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Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act:

EPA's Response to Public Comments

Volume 11: Miscellaneous Legal, Procedural, and Other Comments

Miscellaneous Legal, Procedural, and Other Comments

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Office of Atmospheric Programs
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Washington, D.C.**

FOREWORD

This document provides responses to public comments on the U.S. Environmental Protection Agency's (EPA's) Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, published at 74 FR 18886 (April 24, 2009). EPA received comments on these Proposed Findings via mail, e-mail, and facsimile, and at two public hearings held in Arlington, Virginia, and Seattle, Washington, in May 2009. Copies of all comment letters submitted and transcripts of the public hearings are available at the EPA Docket Center Public Reading Room, or electronically through <http://www.regulations.gov> by searching Docket ID *EPA-HQ-OAR-2009-0171*.

This document accompanies the Administrator's final Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act (Findings) and the Technical Support Document (TSD), which contains the underlying science and greenhouse gas emissions data.

EPA prepared this document in multiple volumes, with each volume focusing on a different broad category of comments on the Proposed Findings. This volume of the document provides responses to public comments regarding miscellaneous legal, procedural, and other matters.

In light of the very large number of comments received and the significant overlap between many comments, this document does not respond to each comment individually. Rather, EPA summarized and provided a single response to each significant argument, assertion, and question contained within the totality of comments. Within each comment summary, EPA provides in parentheses one or more lists of Docket ID numbers for commenters who raised particular issues; however, these lists are not meant to be exhaustive and EPA does not individually identify each and every commenter who made a certain point in all instances, particularly in cases where multiple commenters expressed essentially identical arguments.

Several commenters provided additional scientific literature to support their arguments. EPA's general approach for taking such literature into consideration is described in Volume 1, Section 1.1, of this Response to Comments document. As with the comments, there was overlap in the literature received. EPA identified the relevant literature related to the significant comments, and responded to the significant issues raised in the literature. EPA does not individually identify each and every piece of literature (submitted or incorporated by reference) that made a certain point in all instances.

Throughout this document, we provide a list of references at the end of each volume for additional literature cited by EPA in our responses; however, we do not repeat the full citations of literature cited in the TSD.

EPA's responses to comments are generally provided immediately following each comment summary. In some cases, EPA has discussed responses to specific comments or groups of similar comments in the Findings. In such cases, EPA references the Findings rather than repeating those responses in this document.

Comments were assigned to specific volumes of this Response to Comments document based on an assessment of the principal subject of the comment; however, some comments inevitably overlap multiple subject areas. For this reason, EPA encourages the public to read the other volumes of this document relevant to their interests.

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Acronyms and Abbreviations

ANPR	Advanced Notice of Proposed Rulemaking
APA	Administrative Procedure Act
BACT	Best Available Control Technology
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CASAC	Clean Air Scientific Advisory Committee
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CO ₂	carbon dioxide
DOT	Department of Transportation
E.O.	Executive Order
EPA	U.S. Environmental Protection Agency
EIS	Environmental Impact Statement
FOIA	Freedom of Information Act
GHG	greenhouse gas
HFC	hydrofluorocarbon
HOV	high-occupancy vehicle
ICTA	International Center for Technology Assessment
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
OMB	Office of Management and Budget
PM	particulate matter
RCRA	Resource Conservation and Recovery Act
RFA	Regulatory Flexibility Act
SBREFA	Small Business Regulatory Enforcement Fairness Act
SIP	State Implementation Plans
TSCA	Toxic Substances Control Act
TSD	Technical Support Document

11.0 Miscellaneous Legal, Procedural and Other Comments

11.1 Public Notice and Comment Period

Comment (11-1):

Many commenters (e.g., 1928.1, 1960.1, 3012, 3197, 3257, 3258, 3325.1, 3394.1, 3411.1, 3452.1, 3476.1, 3556.1, 3576.1, 3576.2, 3681.1, 3749, 3892.1, 3913, 3914, 3916, 3964, 3989, 4003, 4112, 4508, 4932.1, 9528, 10965) argue that the 60-day comment period was inadequate. Commenters claim that a 60-day period was insufficient time to fully evaluate the science and other information that informed the Administrator's determination. Some commenters (3452.1, 3596.1) assert that because the comment period for the Proposed Finding substantially overlapped with the comment period for the Mandatory Greenhouse Gas (GHG) Reporting Rule, as well as Congress' consideration of climate legislation, their ability to fully participate in the notice and comment period was "seriously compromised." Moreover, they continue, because the U.S. Environmental Protection Agency (EPA) had not yet proposed Section 202(a) standards, there was no valid reason to fail to extend the comment period. Many commenters (e.g., 1928.1, 1960.1, 3012, 3197, 3257, 3258, 3556.1, 3576.1, 3576.2, 3749, 3892.1, 3913, 4170, 10965, 11466.1) and other entities had also requested that EPA extend the comment period.

