

[*13] II. FMCSA Violated NEPA by Failing to Prepare an Environmental Impact Statement Informing the Public of the Significant Public Health Effects of its Regulations.

NEPA is designed to ensure that agencies disclose the environmental impacts of their actions to the public, show that they have considered environmental concerns, and provide "a springboard for public comment." [Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 \(1989\)](#). See [Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 97 \(1983\) \[*24\]](#) (stating that NEPA "ensures that the agency will inform the public that it has indeed considered environmental concerns in its decision-making process"); [Robertson, 490 U.S. at 349](#) (discussing the informational role of NEPA). As an "action-forcing" statute, NEPA requires an agency to take a "hard look" at the environmental impacts of its actions and inform the public about those impacts. [Id. at 350](#).

Once an agency has fulfilled its procedural obligations to consider and disclose information on environmental impacts, however, it is not substantively bound to avoid those impacts. See [Robertson, 490 U.S. at 349-350](#) (stating that NEPA does not mandate particular substantive results or constrain an agency from deciding that other values outweigh environmental concerns); [Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 558 \(1978\)](#) (emphasizing that NEPA's "mandate . . . is essentially procedural"). Therefore, contrary to Petitioners' assertions, Pet. Brief at 15, 26, merely requiring FMCSA to disclose the significant public health effects of Mexican truck operation beyond the border zone will **[*25]** not dictate a particular policy outcome or restrict the President's power to conduct foreign affairs.

[*14] To achieve NEPA's procedural and informational goals, agencies must prepare an Environmental Impact Statement ("EIS") for all major federal actions significantly affecting the quality of the human environment. [42 U.S.C. § 4332\(c\) \(2004\)](#) (emphasis added). If an agency is unsure whether an EIS is required, it must prepare an Environmental Assessment ("EA"), [40 C.F.R. §§ 1501.4\(b\), \(c\), 1508.9 \(2004\)](#), and issue a Finding of No Significant Impact ("FONSI"), [40 C.F.R. §§ 1501.4\(e\), 1508.13 \(2004\)](#), if the action will not significantly affect the quality of the human environment. "A party challenging the agency's decision not to prepare an EIS must show only that there is a substantial possibility that the action may have a significant impact on the environment, not that it clearly will have such an impact." [Nat'l Audubon Soc'y v. Hoffman, 132 F.3d 7, 18 \(2d Cir. 1997\)](#).

Under regulations promulgated by the Council on Environmental Quality ("CEQ"), n5 significance is determined by reference to both context and intensity. [40 C.F.R. § 1508.27 \[*26\]](#) ("§ 1508.27") (2004). Courts use the CEQ regulations in determining whether to require preparation of an EIS. See [Middle Rio Grande Conservancy Dist. v. Norton, 294 F.3d 1220, 1229-30 \(10th Cir. 2002\)](#) (finding proposed action significant under CEQ regulations on context and intensity). An agency must prepare an EIS if its action will have effects that, because of their intensity, are significant in their relevant context, id.; see also [Nat'l Parks & Conservation Assoc. v. Babbitt, 241 F.3d 722, 731 \(9th Cir. \[*15\] 2001\)](#) ("Context simply delimits the scope of the agency's action . . . intensity relates to the degree to which the agency action affects the locale and interests identified in the context part of the inquiry"), and must consider several contexts, including the affected region and any long-term effects. § 1508.27(a). Intensity is determined by reference to ten factors, including public health impacts, uncertainty of impacts, illegality, and controversy; § 1508.27(b), any one of which could be sufficient to require the preparation of an EIS. See [Nat'l Parks, 241 F.3d at 731](#) (stating that either uncertainty or controversy

might **[**27]** be sufficient to require preparation of an EIS "in appropriate circumstances").

n5 Courts give the CEQ regulations substantial deference. See [Andrus v. Sierra Club, 442 U.S. 347, 358 \(1979\)](#) (stating that the "CEQ's interpretation of NEPA is entitled to substantial deference").

