

COMMENTS on PROPOSED
ENDANGERMENT AND CAUSE OR CONTRIBUTE
FINDINGS FOR GREENHOUSE GASES (GHGs)
Under Section 202(a) of the Clean Air Act

(Docket Number OAR-2009-0171)

By the National Association of Manufacturers

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Via electronic filing and U.S. Mail
Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mailcode:6102T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Docket I.D. No. EPA-HQ-OAR-2009-0171: Proposed Endangerment Finding for GHG Regulation under the Clean Air Act (CAA)

Dear Sir or Madam:

The National Association of Manufacturers (NAM) submits these comments in response to the Environmental Protection Agency's (EPA) proposed endangerment determination for greenhouse gases (GHGs) under section 202(a) of the Clean Air Act (CAA), 74 Fed. Reg. 18886 (Apr. 24, 2009). The NAM is the nation's largest industrial trade association representing small and large manufacturers in every industrial sector and in all 50 states. The NAM is the nation's leading voice for the manufacturing economy, a sector that employs more than 12,700,000 Americans and generates \$1.6 trillion in Gross Domestic Product (GDP). Any expansion of EPA's authority under the CAA, especially one as far-sweeping as that discussed in EPA's proposed endangerment finding under the CAA for GHG emissions ("endangerment finding"), will have a direct impact on the entire manufacturing sector.

The NAM's mission is to enhance the competitiveness of manufacturers and improve American living standards by shaping a legislative and regulatory environment conducive to U.S. economic growth. As a general matter, the NAM supports EPA regulations that are designed to provide net benefits to environmental quality and the public health, including the health of manufacturing workers and their families. Conversely, NAM opposes regulations that would impose overly burdensome compliance costs on the manufacturing sector, especially those with no clear goal for achieving improved environmental quality.

Applying these principles here means that NAM must oppose EPA's proposed endangerment determination. An endangerment determination by EPA is not simply an observation by the agency about climate change nor is it simply a straightforward recitation of scientific data. Rather, it is a policy determination, which must be based on a solid factual record, and which, once made, will have profound consequences for American workers and businesses. A positive endangerment determination would trigger an unprecedented expansion of the EPA's regulatory authority over the American economy because it would allow – and in some cases require – EPA to regulate domestic emissions of carbon dioxide and other GHGs. Regulated entities would include thousands of stationary sources and millions of motor vehicles. Such action will provide no net benefits to environmental quality, but will result in serious risks to our nation's short-term economic recovery and long-term international competitiveness. EPA regulation of GHGs as air pollutants under the Clean Air Act would even hinder the manufacturing sector's ability to deploy the advanced technologies which will be necessary to deal effectively with the challenges posed by GHG emissions, therefore undermining the objectives of any rational federal climate policy.

I. EPA SHOULD NOT MAKE A POSITIVE ENDANGERMENT DETERMINATION BECAUSE IT WOULD REQUIRE EPA TO UNDERTAKE A MASSIVE GHG REGULATORY PROGRAM THAT WOULD HAVE ENORMOUS NEGATIVE ECONOMIC IMPACTS ON AMERICAN BUSINESSES AND CONSUMERS.

If EPA makes a positive endangerment determination for GHGs under section 202(a) of the Clean Air Act, it will be required to regulate GHG emissions from motor vehicles and ultimately from stationary sources as well. As described below, regulation of GHGs under the CAA would lead to huge adverse economic consequences that the drafters of the Clean Air Act never could have intended or anticipated. It would also undermine the Administration's efforts to jump-start the struggling economy through enactment of the historic American Recovery and Reinvestment Act of 2009. Several key provisions of this very important legislation promote installation of energy efficient technologies. The Administration's efforts to accomplish the dual goals of growing jobs while achieving energy security, however, would be stymied by triggering far-reaching New Source Review (NSR) permitting requirements, which as discussed in more detail in part III and IV, would result from a positive endangerment determination.

EPA acknowledges that the determination it must make under section 202(a) of the Clean Air Act is a policy choice. EPA's proposed determination quotes from the opinion of the U.S. Court of Appeals for the D.C. Circuit in *Ethyl Corp. v. EPA*, in which the court stated that EPA must "act, in part on 'factual issues,' but largely 'on choices of policy, on an assessment of risks, [and] on predictions dealing with matters on the frontiers of scientific knowledge.'" 74 Fed. Reg. at 18891. The Supreme Court has not overruled this aspect of the *Ethyl Corp.* case, nor does EPA assert that it has.

As a result, it is anomalous that in the proposed determination, EPA evaluates the relevant policy choice by looking at some consequences of a determination under 202(a) of the Clean Air Act, but not others. It looks at the possible negative consequences of *not* making a positive endangerment determination, but ignores the unavoidable adverse consequences of actually making that positive determination. Indeed, EPA states that the endangerment determination imposes no requirements, and therefore does not have an impact on small entities, nor is it a "significant energy action" that would adversely affect the supply, distribution or use of energy.

Instead of looking at the CAA and the section 202(a) determination solely from a single vantage point—that is, from the perspective of the possible benefits of controlling greenhouse gas emissions while ignoring the negative consequences under the pretext that no actual regulatory controls are being proposed here—EPA should be transparent about what is actually at stake in making this determination and should conduct a full and complete review and analysis of both the positive and the adverse impacts of both positive and negative determinations under CAA section 202(a). Without first addressing these many and obvious implications of its regulatory actions, EPA's final endangerment finding would be arbitrary. See *Competitive Enterprise Inst. v. NHTSA*, 956 F.2d 321, 326-28 (D.C. Cir. 1992) (remanding CAFE standards because the agency failed to address safety effects of higher fuel economy standard).

As demonstrated in part V below, EPA's endangerment finding, if justified at all, is solely justified in terms of the effect of GHGs on national welfare, not public health. But the welfare of the nation's economy is a critical component of the public welfare, and ultimately the nation's health. See *International Union v. OSHA*, 938 F.2d 1310, 1326–27 (D.C. Cir. 1991) (Williams, J., concurring) ("higher income can secure better health, and there is no basis for a casual assumption that more stringent regulation will always save lives . . . regulation reduces incomes and thus may exact a cost in human lives"). EPA is proposing to make a finding that will inevitably cripple the economy, see Parts III and IV, below, without even bothering to address this concern. In effect, EPA is threatening disastrous regulations to motivate Congress to pass greenhouse gas regulation. In this scenario the endangerment

finding is EPA's way of tying its hands so that Congress knows that EPA will not change course and that Congress must act swiftly to avoid disaster.

The NAM argues that a fair evaluation of those impacts will lead to the conclusion that a positive endangerment determination for GHGs under section 202(a) is the wrong policy for dealing with global climate change and GHG emissions. Rather, the Administration should support a forward-thinking climate strategy that will:

- Remove market barriers to cost-effective reductions
- Protect American jobs and consumers;
- Mirror comparable commitments by our global trading partners and competitors;
- Be based on the best science available that meets Information Quality Act Requirements;
- Meet cost-effective and cost-benefit tests; and
- Apply equally throughout the U.S. economy.

Furthermore, NAM supports a comprehensive federal climate policy that will inflict no economic harm, provide a viable domestic energy supply and preempt a patchwork of state and regional schemes to control emissions of GHGs. Implementing such a policy requires new policies, rather than a misguided expansion of a statute which was enacted more than 30 years ago to address pollutants that have qualities completely different from GHGs and continues to be the source of significant litigation and regulatory uncertainty.

A. The Economic Consequences of GHG Controls Must Be Fully Assessed and Evaluated Before EPA Makes an Endangerment Determination.

Because the Supreme Court's decision in *Massachusetts v. EPA* recognized that EPA has wide latitude to determine the timing and nature of any GHG regulations, EPA should not make an endangerment determination until it has adequately examined the policy implications of using the CAA as a means of regulating GHGs. Indeed, NAM believes that it be would arbitrary and capricious for EPA to make the section 202(a) policy determination after evaluating only one set of policy considerations and consequences while brushing off or ignoring altogether others, including many of the known or reasonably foreseeable negative consequences of such a determination. These negative consequences are obvious and massive.

The health and competitiveness of our nation's core manufacturing economy is dependent on energy prices. An endangerment finding would necessarily raise those prices, especially for natural gas, which would have a disproportionate impact on the manufacturing sector. Higher natural gas prices translate into job losses for the manufacturing sector, which uses the commodity as a source to generate electricity and as a feedstock to produce pharmaceuticals, plastics, and fertilizer, among other products. The erosion of the domestic production of ammonia, which is used as a fertilizer and building block for other industrial products, illustrates the challenges of higher natural gas prices. Since the price for natural gas began to climb in 2000, the domestic production of ammonia has declined by more than 40%. From 2000, when natural gas prices began to climb up until the onset of the current financial crisis during the first quarter of 2008, the manufacturing sector shed more than 3.7 million high paying jobs. And since the onset of the current recession, the United States has lost approximately 1.7 million high wage manufacturing jobs, imposing enormous burdens and uncertainty on American workers and their families, (U.S. Census Bureau and Bureau of Labor Statistics).