A few commenters (3679.1, 3769.1) assert that the notice provided by this rulemaking was "defective" because the *Federal Register* notice announcing the proposal had an error in the e-mail address for the docket. One commenter (3679.1) suggests that this error deprives potential commenters of their Due Process under the Fifth Amendment of the Constitution, citing *Armstrong v. Manzo*, 380 U.S. 545, 552 (1965).

Finally, for many of the same reasons that commenters argue a 60-day comment period was inadequate, several commenters (3012, 4170) request that EPA reopen and/or extend the comment period. Other commenters (4932.1, 11466.1) request that the comment period be reopened because they allege that there was new information regarding data used by EPA in the Proposed Findings. In particular, one commenter (11466.1) states that the commenter recently became aware that one of the sources of global climate data had allegedly destroyed the raw data for its data set of global surface temperatures. The commenter argues that this alleged destruction of raw data violates scientific standards, calls into question EPA's reliance on that data in these findings, and necessitates a reopening of the proceedings. Some commenters (e.g., 11460) state that EPA should re-open its proceeding so that the public can review the Carlin document that was developed by Alan Carlin in EPA's National Center for Environmental Economics. Another commenter (4932.1) requests that the comment period be extended and/or reopened due to the release of a federal government document on the impact of climate change in the United States near the end of the comment period, as well as the release of an internal EPA staff document discussing the science.

Response (11-1):

See the Findings, Section I.C., "Public Involvement," for our response to comments regarding the public notice and comment period. See also our responses to comments in this volume and other volumes of the Response to Comments document regarding the Carlin document.

Comment (11-2):

EPA received several comments after the close of the comment period, which provided additional information for EPA's consideration and/or requested that EPA reopen the comment period.

Response (11-2):

To the extent practicable, EPA carefully reviewed and addressed late comments. However, comments that were received well after the close of the comment period were not considered. For example, one commenter (11536) submitted more than 30 additional scientific and other references on November 20, 2009. These extremely late comments, some of which were submitted five months after the close of the comment period and a few weeks before the Administrator signed the final Findings, were submitted too late for the Administrator to fully consider them. Like many fields of science, climate change is a very active area of research, where new studies are published on a regular basis. No matter when the Administrator issued her final Findings, studies would be available shortly before and after the decision. It is reasonable for the Administrator to base her decision on the robust scientific record before her at this time. Nevertheless, EPA was able to review and address some of the very late literature in the Response to Comments document and we note that other are very similar to comments or groups of comments (in some cases with supporting literature) that were received on time and to which we have responded.

On December 2, 2009, another commenter (11537) submitted a supplement to an October 5th petition asking EPA to reopen the comment period in light of what they alleged was new information. This commenter claims that the recent disclosure of hacked e-mail messages and documents from the Climate Research Unit (CRU) of East Anglia University in the United Kingdom undermines the Intergovernmental Panel on Climate Change (IPCC) science and assessment process upon which the Technical Support Document (TSD) and the Findings primarily rely.

From our review, it appears that the scientific issues raised in the e-mails were also raised in public comments. In fact, we believe that the public comments submitted on our Proposed Findings are more comprehensive than the discussions of the issues in the e-mails because many commenters expended considerable effort to describe their point of view and concerns to us, and several also provided supporting literature and data. In preparing the Finding, EPA has addressed many of the issues raised in the hacked e-mails, among the hundreds of issues raised by commenters. Our responses are fully documented, transparent and available to the public. The science on which the Administrator has based her determinations regarding the endangerment of both public health and welfare, and the process EPA has undertaken, have been fully open and transparent.

Some groups have also used the hacked e-mails to attack the credibility of the IPCC process and its findings. We received many comments on the process used to develop, review and approve or accept IPCC reports; see our responses on these issues in Volume 1 of this Response to Comments document. The disclosure of the private communications of a few individual scientists, among the hundreds of scientists that have participated in the development of the IPCC reports and the thousands that have developed the literature that was assessed, provides no evidence that contradicts the key conclusions and basic science underlying climate change. As IPCC Chairman Rajendra K. Pachauri recently stated:

IPCC relies entirely on peer reviewed literature in carrying out its assessment and follows a process that renders it unlikely that any peer reviewed piece of literature, however contrary to the views of any individual author, would be left out. The entire report writing process of the IPCC is subjected to extensive and repeated review by experts as well as governments. Consequently, there is at every stage full opportunity for experts in the field to draw attention to any piece of literature and its basic findings that would ensure inclusion of a wide range of views. There is, therefore, no possibility of exclusion of any contrarian views, if they have been published in established journals or other publications which are peer reviewed.

We note that many of the concerns about the emails appear to be based on a misunderstanding of the importance of certain issues and how concerns raised about a specific issue or study relate to the

fundamental conclusions reached through the assessment of hundreds of scientific studies; in other words a misunderstanding that results in an exaggeration of the importance of these issues. Our responses on these specific issues are provided in the relevant volumes of the Response to Comments document. As an example of overstatements regarding the events at CRU, many commenters and others have implied that the CRU dataset on global surface temperatures is “unique” or “the most important” or even “the basis for virtually all peer-reviewed literature.” These statements are incorrect. In fact, as we discuss in detail in Volume 2 of the Response to Comments document, the CRU data set is not unique (in fact, the other two data sets are developed by NASA and NOAA), and there are multiple lines of evidence that support the conclusions reached in the assessment literature upon which we primarily rely.