Here, the FMCSA erred in issuing a FONSI because the public health impacts that will result from the operation of Mexican diesel trucks throughout the southwest United States are so severe, in terms of both their context and intensity, that FMCSA must consider them in an EIS. n6 An EA, which is an abbreviated preliminary analysis of whether an EIS is warranted, is not adequate for regulations of this potential severity. See [40 C.F.R. § 1508.9 \(2004\)](#) (stating that the EA is meant to be a "concise public document" that "briefly provide[s] sufficient evidence and **[*16]** analysis for determining whether to prepare an [EIS] or a [FONSI]").

n6 Petitioners' contention that the regulations will have no, or minimal, environmental impact, see Pet. Brief at 24, is undercut by the FMCSA's acknowledgement that the application of its regulations may result in the denial of operating authority to the least safe Mexican trucks, which are most likely to be the oldest and most polluting of the Mexican truck fleet. J.A. 484. Therefore, FMCSA's regulations may have a beneficial environmental impact that could be improved by the promulgation of even stricter safety regulations. Id. **[**28]**

The EA prepared by FMCSA in this case considerably understates the environmental impacts of the regulations on public health and welfare, as discussed in greater detail below. Under the CEQ guidelines, the serious health risks associated with diesel exhaust pollutants indicate that FMCSA's regulations are likely to have a significant impact on the quality of the human environment. As noted previously in Section I, the health effects of the regulations include damage to lung tissue and lung function, aggravation of respiratory and cardiovascular disease, cancer, and even death, with attendant detrimental impacts on social and economic welfare. As will be discussed below, such health effects are likely to increase as greater numbers of Mexican trucks enter the U.S. and emit proportionally higher levels of pollutants over time. These public health effects, when properly accounted for, render the regulations intense and significant under the CEQ regulations and require preparation of an EIS. [40 C.F.R. § 1508.27\(b\)\(2\)](#).

Moreover, as noted previously, see Section II.A, these health effects will fall particularly hard on the southwest region of the country. Trucks governed by the new FMCSA **[**29]** regulations are likely to operate in major trucking corridors in southwest urban areas, particularly cities like Phoenix, Houston, and Los Angeles, that are in nonattainment with federal air quality standards. J.A. 320, 330. Thus, the diesel exhaust emissions associated with the regulations are likely to fall on localities that already have poor air quality and are struggling to come into compliance with federal air quality standards. Id. Despite indications of such regional impacts, FMCSA did not consider **[*17]** the impact of Mexican trucks on the southwest region of the country in its EA. Rather, it compared the increase in emissions from Mexican trucks with all U.S. on-road and total U.S. emissions (including all transportation sources, industrial sources, etc.). See J.A. 147; Pet. Brief at 12 n.5 (comparing 34,000 Mexican trucks -- one-half of the approximately 72,000 trucks subject to

the new regulations -- operating beyond the border zone to 4.5 million trucks operating throughout the U.S.), thus masking the regional significance of the regulations in areas where those trucks are most likely to operate. n7 As a result, FMCSA must prepare an EIS in order to fully address these **[**30]** regional impacts, as required under the CEQ regulations. See § 1508.27(a); [Anderson v. Evans, 350 F.3d 815, 835 \(9th Cir. 2003\)](#) (requiring an EIS where an agency failed to adequately address the local impacts of allowing a tribe to hunt whales); [Middle Rio Grande, 294 F.3d at 1229](#) (requiring an EIS, in part, because the local effects of critical habit designation were significant).

n7 FMCSA's choice to conduct even this national analysis, thus acknowledging that its regulations will have some effect on emissions in the U.S., undermines its argument that any increase in Mexican truck traffic would result from the lifting of the Presidential moratorium and not the regulations themselves. J.A. 59-60.

FMCSA also failed to examine the potentially significant long-term effects of its regulations, despite the fact that the CEQ regulations require an examination of both short-term and long-term effects. [40 C.F.R. § 1508.27\(a\)](#). Mexican trucks are less expensive to operate and, thus, likely to displace U.S. trucks in the future, J.A. 331-332, as both the EA and Petitioners' brief acknowledge. J.A. **[*18]** 135; Pet. Brief at 12 n.5. As Mexican trucks pollute **[**31]** more, on average, than U.S. trucks, J.A. 315, the displacement of U.S. trucks by Mexican vehicles will lead to increased pollution in the areas where they operate. J.A. 330-332. In addition, Mexican truck traffic will likely increase due to continuously increasing freight traffic from, and trade with, Mexico, further increasing pollution levels where Mexican trucks operate. J.A. 62, 66, 123, 331. Despite evidence that both the number of Mexican trucks, and their pollution levels, will increase over time, FMCSA only evaluated the effects of Mexican trucks for the year 2002 in its EA. J.A. 67, 331, 423-424.