An endangerment finding would force more industries would be forced to switch to natural gas to meet the GHG regulations that the finding makes inevitable, because natural gas is approximately half as

carbon-intensive as coal. See http://www.osha.gov/SLTC/powergeneration/federal_agencies.html. The Administration claims to be working to bring the nation out of this recession, particularly through enactment of the American Recovery and Reinvestment Act of 2009. Yet an endangerment finding would inexorably lead to regulation under the CAA that would drastically increase energy prices, particularly the price of natural gas.

Recent events in California illustrate the consequences of the kind of GHG regulations that would automatically result from an endangerment finding. A study from the California Public Utilities Commission, assessing a 2020 target renewable energy portfolio standard, states that “reaching a 33 percent target will require procurement of more expensive renewables.” The study goes on to state that “preliminary analysis indicates that such a target may require a state investment of about \$60 billion in generation and transmission from 2010 to 2020.” Not only will deployment of low carbon technology be more expensive, but pre-mature deployment also reduces the quality and reliability of power delivered on a regional grid.

A recently disclosed memorandum from the White House Office of Management and Budget (OMB) states that regulating “CO₂ under the CAA for the first time is likely to have serious economic consequences for regulated entities throughout the U.S. economy, including small businesses and small communities.” The OMB goes on to state that in the event EPA “extends this finding to stationary sources, small businesses and institutions would be subject to costly regulatory programs such as New Source Review (NSR).” The OMB memorandum also criticizes the agency’s lack of cost-benefit analysis and points out that the proposal could “be strengthened by including additional information on benefits, costs and risks.” The document further states that “some issues” that EPA should cover include “impacts of climate change on the value of net economic benefits.” OMB goes on to state that “an endangerment finding under Section 202 [of the Clean Air Act] may not be the most appropriate approach for regulating GHGs.” NAM realizes that Administration officials have denied that the memorandum reflects Administration policy—but regardless of whether it reflects Administration policy, EPA must address these arguments. NAM largely agrees with these comments in the OMB memorandum; if EPA does not, it must demonstrate why those arguments are wrong.

EPA is well aware that an endangerment finding will tie its hands, mandating GHG regulations that, as explained in Part III of these comments, will cripple an already-distressed economy. Yet EPA does not even consider the consequences of its decision. This is arbitrary and capricious.

B. Leakage of GHG Emission Means That Unilateral, Domestic Regulation Will Simply Push GHG Emissions Overseas, With No Environmental Benefit

A dramatic expansion of clean air programs could actually result in increased global GHG emissions by forcing many energy-intensive industries, such as steel, paper, chemicals, glass and cement, to shift operations to countries that have no mechanism for regulating carbon, or which use energy less efficiently. For example, manufacturing in China uses six times as much energy to produce \$10,000 of GDP. Furthermore, EPA’s own analysis using the MiniCAM model shows that the rise in emissions in the rest of the world would more than offset any possible reductions in the U.S. (Edmonds, Clark, Luiz and Wise, “Stabilizing CO₂ Concentrations With Incomplete International Participation,” stating that stabilizing CO₂ concentrations becomes “infeasible” with delayed participation of non-Annex I countries). Similarly, the various permitting programs that could be triggered by an expansion of regulatory authority would merely mandate emissions limits on specific sources, with no likelihood of reducing GHG concentrations in the environment in the United States or around the world.

EPA should not make a positive endangerment determination at this time because, in the context of greenhouse gases and emissions from new motor vehicles, EPA has not examined, explained or justified how this determination and the resulting regulatory consequences will improve air quality or be consistent with the structure or purposes of the Clean Air Act. GHG emissions are a global challenge that cannot be solved by any one nation acting unilaterally pursuant to a statute designed to address local environmental quality. The CAA's permitting programs have historically focused on local emissions of criteria pollutants while not accounting for emissions from other countries.

Finally, unlike any likely congressional solution, CAA regulation would not necessarily preempt state and regional climate change programs. The patchwork of state and regional regulations that would result would create more investment uncertainty and undermine regulatory effectiveness. Under this unfortunate scenario, manufacturers in different regions of the United States would be regulated in different ways not because their emissions or effects of their emissions are any different, but merely because of the policies of the state where they are located. Thus, the expansion of CAA programs that would follow from an endangerment finding would impose significant additional burdens on our struggling economy with no measurable environmental outcomes.

II. EPA HAS BROAD DISCRETION REGARDING WHETHER AND WHEN TO MAKE AN ENDANGERMENT FINDING.

The current economic situation and the uncertain costs and benefits of GHG regulation require EPA to exercise extreme caution with respect to the endangerment determination. EPA has broad discretion to exercise such caution. Nothing in the Clean Air Act or the Supreme Court's decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007), compels EPA to rush to judgment on this complex issue. To the contrary, *Massachusetts* acknowledged that EPA "has significant latitude as to the manner, timing, content, and coordination of its regulations with those of other agencies." 549 U.S. at 533. Moreover, EPA should refrain from acting while Congress considers legislation to address GHG emissions and the United States enters international negotiations in the Copenhagen Climate Change Conference.

A. The *Massachusetts* Decision Acknowledged EPA's Discretion Over the Timing and Nature of an Endangerment Determination

The Clean Air Act vests EPA with substantial discretion regarding the timing and nature of any endangerment finding. In *Massachusetts*, the Supreme Court affirmed that discretion. 549 U.S. at 534-35 ("We need not and do not reach the question whether on remand EPA must make an endangerment finding or whether policy concerns can inform EPA's actions in the event that it makes such a finding."). Thus, despite claims by environmental groups, no court is pressuring EPA to act immediately.

To the contrary, the D.C. Circuit has rejected efforts to force EPA to make an endangerment determination. See *Petition for Writ of Mandamus to Compel Compliance With Mandate, Massachusetts v. EPA*, Dkt. No. 03-1361 (D.C. Cir. Order of June 26, 2008). In a concurring opinion, Judge Tatel observed that "nothing in section 202, the Supreme Court's decision in *Massachusetts v. EPA*, or our remand order imposes a specific deadline by which EPA must determine whether a particular air pollutant poses a threat to public health or welfare." *Id.* at 2. As recognized in the opinion, the court has "often allowed delays significantly beyond a year, especially where, as here, the issue facing the agency was both complicated and controversial." *Id.*

Similarly, the Northern District of California also rejected a petition for mandamus seeking compliance with the Supreme Court's mandate. *S.F. Chapter of A. Philip Randolph Inst. v. EPA*, 2008 No. C 07-4836 CRB U.S. Dist. LEXIS 27794 at *10-11 (N.D. Cal. Mar. 28, 2008). Consistent with the

D.C. Circuit's conclusion, the California court recognized that "[t]he Supreme Court was careful not to place a time limit on EPA, and indeed did not even reach the question whether an endangerment finding had to be made at all. The notion that this Court would fill the void by ordering EPA, by writ of mandamus, to immediately respond to the Supreme Court's decision is so far afield from notions of comity and propriety that it need not be seriously considered."

Courts generally apply a "rule of reason" in assessing delay in agency decision-making. *Telecomm. Research & Action Ctr. v. FCC*, 750 F.2d 70, 80 (D.C. Cir. 1984). Courts consider the "effect of expediting delayed action on agency activities of a higher or competing priority," the "nature and extent of the interests prejudiced by delay" and the potential for impropriety in the agency's inaction. *Id.* The complexity of environmental regulation also justifies lengthy agency deliberation. See *Sierra Club v. Thomas*, 828 F.2d 783, 799 (D.C. Cir. 1987) ("Given the complexity of the issues facing EPA and the highly controversial nature of the proposal, agency deliberation for less than three years – little more than one year since the close of the public comment period – can hardly be considered unreasonable").

EPA should not succumb unnecessarily to pressure from certain groups arguing for expedited action. The issuance of an endangerment finding would reverberate throughout the CAA, potentially impacting all new mobile source engines, fuels for existing mobile sources and stationary sources currently regulated under its provisions and potentially millions of other newly regulated sources. While undoubtedly certain groups will continue to pressure EPA and the courts to issue an endangerment finding, such efforts must be balanced against the impact on the regulated community and the Agency's preparedness for the ramifications of such regulations. In this instance, blindly issuing an endangerment finding would trigger onerous and poorly understood regulatory obligations, overwhelm EPA and state environmental agencies, and fundamentally alter the nation's manufacturing sector and economy.

The regulation of GHGs under the CAA would be the most ambitious and pervasive action that the Agency has ever contemplated – far more so than eliminating lead from gasoline or requiring catalytic converters for mobile sources. Nothing requires quick decision-making, and there are compelling reasons to defer an endangerment determination at this time.

B. EPA Should Defer Any Endangerment Determination Because Action by Political Actors Better Suited to Implement A Comprehensive Federal Climate Policy

Obtaining some direction from Congress, the international community, and stakeholders is essential given the lack of any intelligible principles within the CAA on how GHG emissions should be controlled. EPA's proposals could cripple the economy, swamp state and local agencies with unfunded mandates to administer permitting programs in ways never before imagined, and position the Agency to regulate activities outside of its traditional areas of expertise. Rather than rush ahead, EPA should follow the lead of those politically accountable actors.