See Volume 1, “General Approach to the Science and Other Technical Issues” for our responses to general comments on our use of IPCC, U.S. Global Change Research Program (USGCRP)/Climate Change Science Program (CCSP), and National Research Council (NRC) reports as the primary scientific basis.

11.2 Impact of the May Presidential Announcement on National Fuel Efficiency Policy

Comment (11-3):

EPA received numerous comments (e.g., 3252.1, 3286.1, 3297.1, 3307.1, 3476.1, 3482.1, 3553.1, 3579.1, 3705.1, 3764.1) arguing that the President’s announcement of a new “National Fuel Efficiency Policy” on May 19, 2009 (Office of the Press Secretary, 2009), seriously undermines EPA’s ability to provide objective consideration of and a legally adequate response to comments objecting to the previously proposed endangerment findings. The commenters’ (e.g., 3252.1, 3286.1, 3297.1, 3307.1, 3482.1, 3553.1, 3579.1, 3705.1, 3764.1) conclusion is based on the view that the President’s announced policy requires EPA to promulgate GHG emissions standards under Clean Air Act (known as CAA or the Act) Section 202(a), that the President’s and Administrator Jackson’s announcement indicated that the endangerment rulemaking was but a formality and that a final endangerment finding was a fait accompli. Commenters (e.g., 3252.1, 3286.1, 3297.1, 3307.1, 3482.1, 3553.1, 3579.1, 3705.1, 3764.1) argue that this means the result of this rulemaking has been preordained and the merits of the issues have been prejudged.

Response (11-3):

See the Findings, Section I.C., “Public Involvement,” for our response to comments regarding the impacts of the President’s announcement of a new “National Fuel Efficiency Policy.”

11.3 Endangerment and Cause or Contribute Proposal Separate From Proposed Standards

Comment (11-4):

EPA received numerous comments (e.g., 3252.1, 3286.1, 3297.1, 3307.1, 3482.1, 3553.1, 3579.1, 3705.1, 3764.1) arguing that it was improper for the Administrator to sever the endangerment and cause or contribute findings from the attendant Section 202(a) standards. Commenters (e.g., 3307.1, 3347.1, 3482.1, 3528.1, 3577.1, 3747.1) argue that EPA has no authority to issue an endangerment determination under Section 202(a) separate and apart from the rulemaking to establish emissions standards under Section 202(a). According to these commenters (3577.1, 3747.1, 3704.2), Section 202(a) provides only one reason to issue an endangerment determination, and that is as the basis for promulgating emissions standards for new motor vehicles; thus, it does not authorize such a stand-alone endangerment finding, and EPA may not create its own procedural rules completely divorced from the statutory text. They continue by stating that while Section 202(a) says EPA may issue emissions standards conditioned on such a finding, it does not say EPA may first issue an endangerment determination and then issue

emissions standards. In addition, they contend, the endangerment proposal and the emissions standards proposal need to be issued together so commenters can fully understand the implications of the endangerment determination. Failure to do so, they argue, deprives the commenters of the opportunity to assess the regulations that will presumably follow from an endangerment finding.

Response (11-4):

See the Findings, Section I.C., “Public Involvement,” for our response to comments on the Administrator’s issuance of the endangerment and cause or contribute findings separate from Section 202(a) standards.

11.4 Supreme Court Decision in *Massachusetts vs. EPA*

Comment (11-5):

Commenters (e.g., 3283.1, 3307.1, 3322.2, 3347.1, 3397, 3482.1, 3528.1, 3577.1) argue that the Supreme Court’s decision does not require that EPA make a final endangerment finding. Rather, they contend that EPA has discretionary power and may decline to issue an endangerment finding, not just if the science is too uncertain but also if EPA can provide “some reasonable explanation” for exercising its discretion. They continue that such a reasonable explanation may be based on policy concerns, and that it does not have to be based on the scientific question regarding the reality of climate change or the contribution of carbon dioxide (CO₂) emissions to climate change. Thus, these commenters disagree that the Supreme Court decision allows EPA to forgo a final endangerment determination only if the scientific uncertainty is so profound that a reasoned scientific determination cannot be made. They interpret the Supreme Court decision not as rejecting all policy versus scientific reasons for declining to undertake an endangerment finding, but rather as dismissing solely the policy reasons EPA set forth in 2003. Commenters argue that EPA is free on remand to offer another reasonable, policy-based explanation for deciding not to regulate CO₂ under the existing provisions of the Act; commenters (3424.1) cite *SEC v. Chenery Corp.*, 332 U.S. 194, 67 S. Ct. 1575, 91 L. Ed. 1995 (1947), for the proposition that that an agency can take action on remand identical to the action reversed by the Court if the agency can provide a different and legally permissible basis for the action.