Additionally, the FMCSA's analysis of the environmental impacts of its regulations did not address the condition of the Mexican trucks that are likely to operate in the U.S. under the regulations. Mexican trucks manufactured prior to 1993 pollute more than their U.S. counterparts, which have been subject to stricter U.S. emissions regulations. J.A. 334, 356-358, 379, 392-393. Although FMCSA assumed that approximately one-third of Mexican trucks were manufactured after 1994, J.A. 203, and would pollute less because they were subject to stricter emissions standards, this assumption **[**32]** is considerably higher than more reliable estimates reported by Environ and the General Accounting Office, which place the percentage at 10% (post-1993 trucks) and 20% (post-1994 trucks), respectively. J.A. 394-395, 255. Unlike FMCSA's estimate, the other estimates were "at least founded on some analysis of raw data, and based on some ascertainable methodology." [Public Citizen, et al. v. Dept. of Transp., et al., 316 F.3d 1002, 1025 \(9th Cir. 2003\)](#) (discussing FMCSA's analysis of the regulations' effects). FMCSA, therefore, potentially underestimated **[*19]** the number of higher polluting Mexican trucks operating in the U.S. as a result of the regulations. It also underestimated the increase in emissions under the regulations because it used data on U.S. truck emissions in its analysis of Mexican trucks, J.A. 205, despite the fact that Mexican trucks manufactured before model year 1993 likely emit higher quantities of pollutants because they were subject to less strict emissions requirements. J.A. 334, 356-358, 379, 392-393.

The faulty nature of the FMCSA's environmental analysis of its regulations is further underscored by the fact that Mexican trucks are not likely **[**33]** to meet future U.S. emissions standards. The United States has adopted significantly stricter diesel emissions regulations for model year **2004** and 2007 diesel engines. [40 C.F.R. §§ 86.004-11, 86.007-](#)

[11 \(2004\)](#). In order to meet these new standards, U.S. diesel engine manufacturers will have to install devices in diesel engines that are intended solely to reduce emissions. J.A. 432. However, since these devices increase engine cost, it is unlikely that manufacturers will install them in any engines for sale in countries, like Mexico, which do not have emissions standards requiring their use. n8 J.A. 433-434. Therefore, Mexican trucks are likely to be even more polluting relative to comparable **[*20]** U.S. trucks in **2004** and beyond, increasing the environmental impact of Mexican trucks entering the United States.

n8 Mexico has not yet matched the new U.S. emissions standards, nor has it indicated that it plans to do so. Since model year **2004** vehicles are already being manufactured and sold in the U.S., Mexican trucks are already behind U.S. trucks in emission standards at this point. Thus, Mexican trucks are currently emitting, and will continue to emit, more pollutants than U.S. trucks. **[**34]**

Furthermore, six U.S. diesel engine manufacturers are bound by consent decrees that require them to retrofit their diesel engines and to reduce emissions to meet model year **2004** emissions goals early. Accordingly, the majority of new U.S. trucks are already substantially cleaner than their Mexican counterparts. See, e.g., Consent Decree, United States v. Caterpillar, Inc., No. 98-02544 (HHK) (D.D.C. 1999); [Public Citizen, 316 F.3d at 1026](#); J.A. 388-389, 396-397, 474. Because Mexican diesel engine manufacturers are not bound by the stricter U.S. emissions laws or the consent decrees, id., the disparity in emissions between Mexican trucks and comparable U.S. trucks has already begun to widen and will do so at an accelerated rate beginning in **2004**.

FMCSA's failure to include in its analysis the number of Mexican trucks that will enter the U.S. after 2002, combined with its inaccurate assessment of the condition of the Mexican truck fleet and the projected difference in Mexican and U.S. truck emissions, not only dilutes the true environmental effects of the new regulations, but also renders the extent of their future environmental effects impossible to predict accurately **[**35]** and, therefore, uncertain under the CEQ regulations. [40 C.F.R. § 1508.27\(b\)\(5\)](#). Given this uncertainty, it is likely that the environmental health effects of the regulations may be substantially worse than anticipated. Because FMCSA failed to address the uncertain effects of the regulations adequately in its EA, and because the severity of the impacts that may result will likely depend on the number and condition of Mexican trucks entering the U.S., FMCSA must prepare **[*21]** an EIS. [40 C.F.R. § 1508.27\(b\)\(2\)](#), (5); [Anderson, 350 F.3d at 835](#).