Courts have also recognized that regulating GHGs is best left to elected officials. Environmental groups, state Attorneys General and others filed lawsuits seeking damages and injunctions under tort law to curtail GHG emissions. However, every reviewing court has rejected such attempts as a political question. See *Connecticut v. Amer. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005); *California v. Gen. Motors Corp.*, No. C06-05755 MJJ, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007); *Comer v. Nationwide Mut. Ins.*, 2006 WL 1066645 (S.D. Miss. 2006). In noting that "the elected branches must make an initial policy determination on global warming" before the courts can act, the *General Motors* court cited EPA's own assessment of climate change regulation: "It is hard to imagine any issue in the environmental area having greater 'economic and political significance ... [climate change] has been discussed extensively during the [past] Presidential campaigns; it is the subject of debate and negotiation in several international bodies; and numerous bills have been introduced in Congress over the last 15

years to address the issue.” 2007 WL 2726871 at *8 (quoting 68 Fed. Reg. 52922, 52928 (Sept. 8, 2003) (second alteration in original)).

No one—not environmental groups, the courts, or EPA—claims (or could claim) that Congress intended for the CAA to govern GHG emission reductions. Thus, Congress has provided no guide for how EPA should weigh the multitude of competing values in deploying the CAA to combat climate change—a mission for which it was never designed. The Agency should proceed cautiously and deliberately in complying with the Supreme Court’s direction in *Massachusetts v. EPA*, taking advantage of the discretion the Court affirmed regarding the timing of such a decision, and conducting a more thorough analysis of the costs and benefits of further CAA regulation.

Any immediate, unilateral action by EPA would be imprudent also because the United States is working towards international action on GHG emissions. As a party to the UN Framework Convention on Climate Change (UNFCCC), the United States will participate in the December 2009 Climate Change Conference in Copenhagen. Member nations will be negotiating a potential successor agreement to the Kyoto Protocol and could propose new international commitments to reduce GHG emissions. Given that GHGs pose international problems, EPA should wait and allow the United States’ negotiators to pursue an international solution.

Some have argued that the upcoming Copenhagen discussions actually provide impetus for EPA to press ahead with the endangerment finding. That is incorrect. A free-standing endangerment determination would preempt the Copenhagen discussions. Moreover, even if a freestanding endangerment finding were permissible, it could trigger mandatory regulations under the CAA, as explained below. As such, an endangerment finding would commit the United States to regulating GHGs through the CAA, again short-cutting the Copenhagen discussions which will undoubtedly encompass other means of addressing GHG emissions. This does not mean that the United States is a “skeptic of climate change.” Rather, deferring any endangerment determination would engage the U.S. in an international dialogue and provide U.S. negotiators with the greatest freedom in discussions to craft innovative solutions.

C. EPA Should Carefully Assess the Health and Welfare Effects of CAA GHG Controls.

EPA should take the time to perform a more thorough analysis of not only the costs of regulation, but also the benefits of regulation, as well as the risks to public health and welfare that would be caused by imposing GHG controls, or failing to impose such controls. EPA has not yet had time to perform this careful analysis, as the proposed endangerment finding makes clear.

The most basic problem with the endangerment finding is that it is based on data that fails to support, and often contradicts, its reasoning. For instance, the paragraph below is central to the Administrator’s argument on health effects, and typical of its reasoning:

The Administrator also acknowledges that warming temperatures may bring about some health benefits. Both extremely cold days and extremely hot days are dangerous to human health. But at least in the short run, modest temperature increases may produce health benefits in the U.S. (and elsewhere). Although the IPCC projects reduced human mortality from cold exposure through 2100, it is currently difficult to ascertain the balance between increased heat-related mortality and decreased cold-related mortality. With respect to health, different regions will be affected in different ways. The Administrator does not believe that it is now possible to quantify the various effects. Because

the risks from unusually hot days and nights, and from heat waves, are very serious, it is reasonable to find on balance that these risks support a finding that public health is endangered even if it is also possible that modest temperature increases will have some beneficial health effects.

74 Fed. Reg. at 18901. Thus, on the basis of evidence that shows a decrease in mortality from warming temperatures, EPA concludes that “on balance” warming temperatures endanger public health. This is not rational decisionmaking. It would be fair for EPA to examine the evidence that warming improves public health and conclude that the data was not clear enough to have confidence in that conclusion. Indeed, it would be better if EPA acknowledged existing gaps in available data in drawing conclusions from the limited data on climate change. But it is not rational to say that evidence of health benefits plus uncertainty makes it reasonable to conclude that health is endangered. If it was, regulatory ignorance would always be an excuse for regulation.

In fact, EPA knows that the evidence of health benefits from warming is stronger than its proposed endangerment finding has acknowledged. EPA’s Technical Support Document (TSD) notes that cold caused 16,555 deaths from 1979 to 2002, while heat caused only 4,780 deaths. TSD at 70. And EPA’s *Draft* Technical Support Document noted that a majority of studies show that warming saves more lives from excessive cold than it costs from excessive heat. Draft TSD, Docket No. EPA-HQ-OAR-2008-0318, Doc. ID EPA Docket No. EPA-HQ-OAR-2008-0318-0082 at 66 (June 21, 2008). EPA’s argument that incomplete data means endangerment rings hollow when it buries data contradicting its finding.

Similarly, throughout its proposed finding, EPA repeatedly ignores other issues that are crucial to determining whether the public health of our nation’s citizens is, in fact, endangered. For instance, EPA explicitly refuses to consider how communities will adapt to a warmer earth. 74 Fed. Reg. at 18,894. Adaptation is a ubiquitous response to any change in the climate. EPA’s failure to consider adaptation makes its proposed endangerment finding a hypothetical, or a parlor game, not a reasoned conclusion about the effects of GHG emissions on public health and welfare.

This is not to say that, given more time, EPA could not propose a convincing and well-reasoned endangerment finding. It is just that EPA has not currently done so. In some circumstances, it might be appropriate to rush a finding, even in the face of uncertainty. But given the imminent prospect of international and legislative approaches to a federal climate policy, there is no need to make a hasty and poorly reasoned endangerment finding on the basis of an incomplete record, particularly because those approaches will not have to force the square peg of GHG emissions into the round hole of the CAA.

III. EPA MUST CONSIDER AND ASSESS AN ENDANGERMENT FINDING’S POTENTIAL TO TRIGGER MANDATORY REGULATION OF GHGs UNDER MULTIPLE EPA PROGRAMS

As explained above, EPA is obligated, both as a legal matter and as a matter of sound policymaking, to consider *all* of the consequences of the proposed endangerment determination, not just the consequences of making no endangerment finding. *Cf. Competitive Enterprise Inst.*, 956 F.2d at 326-28. Yet, EPA has utterly ignored the consequences a positive endangerment finding under Section 202 would have under the rest of the Act. EPA’s silence on this matter is all the more erroneous in light of the ANPR’s extensive discussion of these consequences. Further, many of the public comments submitted in response to the ANPR bear directly on the effects on an endangerment finding, and yet EPA has here proposed that finding without responding to the comments. NAM again submits comments on the far-reaching effects of EPA’s proposal and contends that EPA must take into account all of its implications.

Although the current proposal focuses on mobile source emissions under Section 202 of the CAA, an endangerment finding under one section of the statute will have a domino effect throughout the act. For example, once the Administrator makes an endangerment finding under the CAA, issuance of a National Ambient Air Quality Standard (NAAQS) for that air pollutant is not discretionary. EPA suggests that it could issue an endangerment finding for GHGs under CAA § 202 but not promulgate a GHG NAAQS under Title I. 73 Fed. Reg. at 44497. All the Agency would have to do, it reasons, would be to abstain from setting air quality criteria under CAA § 108. 73 Fed. Reg. at 44478. EPA already attempted this maneuver to avoid promulgating a NAAQS for lead, and failed. The D.C. Circuit, in *NRDC v. Train*, 545 F.2d 320 (D.C. Cir. 1976), held that this strategy would render “the mandatory language of § 108(a)(1)(A) ... mere surplusage,” allowing the Administrator to avoid the mandatory deadlines in CAA §§ 108(a)(2), 109 and 110.

EPA cannot ignore the CAA’s plain statutory commands. In last year’s ANPR, EPA discussed raising the major source cutoffs to “establish a significance level for GHGs at a level high enough to assure that the program applies to larger sources and modifications, but excludes smaller sources and modifications.” 73 Fed. Reg. at 44505. This would involve setting major source thresholds above those found in the CAA, suggesting a range between 10,000 metric tons and 100,000 metric tons. *Id.* As an alternative, the Agency also considered a “phase-in” approach, where only the largest sources would receive NSR permits at first with all other sources emitting more than 250 TPY being required to file for NSR permits at an undetermined later date. *Id.* at 44507. As EPA acknowledges, however, the Clean Air Act sets major source thresholds at 100 TPY for listed source categories and 250 TPY for all other sources. *See* 73 Fed. Reg. at 44506 (discussing definition of major source under 42 U.S.C. § 7479(1)). As a second short-cut, EPA is also proposing to jettison the statutory requirement that every permit applicant be subject to a case-by-case BACT analysis in favor of a “presumptive BACT” approach that would forego individual considerations of feasibility, cost, energy usage or collateral environmental impacts. 73 Fed. Reg. at 44508. The Agency suggests that it can ignore the CAA’s concededly plain language in favor of a legislative intent not to regulate smaller sources.