Commenters (e.g., 3320.1, 33214.2, 3329.1, 3435.1, 4173, 7025) then suggest a variety of policy reasons that EPA can and should make to support a reasonable explanation not to undertake a finding of endangerment under Section 202(a)(1) of the CAA. For example, they argue that a finding of endangerment would trigger several other regulatory programs—such as Prevention of Significant Deterioration (PSD)—that would impose an unreasonable burden on the economy and government, and would not provide a real benefit to the environment. At least two commenters (0321, 2898.1) state that an endangerment finding would create a constitutional crisis by empowering litigants and courts to usurp Congress’ authority to determine the basic direction of public policy. They continue that the result would be a “Mega-Kyoto system” without the people’s elected representatives ever casting a vote.

Still other commenters (2818, 3494.1) argue that the endangerment determination has to be made on the basis of scientific considerations only. Commenters (e.g., 3502.1) state that the Supreme Court was clear that “[t]he statutory question is whether sufficient information exists to make an endangerment finding,” and thus, only if “the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment as to whether GHGs contribute to global warming,” may authorize EPA to avoid making a positive or negative endangerment finding. Commenters (e.g., 3356.1) contend that an economic-cost rationale (such as that set forth by many other commenters), like the “policy conflict” rationale EPA provided in its original denial, is “divorced from the statutory text.” They also disagreed that the policy

reasons raised by other agencies as part of the Advance Notice of Proposed Rulemaking (ANPR) were legitimate legal reasons to delay making an endangerment finding.

Response (11-5):

See the Findings, Section I.C., “Public Involvement,” for response to comments regarding whether the Administrator can decline to make an endangerment finding due to policy considerations.

Comment (11-6):

Many commenters (e.g., 0230, 0231, 0692, 2898.1, 2979) disagree with the Supreme Court’s decision in *Massachusetts v. EPA* regarding EPA’s authority to regulate GHGs under the CAA. One commenter (0692) declares that the decision by the Supreme Court ranks equal to the Dred Scott decision sanctioning slavery. Some commenters (2898.1, 2979) continue to make arguments rejected by the Supreme Court regarding Congressional intent and statutory language in the CAA (e.g., legislative history, CAA is focused on local/regional pollution). Others (2898.1) make new arguments to support their claims that the CAA does not authorize EPA to regulate GHGs to address climate change.

Finally, other commenters argue that the Court simply was wrong to hold that the CAA authorizes EPA to address GHGs and climate change, and that GHGs meet the definition of “air pollutant” under Section 302 of the CAA. For example, many commenters (e.g., 3214.2, 3329.1, 3435.1, 4173, 7025) argue that if the Supreme Court had been aware of the regulatory cascade that would flow from a positive endangerment finding and regulation under Section 202(a), they would never have found that the CAA authorizes EPA to undertake such actions. Essentially, commenters (2898.1, 3424.1) argue that petitioners in *Mass. v. EPA* misled the Court into believing that regulation under Section 202(a) would pose no risk to the U.S. economy and thus caused the justices to reject the argument, based on *FDA v Brown & Williamson Tobacco Corp*, 529 U.S. 120 (2000), that GHG regulation was a policy decision of “such economic and political magnitude” that Congress would not delegate it to an administrative agency, especially in “so cryptic a fashion.” These commenters contend that based on more recent information regarding the regulatory cascade that will follow an endangerment finding—including the ANPR, industry studies, and Congressional testimony—the court’s opinion that regulating GHG emissions under Section 202 could not lead to “extreme measures” or to policy decisions of enormous “economic and political magnitude” is no longer tenable. In another example, some commenters (2898.1, 2979, 3217.1) argue that the court’s decision wrote the words “pollutant” and “pollution agent” out of the statutory definition of “air pollutant.”

Response (11-6):

The Supreme Court has ruled that GHGs fall within the definition of “air pollutant” under the CAA and that EPA may regulate GHGs if required findings were made. The decision of the Supreme Court of the United States is binding on EPA. It would not be appropriate for this action to be based in any way on arguments that have been rejected by the Supreme Court. Nor is this rulemaking an appropriate forum for making new arguments in support of commenters’ position that if the Supreme Court had better understood the repercussions of its decision it would have reached a different conclusion. More than 20 briefs were filed by the parties and other interested parties in the *Massachusetts v. EPA* Supreme Court litigation; there was ample opportunity for stakeholders to present their arguments to the Court. The time to challenge EPA’s general authority to regulate GHGs under the CAA has passed; EPA is moving forward and following the Supreme Court’s decision.