The regulations may also have significant effects, within the meaning of the CEQ regulations, because they will likely run afoul of state and federal environmental protection laws. [40 C.F.R. § 1508.27\(b\)\(10\)](#). Under the CAA, California has the authority to control emissions of criteria pollutants from mobile sources by imposing standards that are more stringent than federal regulations. J.A. 452. Attempts by the California Air Resources Board ("CARB") to control heavy-duty diesel emissions will likely be frustrated, however, because CARB cannot apply its standards to Mexican trucks. J.A. 324, 452-454. Emissions from Mexican trucks **[**36]** may well violate California's more stringent emissions laws. Id. Additionally, because the regulations threaten to interfere with the ability of states to comply with the CAA, they may violate the conformity provisions of the Act, as discussed in greater detail in Section III of this brief. See [42 U.S.C. § 7506\(c\)\(1\) \(2004\)](#) (barring federal agencies from engaging in activities that do not conform to federally mandated state implementation plans). These potential violations of state and federal environmental laws are significant and require the preparation of an EIS under [40 C.F.R. § 1508.27\(b\)\(10\)](#).

Additionally, FMCSA must prepare an EIS because the effects of the regulations are highly controversial and, therefore, significant. [40 C.F.R. § 1508.27\(b\)\(4\)](#). The effects are controversial because there is a substantial dispute between FMCSA and other interested parties over the "size, nature or effect" of the regulations, and because FMCSA has not adequately considered or addressed this dispute in its EA. See [Indiana Forest Alliance, Inc. v. U.S. \[*22\] Forest Service, 325 F.3d 851, 857-858 \(7th Cir. 2003\)](#) (stating that if there is a dispute **[**37]** over the size, nature, or effect of an action, "NEPA then places the burden on the agency to come forward with a 'well-reasoned explanation' demonstrating why opinions disputing an EA's conclusions 'do not suffice to create a public controversy based on potential environmental consequences'"). Here, members of the public have disputed the size, nature, and effect of FMCSA's regulations, including the uncertain number of trucks that will enter the U.S., their impact on the southwest region of the country, the amount of pollutants that these trucks will emit, and the FMCSA's ultimate finding that the regulations would have no significant environmental impact. This dispute does not constitute simple opposition to FMCSA's decision to promulgate the regulations, but, rather, goes directly to the regulations' environmental effects. See *id.* (holding that controversy under the CEQ regulations must consist of more than opposition to a particular action). The controversy over the size, nature, and effect of the FMCSA regulations renders their effects significant and requires preparation of an EIS. [40 C.F.R. § 1508.27\(b\)\(4\)](#).

Given their potentially significant impacts under the CEQ regulations, **[**38]** the FMCSA regulations are major federal actions that will significantly affect the quality of the human environment. An EA was not the proper mechanism for examining the environmental impacts of the regulations because it did not allow the FMCSA to consider fully the extent of their effects. The regulations may well lead to increased diesel exhaust emissions from Mexican trucks operating beyond the border zone where they currently operate. These diesel exhaust emissions, which have significant adverse health effects generally, **[*23]** will be particularly harmful in the southwest United States, where Mexican trucks are most likely to operate. These effects will also extend well into the future, as growing numbers of higher-polluting Mexican trucks operate in the United States. The future effects of the regulations, while uncertain, are also highly controversial and will likely include, in addition to adverse public health effects, the violation of state and federal environmental laws. For these and other reasons, the regulations will significantly affect the quality of the human environment, requiring preparation of an EIS.

III. FMCSA Should Have Prepared a CAA Conformity **[39]** Analysis for the Regulations Because the Resulting Emissions May Violate the CAA State Implementation Plans of States Where the Mexican Trucks Will Operate.**

Finding that air pollution had resulted in "mounting dangers to the public health and welfare," Congress enacted the CAA, the purpose of which is to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." [42 U.S.C. §§ 7401\(a\)\(2\), \(b\)\(1\) \(2004\)](#). The CAA employs state implementation plans ("SIPs"), among other mechanisms, to protect public health. Under the CAA, states must submit SIPs to the Environmental Protection Agency ("EPA") providing for "implementation, maintenance, and enforcement" of EPA's national ambient air quality standards ("NAAQS"). [42 U.S.C. §§ 7407\(a\), 7410\(a\) \(2004\)](#). EPA must set NAAQS for criteria pollutants, such as PM, NO_x, and ozone, at a level to protect health. [42 U.S.C. § 7409\(b\)\(1\) \(2004\)](#). Thus, **[*24]** SIPs serve to protect the public health by reducing emissions of harmful pollutants.