EPA’s proposed legal argument has high legal risks and could well be rejected by a reviewing court. Indeed, convincing a court to ignore the plain language of a statute is an incredibly rare occurrence. The Agency cites to *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1980), as supporting its theory that courts will, on extreme occasions, ignore a statute’s language in favor of Congressional intent, as expressed by an administrative agency. The actual holding of *Alabama Power*, if anything, contravenes EPA’s proposed interpretation as the court rejected EPA’s interpretation of “potential to emit” in favor of “the language and comprehensive scheme of the statute” 636 F.2d at 354. Specifically, it rejected EPA’s attempt to “creat[e] a broad exemption for smaller sources,” holding that “the Act does not give the agency a free hand authority to grant broad exemptions.” *Id.* The court also provides EPA with nothing to support its de minimis emitter theory, discussed on 73 Fed. Reg. at 44507. NAM does not disagree with the policy that EPA appears interested in pursuing with respect to exempting smaller sources from the consequences of EPA’s decisionmaking, but there is serious doubt about the legal viability of EPA’s approach. Neither EPA nor anyone else should fool themselves about the likely consequences of a positive endangerment determination by hoping that EPA will find a way to exclude smaller sources from regulatory overreach.

It should be noted that olive branches extended by two of the major environmental groups does not make an unlawful reading of the CAA defensible. In their testimony before Congress last year, representatives from the Natural Resources Defense Council (“NRDC”) and the Sierra Club both agreed that they were not interested in compelling regulation of sources emitting less than 5,000 or 10,000 tons per year of carbon dioxide. *See* Testimony of David Bookbinder, Chief Climate Counsel, Sierra Club, Before the Senate Comm. on Environ. and Public Works at 7 (Sept. 23, 2008) (“EPA should state that it has no intent of requiring [PSD] permits for sources emitting less than 5,000-10,000 [TPY] of CO₂. No

one – not industry, not the environmental community, not EPA, not the state air agencies – believes that those sources should be regulated.”); Testimony of David D. Doniger, Policy Dir., Climate Center, NRDC, Before the House Comm. on Energy and Commerce Subcommittee on Energy and Air Quality at 19-20 (Apr. 10, 2008) (“NRDC is prepared to work with EPA to evaluate proposed solutions to the issue of smaller source coverage” so long as “indisputably major sources of CO₂, such as new coal-fired power plants” are regulated under NSR). In effect, the representatives for the NRDC and Sierra Club argue that, if EPA agrees to ignore the language of the CAA, then no one will sue for its enforcement. Messrs. Bookbinder and Doniger offer a promise that neither party can guarantee. Many organizations are active in suing to stop manufacturing construction, including State Attorneys General, smaller environmental activists and local “NIMBY” groups opposed to development. There will be challenges to EPA’s proposed interpretation of CAA § 169(1), even if it is by parties other than NRDC and the Sierra Club. When that challenge comes, EPA’s reliance on *Alabama Power* might not be sufficient to protect smaller sources of GHG emissions.

In estimating the number of sources that would be subject to NSR for GHGs, EPA has used a “capacity factor” to discount emissions based on actual operations. EPA stated that “the interpretation of the term ‘potential to emit’ ... would determine whether they would be considered ‘major’ for GHG emissions under PSD,” 73 Fed. Reg. at 44499, suggesting that the Agency may read the term “potential to emit” differently than it does today. As stated above, this interpretation would violate EPA’s existing regulations requiring potential to emit calculations to be based on a hypothetical scenario where the source runs at full capacity 8,760 hours per year. Several industries currently subject to NSR have unsuccessfully argued that NSR’s potential to emit calculations over-estimate actual emissions. Only now, however, does EPA consider a “capacity factor” approach to make more realistic estimates of the number of sources that would be subject to NSR. In fact, the ANPR states that, for small sources, “the interpretation of the term ‘potential to emit’ ... would determine whether they would be considered ‘major’ for GHG emissions under PSD.” 73 Fed. Reg. at 44499. Should EPA wish to reduce the number of sources subject to NSR, it must modify its regulatory definition of potential to emit through the rulemaking process, not through a string of guidance memoranda or litigation positions, as it has done in the past with other aspects of NSR. In addition, if EPA adopts this “capacity factor” view of “potential to emit” for carbon dioxide, it should do so formally for all air pollutants. Interpreting “potential to emit” differently for one pollutant but not others lacks any rational basis and would be an arbitrary and capricious reading of the law. In other words, EPA can not game the regulatory language to reach a preferred result for carbon dioxide.

When applied to EPA’s claim for administrative necessity in this instance, however, the argument has serious legal vulnerabilities. In *Alabama Power*, the court surveyed prior uses of the exemptions where administrative agencies could not carry out a mandatory duty for lack of funding, time or qualified personnel. The heart of this “administrative necessity” doctrine is that courts may “uphold streamlined agency approaches or procedures where the conventional course, typically case-by-case determinations, would, as a practical matter, prevent the agency from carrying out the mission assigned to it by Congress.” *Id.* (emphasis added). Here, Congress did not task EPA with the mission of regulating GHG emissions. Instead, the Agency contemplates taking on this burden absent any authorizing legislation and with a legislative history that explicitly disowns such commands. Where EPA, and not Congress, is the source of such administrative burdens, it should not be allowed to craft administrative exemptions in contravention of the statutory language.

IV. EPA MUST CONSIDER THE CLEAN AIR ACT’S SUITABILITY FOR REGULATING GHGs

A. The Clean Air Act Is Designed To Address Local And Regional Pollutants

The Clean Air Act is designed to control traditional air pollutants. By way of example, under one of the CAA's core provisions and programs, the EPA administrator specifies a particular maximum atmospheric concentration for each pollutant, called a National Ambient Air Quality Standard ("NAAQS"), 42 U.S.C. § 7408, and then each state must devise a State Implementation Plan ("SIP") to achieve that concentration within the state. 42 U.S.C. § 7410. Regions that achieve that concentration level are designated "attainment areas" and those that do not are designated as "non-attainment areas." States that contain non-attainment areas are subject to increasingly severe punishments, including withdrawal of highway funding. *See* 42 U.S.C. § 7509.

This framework, with its complex balancing of state and federal powers, is sensible when a state can control the local concentration of the listed pollutant within its boundaries. When a state must control lead concentrations in the air, it limits the lead that its industries can emit. But a state has no real control over the carbon dioxide concentrations in the local air, because carbon dioxide and other GHGs are long-lived, well-mixed in the atmosphere, and diffuse rapidly, so that they are relatively evenly distributed around the globe. So the carbon dioxide concentration at any spot on the globe has effectively no relation to nearby emissions; instead it is determined by the collective actions of every CO₂ emitter in the world. Because CO₂ persists in the atmosphere for decades, local concentrations depend not only on all current global emissions but on decades of past emissions. The problem is compounded by the additional emissions of other GHGs such as methane (agriculture, natural gas production, wetlands) and nitrous oxide (agriculture).

GHGs' spatial and temporal diffusion makes the CAA's carefully crafted provisions for state implementation plans and local enforcement unworkable. For example, designating Vanderburgh County, Indiana as an attainment or non-attainment area for CO₂ would be pointless. No state regulation could possibly lower the concentration of CO₂ or other GHGs in that county's air. Those concentrations will be determined by global activity—by industries and consumers everywhere in the world, from China to India to Russia. And the county's ambient CO₂ levels will always be almost identical to any other county in the United States because CO₂ is uniformly distributed around the globe. So if EPA chooses a NAAQS for CO₂, it will effectively designate every county in the United States as either being in attainment, or being in non-attainment, but regardless, no area will be able to do anything to affect its attainment status.

The fundamental differences between GHGs and existing criteria pollutants currently regulated under the Act would make the CAA's core provisions a useless and costly exercise in paper shuffling. EPA would have to prescribe a NAAQS that it knows that states cannot meet—or prescribe one that they cannot avoid meeting. States, in turn, would have to submit detailed SIPs, including timetables, funding details, and monitoring and enforcement procedures, *see* 42 U.S.C. § 7410, describing how they will accomplish a task which everyone acknowledges is impossible.

But for all its pointlessness, CAA regulation of GHGs could also cause great harm. First, if states are in non-attainment status, they would be subject to severe statutory sanctions. Second, and regardless of attainment status, millions of individuals and businesses would be subject to intrusive and expensive permitting requirements and emissions controls for new sources. EPA argues that it could avoid sanctioning states by relying on 42 U.S.C. § 7409a, a section entitled "International border areas" that allows the agency to approve a SIP if the state demonstrates that the SIP would have been adequate to maintain the NAAQS "but for emissions emanating from outside of the United States." *See* 73 Fed. Reg. at 44481. It is not at all clear that a court would allow EPA to use this provision, entitled "International border areas" to excuse every state and county's failure to achieve the NAAQS. If it did, the entire SIP structure would be a dead letter because "but for" international emissions no state could possibly exceed a GHG NAAQS: if no other country emitted CO₂, any state's emissions would disperse around the globe, leaving little trace within its borders. But even if a court approved this strange consequence of treating

CO₂ as a regulated CAA pollutant, EPA would still have to enforce the CAA stringent non-attainment new source requirements. *Id.* As explained below, applying these requirements to GHG emissions, including CO₂, would swamp the agency and bring the economy to a standstill while providing negligible environmental benefits.