11.5 Economic and Related Considerations

Comment (11-7):

At least one commenter (3347.1) argues that EPA was required to conduct an economic analysis under Section 317 of the CAA. The commenter contends that Section 317 requires the preparation of an economic impact assessment prior to the publication of a notice of proposed rulemaking for most major standard-setting actions under the Act, including “any regulation establishing emission standards under [Section 202] of this title and any other regulation promulgated under that section.” They continue that since EPA is issuing the findings through the Section 307(d) notice and comment procedures, the requirements of Section 317 apply as well. Commenters note that the economic impact assessment required under Section 317 requires an analysis of: 1) the costs of compliance; 2) potential inflationary or recessionary effects; 3) effects on small businesses; 4) effects on consumer costs; and 5) effects on energy use. They argue that if EPA had undertaken its Section 317 duties, it would have exposed the substantial economic costs identified by commenters to the proposal and the 2008 ANPR. These commenters believe that EPA proceeded with an endangerment finding separate from actual proposed regulations specifically to circumvent its responsibilities under Section 317 and that such political maneuvering is unacceptable and must be corrected by the issuance of a full Section 317 economic impact assessment for the proposal and any regulations triggered by an endangerment finding.

Response (11-7):

Section 317 of the CAA applies to “any regulation establishing emission standards under [Section 202] and any other regulation promulgated under that section.” The Final Findings are not a regulation promulgated under Section 202(a) of the CAA, as they do not include any regulatory text, and they do not impose any requirements on any person other than EPA. While it is true that EPA determined that the procedural requirements of Section 307(d) applies to this action, that decision does not render these findings a “regulation” for purposes of Section 317 of the CAA. The emissions standards proposed in the Proposed Vehicle Rule (74 FR 49454) are the appropriate forum for any economic impact assessment required by Section 317, because that is the rule in which EPA explores the various control strategies and their costs and benefits. Section 317(c) discusses the details of the economic analysis, which only makes sense when applied in the concrete context of proposed standards or other control requirements (e.g., cost of compliance), rather than in the context of endangerment and cause or contribute findings, which are unrelated to such considerations. EPA is not attempting to circumvent Section 317 by issuing the Final Findings separate from the proposed motor vehicle emissions standards; indeed, the Proposed Vehicle Rule contains an economic assessment, and commenters are welcome to address it.

The commenter essentially is trying to inject standard-setting cost considerations into the endangerment finding, of not only any Section 202(a) emissions standards but also of regulating GHGs more generally under the CAA. As discussed in the Final Findings, and in our response (11-8) and other responses in this volume, the appropriate forum for considering the cost of regulation is the emissions standard-setting phase; not the endangerment analysis.

Comment (11-8):

Numerous commenters (e.g., 2898.1, 3704.2, 3747.1, 3764.1) argue that EPA must fully consider the benefits of regulation side by side with the negative secondary effects and benefits of inaction, describing this balancing as “risk-risk analysis,” “health-health analysis,” and most predominantly “risk tradeoff analysis.” These commenters express surprise at EPA’s alleged failure to do so, and contend that, as a result, the proposal is invalid under the law. They argue that EPA’s final endangerment finding would be arbitrary unless EPA undertakes this type of risk trade-off analysis (citing *Competitive Enterprise Inst. v NHTSA*, 956 F.2d 321, 326-28 (D.C. Cr. 1992) (remanding CAFE standards because the agency failed to

address safety effects of higher fuel economy standard); *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201 (5th Cir. 1991) (holding EPA failed to consider toxicity of likely asbestos substitutes); *Portland Cement Co. v. Ruckelshaus*, 486 F.2d 375, 385 (D.C. Cir. 1973) (relevant CAA criteria required EPA to take into account counter-productive environmental effects of a proposed standard including economic costs to industry); *NRDC v. EPA*, 655 F.2d 318, 342 (D.C. Cir. 1981) (EPA balanced looser nitrogen oxides (NO_x) standards for vehicles against compliance with tighter particulate matter [PM] standards). Commenters (e.g., 3347.1) also argue that the reference to “public” health or welfare in Section 202 especially requires EPA to consider the full range of possible impacts of regulation (or not). Indeed, commenters (e.g., 3397, 3564.1 4040.1,) argue, negative economic impacts associated with an unnecessarily broad endangerment finding and the unilateral imposition of aggressive GHG controls are the kinds of welfare effects that EPA should consider in its overall endangerment finding to begin with.

More specifically, many commenters (e.g., 2898.1, 3319.1, 3704.2) argue that when evaluating the adverse and beneficial effects of GHGs, EPA must look at the full impact of regulating GHGs under numerous provisions of the CAA and determine if the result would be worse for public health and welfare than not regulating. They contend that while EPA looks at the possible negative consequences of not making a positive endangerment determination, it ignores the unavoidable adverse consequences of actually making a positive determination. Commenters (e.g., 3411.1, 3702.2,) argue EPA must be transparent about what is actually at stake in making this determination and 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). Commenters (e.g., 3704.2) also specifically argue that EPA must consider the economic impact of regulation when assessing whether there is endangerment to public welfare (citing *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”). At least one commenter (3261.1) argues that EPA has violated Executive Order (E.O.) 12866, the Regulatory Flexibility Act, and the Unfunded Mandates Reform Act by not conducting an economic analysis or otherwise fully assessing the risks that will inevitably flow from a positive endangerment finding.