In order to ensure that the federal **[**40]** government does not hinder a state's ability to comply with its SIP, the CAA bars federal agencies from engaging in any activity that does

not conform to an approved SIP. [42 U.S.C. § 7506\(c\)\(1\) \(2004\)](#). EPA regulations require federal agencies to prepare a conformity determination for "each pollutant where the total direct and indirect emissions in a nonattainment or maintenance area" caused by the regulations would equal or exceed levels set in [40 C.F.R. § 93.153\(b\)\(1\)](#), or where the regulations would result in an emissions increase which is more than de minimis. [40 C.F.R. § 93.153\(b\) \(2004\)](#). This conformity determination must be made before an agency can promulgate its regulations. See [40 C.F.R. § 93.150\(b\) \(2004\)](#) ("[a] Federal agency must make a determination that a Federal action conforms . . . before the action is taken").

Because emissions from Mexican trucks operating under the FMCSA regulations will exceed regulatory thresholds in certain areas of the southwest United States currently in nonattainment with EPA's NAAQS, such as Houston and Los Angeles, J.A. 320, 330, FMCSA must conduct a conformity analysis of the effect of its regulations. For example, **[**41]** Houston is in severe nonattainment for ozone. n9 [40 C.F.R. § 81.344 \(2004\)](#); J.A. 341, 427. Some estimates indicate that in Houston, by 2007, emissions **[*25]** increases from Mexican trucks could drastically eclipse the daily emissions conformity threshold for NO_x in a severe ozone nonattainment area. n10 J.A. 342, 427. Similarly, by 2010, increased NO_x and PM emissions in the South Coast Air Basin (including Los Angeles), which is in extreme nonattainment for ozone and serious nonattainment for PM₁₀, [40 C.F.R. § 81.305 \(2004\)](#); J.A. 346-347, 427, may also exceed daily emissions conformity thresholds. J.A. 347, 427.

n9 Areas which do not meet "the national primary or secondary air quality standard" for a given pollutant are designated as nonattainment areas. [42 U.S.C. § 407\(d\)\(1\)\(A\)\(i\) \(2004\)](#).

n10 The conformity thresholds are defined as a yearly limit, [40 C.F.R. § 93.153\(b\)\(1\) \(2004\)](#), which can then be broken down into a daily threshold by dividing the yearly limit by 365. J.A. 342, 346-47, 427.

Because FMCSA prepared no conformity determination before issuing the regulations under review in this case, it is unclear what effect the **[**42]** increased emissions from Mexican trucks will have on the ability of southwest states and California to meet the requirements of their SIPs. Given the substantial increases in emissions that may result from the FMCSA's regulations, it seems likely that these states will have a difficult time complying with their SIPs. Meeting SIP requirements has proved difficult in the past, S. Rep. No. 101-228, at 10-12 (1989), and it is possible that states will simply be unable to absorb the emissions increases from Mexican trucks and still achieve the NAAQS. If this occurs, then public health will suffer because the air quality goals of the SIPs will go unmet.

In attempting to meet the NAAQS, states will likely have to cut back on other sources of pollution. J.A. 245-246. Since states cannot control the emissions of Mexican trucks or the entry of those trucks into their jurisdictions, **[*26]** they will likely be compelled to tighten emissions controls on local industry and commerce, which may impose significant costs and job losses. In states like California, for example, some industries are already heavily regulated and could face further tightening of emissions controls as the state struggles **[**43]** to absorb the increased emissions from Mexican trucks operating beyond the border zone. Id. Because the increased emissions from Mexican trucks operating pursuant to FMCSA's regulations may hinder states' abilities to meet the requirements of their SIPs and achieve a clean and healthy atmosphere, FMCSA must prepare a conformity determination for its regulations under the CAA.

CONCLUSION

For the foregoing reasons, the Court should affirm the Court of Appeals' ruling.

Respectfully submitted,

HOPE M. BABCOCK, Director, LISA GOLDMAN, Staff Attorney, Institute for Public Representation, GEORGETOWN UNIVERSITY LAW CENTER, 600 New Jersey Avenue, N.W., Suite 312, Washington, D.C. 20001, Phone: 202-662-9535, Fax: 202-662-9634, Attorneys for Amici