B. The Ramifications Of Regulating GHGs Under the PSD Program Demonstrates the Utter Infeasibility of Using the Clean Air Act as a Tool to Address GHG Emissions.

EPA has reviewed at length many of the difficulties and uncertainties that would arise in attempting to regulate GHG emissions through the New Source Review/ Prevention of Significant Deterioration (“NSR”) program. The NAM shares many of EPA’s concerns regarding the pragmatic difficulties in applying NSR to GHG emissions and the effect that NSR would have on the economy. We disagree, however, that EPA can avoid these consequences by creatively “tailoring” the NSR program to reduce its impact. As discussed in more detail below, EPA’s legal theories are deficient as a matter of law and stand significant risk of being rejected by the courts.

1. NSR Overview

The goal of the NSR program is to require state of the art pollution controls at the time of construction or, for existing sources, at the time of a major modification. NSR only applies to regulated air pollutants. Not every air pollutant is regulated. For Title I of the CAA, an air pollutant becomes “regulated” after the Administrator issues an endangerment finding. *See* 42 U.S.C. § 7408(a)(1)(A); 40 C.F.R. § 52.21(b)(50)(i) (defining “Regulated NSR pollutant” to include any pollutant subject to an endangerment finding under CAA § 108). Although the Petitioners in *Massachusetts v. EPA* only sought an endangerment finding for certain GHGs as applied to light duty vehicles, the endangerment finding criteria are virtually identical and an endangerment finding under Title II could trigger an endangerment finding under Title I. The NAM is not aware of any legal justification for finding that carbon dioxide endangers the public health and welfare under Section 202 but not Section 108.

The NSR program applies to any new stationary source emitting a threshold level of regulated air pollutants or a modified source where the modification triggers emission increases above a significance level. 42 U.S.C. § 7479(1); 40 C.F.R. § 52.21(b)(23)(i). For new sources, if the source is a listed source category,¹ it need only have the potential to emit 100 tons of any air pollutant to fall under NSR; unlisted sources must have the potential to emit 250 tons per year of any air pollutant (“100 TPY/ 250 TPY”). 40 C.F.R. Sec. 52.21(b)(23)(i).

EPA has stated that for any unlisted air pollutant, such as carbon dioxide, the significance level is zero. *Id.* § 52.21(b)(23)(ii). For any source with the potential to emit more than zero tons of carbon dioxide, unless EPA sets a higher significance level by regulation, that source will require an NSR permit upon initial construction or any “major modification.” § 52.21(a)(2)(ii); 73 Fed. Reg. at 44498. This means that an endangerment finding for GHGs, either individually or as a group, would trigger NSR for every stationary source—every building, structure, installation or facility—that emits any carbon dioxide or other GHG. *See* 40 C.F.R. § 52.21(b)(5) (defining stationary source). If EPA does regulate GHG emissions under NSR, NAM expects that the Agency will set significance levels as high as possible under

¹ These listed source categories include, by way of examples, fossil-fuel fired electricity generating plants of significant size, kraft pulp mills, Portland Cement plants, iron and steel mill plants, primary aluminum ore reduction plants, municipal incinerators, petroleum refineries, phosphate rock processing plants, coke oven batteries, carbon black plants (furnace process), most smelters, chemical plants, fossil-fuel boilers of significant size and glass fiber process plants. 42 U.S.C. § 7479(1).

42 U.S.C. § 7479(1), which is 100 tons per year for listed source categories and 250 tons per year for all other sources. The Agency appears to share this assumption. See 73 Fed. Reg. at 44500.

2. EPA Grossly Underestimates the Impact of PSD for GHGs.

EPA's estimate that NSR regulation of GHGs would only capture 2,000-3,000 additional sources (73 Fed. Reg. at 44499) is drastically low. EPA's estimate, heavy with caveats regarding uncertainties, is based on a methodology contradictory to NSR regulations. EPA calculated CO₂ emissions based on a "capacity factor," which discounted potential emissions based on actual operations of energy-using equipment. *Id.* at 44498-99 (explaining that a natural gas fired furnace would need only consume fuel at a rate of 0.49 mmBtu/hr to emit 250 tons per year of CO₂, but that "[i]n practice a furnace like this would likely operate far less than year round and its actual emissions would be well below 250 tpy."). Not only is this estimate of a "capacity factor" unreliable due to a lack of information, it is arguably unlawful under NSR, which determines applicability based on a facility's potential-to-emit a pollutant. The potential-to-emit calculation assumes that a new facility operates at maximum capacity around the clock, 365 days a year. 40 C.F.R. § 52.21(b)(4). If EPA applied existing NSR regulations, the number of new sources requiring permits is much higher.

The U.S. Chamber of Commerce released a study in September 2008, Portia M.E. Mills, Mark P. Mills, *A Regulatory Burden: The Compliance Dimension of Regulating CO₂ as a Pollutant* (September 2008) ("Mills study"), which shows a dramatic potential expansion of the scope of the CAA jurisdiction posed by GHG regulation under the CAA. The Mills study analyzes data from the U.S. Census Bureau and Energy Information Administration data to draw its conclusions. It shows, for example, that triggering existing emission thresholds for operating and preconstruction permits such as Title V and Prevention of Significant Deterioration (PSD), among others, would result in the regulation of approximately 200,000 manufacturing facilities nationwide. That number would increase to more than one million regulated entities economy-wide, according to the study. The report also states that any source or facility using more than \$70,000 per year of natural gas or oil "for stationary equipment" would easily fall within the purview of a PSD permit. The Mills study concluded that over a million businesses actually emit 250 tons of carbon dioxide or more per year. This is based on the sources' actual CO₂ emissions, not the potential to emit, as required by NSR, meaning that the Mills Study actually underestimates the number of businesses that would require NSR permits. Additionally, the Mills Study does not consider GHGs other than carbon dioxide. EPA requested comment on whether there are large categories of sources for GHGs other than CO₂ (73 Fed. Reg. at 44499). According to EPA's most recent GHG inventory, several industries emit compounds with a high global warming potential, relative to carbon dioxide. See EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006* at ES-5 to ES-5,6 (Apr. 15, 2008) ("2008 GHG Inventory"). Should EPA choose to regulate all GHGs on a carbon dioxide-equivalent basis ("CO₂E"), the NSR program could capture even more sources. See 73 Fed. Reg. at 44505 (considering the use of CO₂E emissions for the NSR program).² For example, semi-conductor manufacturers are not large emitters of carbon dioxide, but do emit small quantities of hydrofluorocarbons ("HFCs"), perfluorocarbons ("PFCs") and sulfur hexafluoride. See 2008 GHG

² EPA is also considering designation of "Carbon Equivalent" ("CE") as the NSR pollutant to be regulated. 73 Fed. Reg. at 44505. Under a CE metric, sources could emit 917 tons of CO₂ before reaching a CE threshold of 250 tons. *Id.* If EPA is intent on regulating GHGs under the NSR program, NAM believes that using CE is preferable to CO₂E and more defensible than EPA's "tailoring" approaches, discussed below. Although NAM agrees that this "approach would likely result in fewer sources being added to the PSD program for GHGs," *id.*, the actual number of newly regulated sources can not be known without further study.

Inventory at ES-6. Under a CO₂E basis, if a semi-conductor manufacturer emits just 77 pounds of tetrafluoromethane (“CF₄”), it will require an NSR permit.³

3. Triggering PSD in Turn could Trigger NAAQS Ramifications.

It is virtually impossible to separate the NSR program from the National Ambient Air Quality Standards (“NAAQS”) under 42 U.S.C. § 7408. The stringency of regulation under the NSR program depends entirely on whether EPA sets a NAAQS and whether EPA classifies the area where a stationary source is located as attainment or non-attainment for a specific air pollutant. If the area is designated as being in attainment, or where there is no NAAQS set for the regulated pollutant, then new and modified sources must install the Best Available Control Technology (“BACT”). 42 U.S.C. §§ 7475(a); 40 C.F.R. § 52.21(b)(12). If the area is designated as non-attainment, then new and modified sources would have to install control technologies achieving the Lowest Achievable Emission Rate (“LAER”). Given the global nature of GHG emissions, if EPA were to set a NAAQS for GHGs, EPA would either designate the entire country as being in attainment or non-attainment. There would be no rational reason to differentiate between different areas of the country for designation purposes. As explained below, however, regardless of EPA’s attainment designation, GHG regulation under NSR would be administratively unwieldy, economically harmful and wholly ineffective in reducing global GHG levels.

4. A NSR Permitting Program for GHGs Is Unfeasible and Unrealistic.

The NSR program is renowned for its delays, expense and subjecting covered stationary sources to litigation exposure. A review of 391 NSR/ PSD permits issued between 1997 and early 2001 found that permit application processing time averaged 7.2 months, from the permitting agency’s receipt of the application until the issuance of the final permit. EPA, NSR 90-Day Review Background Paper at 7 (June 22, 2001) (available at www.epa.gov/oar/nsr/documents/nsr-review.pdf “NSR 90-Day Review”). The 7.2 month figure is not a reliable estimate of when a covered stationary source can expect a final permit. According to EPA’s study, permit processing times have a wide range, extending from 1.6 months to 35 months. *Id.* Nor does this estimate include the time required to hire consultants and lawyers to determine NSR applicability, prepare an application, wait for the permitting agency to issue a completeness determination and defend against administrative and judicial appeals once the final permit is issued.