Some commenters (e.g., 3217.1, 3595.1, 3628.1, 3747.1) argue that the impact of regulating under Section 202 supports making a final, negative endangerment finding. Some commenters (3217.1, 3479.2) contend that the incredible costs associated with using the inflexible regulatory structure of the CAA will harm public health and welfare, and therefore EPA should exercise its discretion and find that GHGs do not endanger public health and welfare because once EPA makes an endangerment finding under Section 202, the Agency will be forced to regulate GHGs under a number of other sections of the Act, resulting in regulatory chaos.

Many commenters (e.g., 3214.1, 3327.1, 3433.1, 3530.1, 3567.1, 3608.1, 3704.2, 4099) provide various predictions regarding how regulating GHGs under the CAA more broadly will impact the public, industry, states, and the overall economy, and thus, they conclude, public health and welfare. Examples of commenters’ predictions include potential adverse impacts on 1) the housing industry and the availability of affordable housing, 2) jobs and income due to industry moving overseas, 3) the use of hydrofluorocarbons (HFCs) in truck foam insulation, 4) the methods used to find, extract, and refine hydrocarbons, 5) the agriculture industry and its ability to provide affordable food, and 6) the nation’s energy supply. At least one state (Texas) provided a detailed estimate of the impact of regulating GHGs under the CAA on the state economy. In support of its arguments, some commenters cite the Office of Management and Budget (OMB) letter provided with the ANPR, as well as interagency comments on the draft Proposed Findings, with regard to the potential for serious economic consequences for regulated entities throughout the U.S. economy if EPA regulates CO₂ under the CAA for the first time. See

Appendix A of this volume for a more detailed summary of comments pertaining to economic implications of regulation under the CAA.

Response (11-8):

Please see Section III.F of the Final Findings for a general response to this comment. In addition, we note that the cases cited above by commenters in support of their argument—that EPA must consider the impacts of GHG regulations under the CAA when making an endangerment determination for GHGs under Section 202(a) of the CAA—involve the setting of standards or regulations, and not the initial question of whether a statutory precondition to setting standards has been met, such as determining whether the air pollution (not the ensuing regulations) endanger public health or welfare. None of the cases stand for the proposition that it would be arbitrary for the Administrator to focus her endangerment analysis on the science of GHGs and climate change, and nor on the potential economic ramification of regulations that may follow a positive endangerment finding. As discussed in the Final Findings and elsewhere, the statutory question of whether air pollution may reasonably be anticipated to endanger public health or welfare is different than the question of how to address that air pollution if there is endangerment. The latter step, in the standard-setting phase, is the appropriate forum for considering and weighing the types of factors raised by commenters.

Moreover, as a general matter, the statutory language applicable to the various standards discussed in the cited cases require the relevant agency to consider costs or other factors when setting the standards; thus, it is not surprising either that the agency did so or that the court held that it must do so. For example, in *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201 (5th Cir. 1991), the Toxic Substance Control Act (TSCA) specifically required that EPA choose the least burdensome regulation that achieves an acceptable level of risk. *Id.* at 1215. It also required that EPA consider, along with the effects of toxic substances on human health and the environment, the benefits of such substance[s] or mixture[s] for various uses and the availability of substitutes for such uses,” as well as “the reasonably ascertainable economic consequences of the rule, after consideration of the effect on the national economy, small business, technological innovation, the environment, and public health.” *Id.* at 1216 (citing 15 U.S.C. § 2605(c)(1)(C-D)). Thus, it is not surprising that the court reviewed whether EPA had followed these statutory requirements when establishing “the harshest remedy given to it under TSCA.” 947 F.2d at 1216. Similarly, in *Portland Cement Co. v. Ruckelshaus*, 486 F.2d 375, 385 (D.C. Cir. 1973), the court was reviewing a New Source Performance Standard under Section 111 of the CAA, which specifically requires that EPA consider cost when setting such standards. The other cases cited also contain specific statutory language authorizing and/or requiring weighing of various factors when setting standards (or waiving control requirements). See *Competitive Enterprise Inst. v. NHTSA*, 956 F.2d 321, 326-28 (D.C. Cir. 1992) (The National Highway Traffic Safety Administration [NHTSA] has always taken safety into account when setting Corporate Average Fuel Economy (CAFE) standards, but failed to do so adequately when setting this standard); *NRDC v. EPA*, 655 F.2d 318, 342 (D.C. Cir. 1981) (then CAA Section 202(b)(6)(B) specifically authorized EPA to waive NO_x requirements for certain vehicles under certain circumstances and EPA properly recognized a trade-off at that time between reducing NO_x and particulate matter [PM] from these sources). These cases do not support the argument that when determining whether the air pollution endangers under Section 202(a) of the CAA, the Administrator must consider the full range of possible impacts of future regulation.