The NSR process is also very expensive. Permit application fees can exceed \$15,000 with the cost of preparing an application, complete with site drawings and other technical information, in excess of \$50,000. Air quality modeling can range from \$75,000-\$300,000. If air monitoring near the site is already available, the source may have to compile its own monitoring information, at a cost of \$50,000 - \$75,000. And, if the site or modification is proposed in a non-attainment area, the required offsets can routinely exceed \$500,000. None of these estimates include additional fees for attorneys and consultants which can range into the hundreds of thousands of dollars, or the cost of whatever pollution controls the permitting agency requires as BACT or LAER.

As it currently exists, the permitting process is described as “an extremely complex and time-consuming process” and the “financial impacts from permitting (including NSR) can change the economic feasibility of the project.” NSR 90-Day Review at 11. This assessment, and the accompanying cost and time estimates, however, exist only under the NSR program as it is currently implemented. If EPA regulates GHGs under the NSR program, none of these estimates will apply. The crush of new permit applications will inevitably slow the application review process to a near halt. Each permit

³ See 2008 GHG Inventory at ES-3 (tetrafluoromethane has a global warming potential 6,500 times that of carbon dioxide).

requires a case-by-case review, a public hearing and the receipt and review of public comments on the proposed permit. This would not just be an initial wave of new applications that permitting agencies could endure for a few years; with an increase in newly regulated sources would also come an increase in applications associated with major modifications to existing sources. As EPA noted in the ANPR, due to the nature of GHG emissions, “[r]elatively small changes in energy use that cause criteria pollutant emissions too small to trigger PSD would newly trigger PSD at such facilities because such changes would likely result in greater CO₂ increases.” 73 Fed. Reg. at 44499. As an example, EPA noted that a 500 MW power plant will exceed its 100 TPY threshold by just 10 extra minutes of operation. *Id.* For manufacturers and other newly regulated GHG sources, even relatively small changes would trigger the obligation for a new NSR permit application. Given this consistent volume of modification-related permit applications, there is simply no conceivable way that permitting agencies could comply with the CAA’s mandate to issue or deny a final permit within one year after receiving a completed application. 42 U.S.C. § 7475(c).

Under an NSR program that regulates GHGs, the delay, cost and uncertainty would likely give many small- and mid-sized manufacturers little choice but to forego the construction of new sources or expansions for existing sources, including projects that would improve energy efficiency. Significant delays will hinder their ability to obtain financing for new projects. Even where financing is successfully obtained, source owners must sit idly by incurring interest on loans and tying up their own capital dedicated to the proposed project until a final permit is issued (assuming there is no subsequent appeal). Expanding NSR to cover GHG emissions, based on the 100 TPY/ 250 TPY threshold will severely disable the ability of small and mid-sized manufacturers to expand or change their operations to accommodate increased demand for their products or shift the processes away from products subject to declining demand. This will further disadvantage American businesses in an increasingly globalized economy and inevitably result in lost jobs and diminishing investments in America’s industrial infrastructure.

5. A NSR Permitting Program for GHGs Will not Improve the Environment

Regulating GHGs, either separately or individually, would be largely ineffective under NSR. First, the designation of any specific area or the entire country as attainment or non-attainment would be pointless, given the global, homogenized nature of GHG ambient levels. Second, if EPA opted to designate any area or the country as a whole as a non-attainment area, stationary source adherence to LAER would be incredibly disruptive to the economy.

NSR requires BACT where the source is located in an area that EPA designates to be in attainment with the NAAQS for any specific pollutant. If the area is non-attainment, then the LAER standard applies. The NAAQS program was designed for controlling air pollutant emissions in localized areas. This has no application to GHG emissions, which are evenly distributed throughout the world. Setting a GHG NAAQS where the entire country is in attainment would do little to reduce emissions. Where areas are already in attainment, making local stationary sources subject to Prevention of Significant Deterioration (“PSD”) standards, states might choose the PSD program to be the only measure to prevent nonattainment but such reliance on PSD will fail to prevent nonattainment while imposing very serious impacts on business, state resources, and the economy. In light of evidence that reliance merely on PSD to prevent nonattainment will fail, as the concentration of GHGs in the atmosphere increases, states would be compelled to implement additional measures to demonstrate that they will not fail to maintain compliance with the NAAQS.

Each stationary source applying for a PSD permit must conduct increment modeling to determine if its proposed construction or modification would cause or contribute to a NAAQS violation. This type of modeling, required under 42 U.S.C. § 7475(a)(3), and the related analysis of increment consumption,

should have no meaning for a GHG NAAQS. As both EPA and the Department of the Interior concluded in memoranda issued on October 3, 2008, current modeling capabilities can not determine a single, identifiable source's contribution to the aggregate global concentration of climate change.⁴ EPA declined to "address in detail" these requirements. The Agency should explain whether or not it would require stationary sources to expend significant amounts of money to perform meaningless modeling of GHG emissions, as required by CAA § 165(a)(3). If not, the Agency should explain how it can relieve stationary sources of this statutory obligation without legislative amendment.

Lastly, EPA has not explained what would constitute BACT or LAER for GHG emissions under the NSR program, referencing only the possibility of future innovations. *See* 73 Fed. Reg. at 44501 (PSD "might result in ... CO₂ reducing technologies, such as more efficient combustion processes.")⁵ BACT requires the permitting agency to perform a collateral impact analysis considering the "energy, environmental and economic impacts" of the selected control technology. *Id.* EPA guidance interprets this collateral impact analysis to require a review of the cost effectiveness (cost per ton of pollutant reduced) and an incremental cost effectiveness basis (cost per ton of pollutant reduced compared to the next most stringent control option). Draft NSR Review Workshop Manual (1990) at B.31, B.41-45. In its example BACT analysis, the Draft NSR Review Workshop Manual advises permitting authorities that a cost effectiveness of \$6,600 per ton removed and an incremental cost effectiveness of \$56,200 is "economically infeasible." *Id.* at B.68; see also *In re Genesee Power Station*, PSD Appeal Nos. 93-1 – 93.7 at 19 (EAB Oct. 22, 1993) (it is not cost-effective to require \$5 million in pollution controls to reduce particulate matter emissions by 23 tons per year); *In re Inter-Power of New York, Inc.*, 5 E.A.D. 130, 148 (EAB 1994) (upholding permitting agency's decision not require low sulfur coal at a cost of \$4,000-\$6,000 per ton of SO₂ removed).

This leaves energy efficiency standards as the only practical control technology under BACT. *See* 73 Fed. Reg. at 44,509 (even where add on controls become available, "the focus of presumptive BACT for CO₂ would likely be on energy efficiency standards for the installed equipment"). Owners of new stationary sources already have ample economic incentives to incorporate energy efficiencies into new manufacturing facilities. Thus, BACT for new sources would simply compel what is already undertaken on a voluntary basis, but with the addition of onerous permitting, recordkeeping, monitoring and reporting requirements—all subject to stiff penalties for non-compliance. For what would be "modified sources," owners would incorporate energy efficiency upgrades when feasible or affordable. NSR, however, would compel these upgrades unless they are deemed egregiously expensive under a BACT collateral impact review. In this case, newly regulated stationary sources would likely behave like those currently regulated—avoiding major modifications, including expansions and manufacturing process changes, in order to avoid the additional cost of permitting and delays associated with permitting.

⁴ EPA requested comments on the implications of GHG regulation on NSR requirements to consult with Federal Land Managers, assess the potential impact of proposed new sources or major modifications on Air Quality Related Values for Class I Areas and the potential impairment of soils and vegetation. 73 Fed. Reg. at 44498. To the extent that GHG emissions would have any impact, they would be measured through modeling. Without modeling programs capable of determining single source contributions, no applicant could comply with these requirements.

⁵ EPA claims that BACT "would likely involve decisions on how proposed installations of equipment and processes for a specific source category can be redesigned to make those sources more energy efficient while taking cost considerations into account." 73 Fed. Reg. at 44502. Manufacturers already have ample cost-savings incentives to find as many affordable energy efficiencies as possible. *See, e.g.,* Mark Schipper, Energy-Related Carbon Dioxide Emissions in U.S. Manufacturing at 9-10 (EIA Nov. 2006) (energy intensity for most manufacturers declined between 1991 and 2002 despite increases in gross manufacturing output). NAM is skeptical that EPA engineers could make better decisions in designing more energy efficient and cost-effective equipment and processes than those who are actually working in the manufacturing sector.

Should EPA opt to designate the United States as a non-attainment area for GHGs, regulation under nonattainment NSR would not only be ineffective, as it would be under a BACT standard, but even more certain to be economically destructive. When an area is designated as non-attainment, all sources are subject to a 100 TPY threshold. New or modified stationary sources must install LAER controls, and emission offsets to actually reduce emissions and bring the area closer to attainment. LAER does not consider costs.