Comment (11-9):

One commenter (3261.1) argues that EPA fails to discuss the public health or welfare benefits of the processes that *produce* the emissions. The commenter contends that for purposes of Section 202(a), this process would be the combustion of gasoline or other transportation fuel in new motor vehicles, and that for purposes of other CAA provisions with similar endangerment finding triggers, the processes would be the combustion of fossil fuel for electric generation, manufacturing, industrial production, or

a myriad of other activities, or it could be non-combustion activity such as the emission of methane by coal mines, agriculture, or municipal solid waste facilities; the production of nitrous oxides in various agricultural operations; the use of chlorofluorocarbons for refrigeration; and many others. The commenter continues that EPA's decision to limit its analysis to the perceived detrimental aspects of emissions after they enter the atmosphere—as opposed to the possible positive aspects of emissions because of the processes that create the emissions—is based on EPA's overly narrow interpretation of both the meaning of the term “emissions” in Section 202(a) (and therefore in other endangerment finding provisions) and the intent of these provisions. The commenter notes that EPA fails to provide an analysis of the term “emissions” in Section 202(a), and the commenter states that logically, it makes little sense to limit the definition of the term “emissions” to only the “air pollutants” that are emitted. Obviously, the commenter continues, GHGs are emitted for a reason; they are the inevitable byproduct of the combustion of fossil fuels for energy or the end result of some other process. Thus, the commenter concludes, when EPA assesses whether the emission of GHGs endangers public health and welfare, EPA must assess the dangers and benefits on both sides of the point where the emissions occur: in the atmosphere where the emissions lodge and, on the other side of the emitting stack or structure, in the processes that create the emissions—otherwise, EPA will not be able to accurately assess whether the fact that society emits GHGs is a benefit or a detriment. This approach, the commenter argues, comports with the preventative nature of the endangerment language: it recognizes the policy decisions inherent in administering the endangerment language. The commenter states that because GHG emissions, particularly CO₂ emissions, are so closely tied with all facets of modern life, a finding that GHG emissions endanger public health and welfare is akin to saying that modern life endangers public health or welfare; but that simply cannot be true because the lack of industrial activity that causes GHG emissions would pose other, almost certainly more serious, health and welfare consequences.

The commenter goes on to argue that GHG emissions are associated with significant, positive health and welfare effects that must be evaluated as part of the endangerment finding. For example, the commenter contends that EPA's view misses the obvious fact that public health and welfare has been improving notwithstanding the state of the climate, which is always changing (attaching a report that places this issue in historical context and shows the dramatic health and welfare benefits created by fossil fueled-energy usage, particularly as a result of the large-scale introduction of electricity).

Response (11-9):

See the Findings, Section III.F, for our responses to comments that EPA should discuss the public health or welfare benefits of the processes that produce the emissions.

Comment (11-10):

Similar to comments above arguing the Administrator must consider the economic impacts of regulation in her endangerment analysis, many commenters (e.g., 3217.1, 3347.1, 3411.1, 3509.1, 3699.1, 3747.1) express an overall criticism that the Proposed Findings and/or the TSD lack an economic cost-benefit analysis or have an incomplete analysis of costs and benefits. Several commenters (e.g., 3509.1, 3553.1, 3232.1, 3699.1, 3704.2) cite the OMB letter provided with the ANPR, as well as interagency comments on the draft Proposed Findings, stating that EPA's proposal could “be strengthened by including additional information on benefits, costs and risks.” The comments suggest that these comments should be addressed and reflect on the validity of the Agency's endangerment finding. Many commenters (e.g., 0400, 0564, 0650, 2895, 3324.1, 3394.1, 3764.1, 4173, 4288, 9913, 10923,) request that EPA undertake a careful cost-benefit analysis before moving forward with any regulation of GHG emissions.

Commenters appear to believe that the economic cost-benefit analysis should broadly analyze regulating GHGs under the CAA as a whole (e.g., assuming different National Ambient Air Quality Standards

[NAAQS] scenarios, availability of biomass as a fuel), or for all potential mitigation scenarios (e.g., assuming new legislation). Some commenters (e.g., 3452.1, 3507.2, 3560.1, 3595.1) suggest a variety of factors that EPA should consider in an economic cost-benefit analysis, such as impacts on jobs, home prices, and the impacts on safety of imports as they increase. Others (e.g., 0630, 2980.1, 3360, 3436.1) express concern with how EPA would undertake any cost-benefit analysis, including claiming that any cost-benefit analysis conducted by EPA will be biased due to EPA's "alarmist" tendencies when interpreting climate modeling results, or warning against discounting the future in any present value calculations EPA undertakes, or criticizing the FUND (Climate Framework for Uncertainty, Negotiation, and Distribution) model in favor of the DICE model (Dynamic Integrated Model of Climate and Economics).