6. EPA's Proposals for "Tailoring" Existing NSR Requirements Are Not Likely to Prevail.

The NAM appreciates that EPA largely recognizes many of the NSR program's structural deficiencies in reducing GHG emissions. We disagree, however, with EPA's optimism that, through creative legal "tailoring" and interpretation, it can mitigate the destructive consequences of NSR regulation or streamline the more onerous aspects of the permit process. See 73 Fed. Reg. at 44501 ("unless there are ways to effectively streamline BACT determinations and permitting for smaller sources ... BACT would not appear to be an efficient regulatory approach ..."). Many of the potential legal constructions have either failed in the past or are likely to fail when reviewed by a court.

C. EPA Must Consider Acting Under Section 115 Prior to Proceeding Under Other Provisions.

EPA has invited comment on alternative approaches to an endangerment finding under Section 202. Section 115 of the Act - which addresses international air pollution - is an obvious candidate. Yet, EPA has largely ignored Section 115, devoting just a few paragraphs to it in the ANPR.

Section 115 provides EPA with authority to address pollutants emitted in the United States that endanger public health or welfare in other countries. 42 U.S.C. § 7415. Section 115 thus has much more obvious application to GHGs than the Act's other provisions. GHGs are truly global pollutants with international ramifications. Because GHGs emitted in the United States "become well mixed throughout the global atmosphere," they "affect climate everywhere in the world." ANPR, 73 Fed. Reg. 44401. The apparent fit between Section 115 and GHGs means that EPA must consider and explain why EPA would act under other provisions of the Act instead.

EPA should consider acting under Section 115 for the additional reason that the provision may provide EPA with unique flexibility to address GHGs without triggering the cascade of mandatory and ill-advised regulations under the Act's other provisions. Because Section 115's endangerment determination focuses on the pollutant's effect in other countries, it differs fundamentally from the endangerment determination of other CAA provisions, which focus on effects in the United States. Further, the burden of proof for Section 115—which can rely on "reports, surveys or studies from any duly constituted international agency," 42 U.S.C. § 7415(a)—is lower than the endangerment determination in Section 202 and other Clean Air Act provisions, which require an independent assessment and record by EPA. EPA may therefore have room to make an endangerment finding under Section 115 without being forced to make endangerment findings under other CAA provisions. As explained above, *Massachusetts v. EPA* left EPA with discretion not to make an endangerment determination under Section 202. Opting to follow Section 115's alternative, better-suited regulatory approach would be a valid reason to one reason to exercise that discretion.

Another practical advantage of Section 115 is that resulting emission controls arguably are not "regulations under the Act," and therefore would not trigger NSR permitting requirements. This is because Section 115 uniquely does not obligate EPA to issue any federal control standards. Instead, Section 115 requires EPA only to give States notice of the endangerment finding, which automatically constitutes a "finding under Section 110(a)(2)(H)(ii)." 42 U.S.C. § 7415(b). That provision, in turn,

requires States to revise their SIPs in order to attain a NAAQS or “to otherwise comply with any additional requirements established under [the CAA].” Because of the second clause in that Section (“or to otherwise comply . . .”), it appears that EPA would give notice under Section 115 even in the absence of a NAAQS relating to GHGs. Arguably, then, Section 115 permits EPA to coordinate state efforts to regulate GHGs through their SIPs without EPA having to issue any particular federal requirement controlling GHG emissions under the Act.

Based on that reading, state regulations of GHGs triggered by Section 115 would not render GHGs “subject to regulation under the Act” for purposes of the “regulated NSR pollutant” definition. 40 C.F.R. § 52.50(b)(50). As EPA has previously explained regulation of a pollutant under a SIP alone does not make a pollutant subject to regulation under the Act.⁶

Both because the plain text of Section 115 more naturally applies to GHGs than do other provisions of the Act, and because Section 115 offers the possibility of requiring some GHG regulation without triggering the cascade of other CAA regulatory mechanisms, EPA has a responsibility to consider and explain whether to act under Section 115 rather than Section 202.

V. THE PROPOSAL HAS NOT OFFERED A SUFFICIENT BASIS FOR, AND INDEED THERE IS NO SUFFICIENT BASIS FOR, A DETERMINATION THAT PUBLIC HEALTH IS ENDANGERED.

EPA’s proposal to find that GHG emissions endanger public health based solely on indirect effects of climate change is inconsistent with the CAA’s text and legislative history, as well as established EPA practice. *See* 74 Fed. Reg. 18,901-02. Since EPA has concluded that exposure to current and projected levels of ambient GHG concentrations will cause *no* direct adverse health impacts, EPA cannot properly find that GHG emissions may endanger public health.

A. The Clean Air Act Defines Impacts From Climate and Weather As “Welfare” Effects, Not Health Effects.

The CAA, including Section 202(a)(1), requires EPA to consider endangerment of public health separately from endangerment of public welfare. The Proposal collapses those categories by failing to heed the Act’s requirement to consider climate and weather change as effects on welfare and not on public health.

While the Act does not provide a definition of public health, Section 302(h) of the Act addresses the meaning of “welfare”:

All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, *weather*, visibility, and *climate*, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.

42 U.S.C. § 7602(h) (emphasis added). Thus, Congress has instructed that effects on weather and climate are to be considered as potentially endangering welfare – not human health. Congress surely knew that

⁶ Stephen L. Johnson, Administrator, U.S. EPA, EPA’s Interpretation of Regulations That Determine Pollutants Covered By Federal Prevention of Significant Deterioration (PSD) Permit Program (Dec. 18, 2008), at 14, notice published at 73 Fed. Reg. 80,300 (Dec. 31, 2008).

weather and climatic events such as flooding and heat waves could affect human health, but Congress nonetheless classified air pollutants' effects on weather and climate as effects on welfare.

Other sections of the CAA confirm that “public health” effects encompass only health effects resulting directly from exposure to the pollutants in question. For example, CAA Section 103 requires EPA to conduct research on the “health effects” of air pollutants in that the Administrator must consider the “risks to human health from both routine and accidental exposures to” air pollutants. 42 U.S.C. § 7403(d). The required research on “health effects” clearly focuses on effects from direct exposure to the pollutant. *E.g., id.* § 7403(d)(2)(C)(i) (requiring preparation of “health assessments” for hazardous air pollutants that include evaluation of “toxicological and epidemiological information for the pollutant to ascertain the levels of human exposure which pose a significant threat to human health and the associated acute, subacute, and chronic adverse health effects”). Similarly, CAA Section 112 discusses “human health effects” as those resulting from “inhalation or other routes of exposure.” 42 U.S.C. § 7412(b)(2).

B. The Clean Air Act’s Legislative History Confirms That “Public Health” Effects Include Only Impacts From Direct Exposure.

The legislative history of Section 302(h)’s welfare definition and the related Section 109, which calls for primary and secondary NAAQS, show that Congress intended “public health” effects to include only direct effects of exposure to a pollutant.

In 1970, Congress expanded the prior list of “adverse effects on welfare” to include the effects on “soil, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate,” as well as effects on “economic values” and “personal comfort and well-being.” *See* 1970 Legis. Hist. 1543, 1571 (quoting Clean Air Act § 302(g)). That expanded list of welfare effects accompanied Section 109’s creation of a primary NAAQS—which focuses on public health—and a secondary NAAQS—which focuses on public welfare.

Crucially, the bill sponsors described the primary NAAQS (then called the “standard”) as tied to *direct* health effects, while describing the secondary NAAQS (then called the “goal”) as encompassing effects on health, but only *indirectly* along with effects on welfare. *See* Sen. Debate (Sept. 21, 1970), 1970 Leg. Hist. 227 (statement of Sen. Muskie) (describing the “standard” as forcing the “air quality [to] be better than that level of quality which protects health. Anybody in the Nation ought to be able at some specific point in the future to *breathe healthy air*”; in contrast, the “goal” would be “protective against any known or anticipated adverse environmental effects”); *id.* at 260 (statement of Sen. Cooper) (“National air quality goals, as distinguished from standards, goals protective of public welfare as well as health . . . would also be established”). Thus, Congress understood that welfare effects could have indirect health effects, through changes in climate or weather, but Congress intended “health effects,” as such, to encompass only direct effects of exposure to pollutants. *See* S. Rep. No. 91-1196 (1970), at 11 (noting that national “standards” would “protect[] . . . health,” while national “goals” would protect “public health and welfare from . . . effects on soils, water, vegetation, . . . climate . . .”).

C. EPA Has Traditionally Limited “Health Effects” to Effects of Direct Exposure.

Given the CAA’s text and legislative history, it is not surprising that EPA has historically treated “health impacts” as encompassing only health impacts from exposure to air pollution. EPA’s current proposal thus represents a radical break from that practice – a change not supported by adequate explanation.

Importantly, EPA treated climate change as a welfare effect, and not as a health effect, in the endangerment finding under Section 111 when EPA listed municipal solid waste landfills as a source

category. Standards of Performance for New Municipal Solid Waste Landfills, 56 Fed. Reg. 24469 (May 30, 1991). Specifically, EPA identified global climate change, along with such effects as reduced plant growth and decreased crop yield, as an effect on public welfare. The current EPA proposal thus represents a change in position without articulating a rationale for such a significant change.

Further, EPA has consistently considered only direct effects as health effects when setting or reviewing the primary and secondary NAAQS. In 1995, EPA reviewed the NO₂ NAAQS and identified public health effects as lung cell injury, death, increased susceptibility to respiratory illness in children, pulmonary adema, and increased airway resistance in asthmatics. *See* Review of the National Ambient Air Quality Standards for Nitrogen Dioxide, Assessment of Technical and Scientific Information, US EPA (September 1995). In contrast, EPA identified “welfare effects” as impacts to ecosystems, including adverse effects to vegetation, wetlands, aquatic systems, soil, and toxicity to wildlife, and impacts to visibility and man-made materials. *Id.*

Additionally, courts have affirmed EPA’s past decisions to limit “health effects” to direct impacts on human health. In *NRDC v. EPA*, the D.C. Circuit rejected the argument that, in setting a primary NAAQS, EPA must consider the health effects of increased unemployment that could result from a more stringent standard. 902 F.2d 962, 973 (D.C. Cir. 1990). The Court explained that, “[i]t is only the health effects relating to pollutants in the air that EPA may consider.” *Id.* EPA later relied on that holding to defend its decision to set a primary NAAQS for ozone based solely on direct health effects of ozone. *See* EPA Pet’n for Rehearing, *Am. Trucking Ass’n v. EPA*, No. 97-1440 (D.C. Cir. June 28, 1999) (arguing that the primary NAAQS should be set through consideration of only “direct adverse effects on public health, and not indirect, allegedly beneficial effects”).

EPA fully acknowledges that exposure to GHGs poses no direct health impacts. 74 Fed. Reg. 18901. As such, GHGs cannot be found to endanger public health, given the Act’s text and legislative history, and past Agency practice. We therefore urge EPA to withdraw its proposed finding that GHGs cause or contribute to air pollution which may reasonably be anticipated to endanger public health.

VI. THE ADMINISTRATOR’S POWER TO MAKE AN ENDANGERMENT FINDING ONLY EXTENDS TO POLLUTANTS EMITTED BY MOTOR VEHICLES

The Administrator’s proposal to find endangerment for two pollutants that are not emitted by motor vehicles is flawed. The Administrator has consistently maintained that the sole authority supporting an endangerment finding is CAA § 202. And, the Supreme Court has stated – and EPA itself has recognized – that the endangerment determination must be grounded in the requirements of section 202(a). 74 FR 18889. Thus, the proposal’s section on “Statutory Basis for this Proposal” begins:

Section 202(a)(1) of the CAA states that “The Administrator shall by regulation prescribe (and from time to time revise) * * * standards applicable to the emission of *any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines*, which in [her] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.”

74 Fed. Reg. 18888 (emphasis added). Therefore, the Administrator’s statutory basis to make an endangerment finding is limited to a pollutant from new motor vehicles, or their engines. Yet, the proposed endangerment finding purports to apply to two pollutants that are not emitted by *any* motor vehicles: perfluorocarbons and sulfur hexafluoride. 73 Fed. Reg. at 44431. This constitutes an extension of the endangerment finding to an area that is divorced from the requirements from section 202(a).

Indeed, EPA is incapable of promulgating any regulations under section 202 that will affect the two pollutants not emitted by motor vehicles, since regulations under 202 only can address emissions from new motor vehicles.

The Administrator does not offer any basis for flouting the statutory language. Instead, she asserts: “it is entirely appropriate for the Administrator to define the air pollutant in a manner that recognizes the shared relevant properties of all of these six gases, even though they are not all emitted from the source category before her.” 74 Fed. Reg. at 18904. She analogizes this category of six GHGs to Volatile Organic Compounds (VOCs), which is a category of criteria pollutants. But this misses the point. Whether or not any individual source emits all the VOCs, the endangerment finding for VOCs only applies to compounds that are emitted by *some* source subject to the endangerment finding. There is no basis in EPA’s past actions for directly contradicting the statutory limitation to pollutants “from any class or classes of new motor vehicles or new motor vehicle engines.”

VII. EPA SHOULD RECOGNIZE THE ADDITIONAL DISCRETION GRANTED IT IN CONSIDERING ANY NEW SOURCE PERFORMANCE STANDARD (NSPS) ENDANGERMENT FINDINGS

As the Administrator continues considering an endangerment finding, she should keep in mind that CAA § 202 presents a particular endangerment question that differs from the endangerment question under CAA § 111’s NSPS program in at least three ways. First, the endangerment question for the NSPS program is whether a “category of sources . . . causes, or contributes *significantly* to, air pollution which may reasonably be anticipated to endanger public health or welfare.” CAA § 111(b) (emphasis added). The NSPS question thus requires a heightened standard of causation. In considering regulation of stationary sources through NSPS, EPA must give effect to the Congress’ direction that an endangerment finding is only appropriate when a category of sources “significantly” contributes to dangerous air pollution. That word, which is absent from the § 202 provision, must be heeded because “Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.” *Russello v. United States*, 464 U.S. 16, 23 (1983).

Second, the NSPS provision differs from the CAA § 202 provision in that it allows the Administrator to determine the category of sources that it applies to, rather than specifying a particular category. The NSPS endangerment question focuses on dangers posed by categories of sources, not specific air pollutants. Even if the Administrator makes an endangerment finding for GHGs under § 202, that decision would not determine whether any source emits GHGs in a manner that warrants regulation under CAA § 111(b).

Finally and crucially, the NSPS program gives the Administrator discretion to decide which air pollutants to regulate in any given source category. Section 111(b)(1)(B) places two requirements on EPA for each source category listed under Section 111(b)(1)(A). First, after listing a source category and undergoing notice-and-comment procedures, the Administrator must promulgate “such standards” as the Administrator “deems appropriate.” 42 U.S.C. § 7411(b)(1)(B). Both EPA and courts have interpreted the “deems appropriate” language as vesting EPA with “significant flexibility in determining which pollutants are appropriate for regulation under section 111(b)(1)(B).” 73 Fed. Reg. at 35858 (citing *National Lime Assoc. v. EPA*, 627 F.2d 416, 426 (D.C. Cir. 1980) (explaining reasons for not promulgating standards for NOX, SO2, and CO from lime plants).

Then, every eight years, EPA must review and, if appropriate, revise an NSPS that has been established. 42 U.S.C. § 7411(b)(1)(B). As EPA has explained, that requirement does not require EPA to include an NSPS “for an air pollutant not already covered by the standard of performance under review.” 73 Fed. Reg. at 35858. That conclusion follows directly from the text of Section 111, which requires the 8-year review to encompass only the standards previously promulgated. *Id.* at 35859.

Further, even if Section 111(b)(1)(B)’s eight-year review required promulgation of new standards, it would not follow that EPA must set performance standards for all air pollutants emitted by the source category. *See* 73 Fed. Reg. at 35859. Indeed, in 1990, Congress specifically modified the definition of “standard of performance” to clarify that it does not require EPA to cover all air pollutants emitted from a source category. *See id.* (noting deletion of word “any” from pre-1990 version of CAA § 111(a)(1)’s definition of “standard of performance” as meaning “a standard for emissions of *any* air pollutant”).

Given the text of the Act and EPA’s consistent interpretations, EPA should not rush to develop NSPS standards if it finalizes the endangerment finding for GHGs under CAA § 202 and *not* compel EPA to develop performance standards for GHGs under CAA § 111. Moreover, as EPA explained in declining to develop a GHG performance standard for oil refineries, there are good reasons why EPA would not *choose* to do so. An NSPS for GHGs could trigger other regulatory requirements under the Act, including the NSR program. And, because any NSPS rulemaking accounts for a single source category, it is not an effective means of addressing so complex an issue as GHG emissions. Nonetheless, some may argue that EPA must and should GHG promulgate performance standards under CAA § 111 if it finalizes an endangerment finding for GHGs under CAA § 202. To prevent confusion and uncertainty on that point, if EPA does finalize an endangerment finding under CAA § 202, EPA should clarify that such action neither compels nor counsels in favor of developing GHG performance standards under CAA § 111.

Conclusion

The NAM is willing to engage in a constructive dialogue with policy makers regarding a new and modern, comprehensive framework with which to address the challenges posed by GHG emissions. As outlined above, the NAM urges EPA to avert a positive endangerment determination before examining the economic and regulatory consequences of its proposed action. Such action will precipitate an avalanche of rulemakings for GHG emissions that will prolong the current economic pain being born by U.S. workers and their families, swamp federal and state regulators, and do nothing to improve environmental quality. In fact, an endangerment determination would actually undermine the industrial sector’s ability to develop and implement the next generation of energy technologies that will be necessary to deal effectively with GHG emissions. The NAM and its 11,000 member companies look forward to working with federal policy makers to offer their insights and technical expertise to develop programs that will accomplish real environmental objectives in an efficient and rational manner, based on new technologies and new ideas. Attempting to address the emerging challenges posed by GHG emissions by means of the Clean Air Act, a statute which has been amended over the past three decades and remains the source of persistent litigation and counter-regulation will not accomplish these objectives.