Commenters (e.g., 0801.1, 3679.1) raise many points in support of their argument that EPA should undertake a broad economic cost-benefit analysis for this action, including that the Proposed Findings do not comply with Executive Order 12866 because the commenter estimates that the cost far exceeds the threshold of \$100 million per year and that the Proposed Findings are not consistent with other rulemakings where EPA makes an endangerment finding and issues regulations concurrently. On the other hand, some commenters (e.g., 5844) support EPA's precautionary approach in the endangerment and cause or contribute findings over an approach reliant solely on cost-benefit analysis because a cost-benefit analysis: 1) does not adequately address the cumulative impacts of GHG emissions, 2) is premised on an outdated way of thinking that was conceived during the industrial revolution and has tolerated continually increasing increments of environmental damage in the pursuit of economic growth, and 3) has failed to protect the public's health and welfare from the cumulative impacts of our society's seemingly blind deference to economic growth.

Finally, many commenters (e.g., 4173, 3218.1, 3352.1) express doubt that the benefits of taking action to combat climate change will outweigh the costs; others expressly conclude that any regulation will be a net cost to society rather than a net benefit. They argue that the findings will cause many adverse consequences, including 1) putting the United States at a competitive disadvantage and threatening the nation's ability to maintain world economic dominance; 2) causing stagnation of economic growth; 3) increasing costs for energy, food, transportation, clothing, and other necessities; and 4) disproportionately burdening low- and middle-income families. See Appendix A of this volume for a more detailed summary of comments pertaining to economic implications of regulation under the CAA.

Response (11-10):

As discussed in the Final Findings and in our response (11-7) and other responses in this volume, this action is not the appropriate place to consider the economic impacts of mitigation measures that may follow a positive endangerment finding. EPA generally provides an analysis of costs, economic impacts, and benefits in conjunction with proposed regulatory standards under the CAA. EPA has developed such an analysis to accompany the proposed light-duty vehicle standards under Section 202(a). While Executive Order 12866 applies to this action, it does so because it raises novel policy issues. It is the proposed vehicle emissions standards and any other regulatory actions that are to be evaluated regarding costs exceeding the \$100 million threshold, not these findings.

With respect to the commenters' statement that comments submitted during interagency review of the Proposed Findings required further response, we disagree. In this case, all interagency comments were considered by EPA prior to the Administrator issuing the Proposed Findings. Any implication that these comments were not considered and addressed by EPA as it considered appropriate in advance of the release of the Proposed Findings is incorrect.

Consistent with the requirements of CAA Section 307(d), EPA places all written interagency comments in the docket. In this case, questions were raised as to whether these comments indicated ongoing concern

of other agencies regarding the Administrator's Proposed Findings. In response to this confusion, the director of OMB issued a statement stating that "OMB would have not concluded [preliminary] review [of the proposal], which allows the finding to move forward, if we had concerns about whether EPA's finding was consistent with either the law or the underlying science" (Orszag, 2009). As the director's statement explains, the document "simply collated and collected disparate comments from various agencies during the inter-agency review process of the proposed finding" that "do not necessarily represent the views of either OMB or the Administration."

We also note that an economic cost-benefit calculation necessitates analysis of a given level of action. No such analysis can be made for the endangerment and cause or contribute findings because they do not set a level of action (e.g., emissions reductions targets). Quantitative analysis of monetized costs and benefits would not be possible without either first selecting specific standards to assess or making significant assumptions about a given level of action.

Because EPA did not undertake an economic cost-benefit analysis with these Final Findings, we are not responding to comments addressing the specifics of such an analysis (e.g., commenting on models or assumptions).

Finally, as in other comments, the issues before EPA concern the contribution of emissions from new motor vehicles and the impacts of the air pollution on the public health or welfare. A cost benefit analysis of a subsequent standard-setting or other mitigation measure is not relevant to deciding the statutory question before EPA concerning contribution and endangerment.

Comment (11-11):

Numerous commenters (e.g., 0248, 2158, 3218.1, 3224, 3372.1, 3373, 3440. 1, 3509.1, 4099, 4107, 6810, 11230, 11050) state that imposing regulation of GHGs in this country will only impede industry and the economy, while other countries, such as China, will continue on with little to no control. Stated another way, they argue that even if the United States were to eliminate all of its GHG emissions today, CO₂ levels in the United States would not decrease, and CO₂ concentration in the atmosphere would continue to increase. They conclude that GHG regulation will be ineffective in combating a global problem or have such minimal effect as to be indistinguishable from taking no action (e.g., a commenter [11165] cites an EPA finding that a 60-percent reduction in CO₂ emissions by 2050 will only reduce global temperature by 0.1° to 0.2°C by 2095). Some commenters (3324.1, 3704.2) quote the comments of the former Secretaries of Commerce, Transportation, Energy, and Agriculture included as part of the original ANPR in June, 2008, to express their concern that: 1) emissions of GHGs by developing countries already exceed those of the developed world; 2) developing countries' emissions are forecast to grow exponentially faster than U.S. emissions; and 3) GHG emissions reductions in the United States will produce a global benefit only if emission reductions in one part of the world are not replaced by emission increases elsewhere. Several commenters (e.g., 3324.1, 10115, 11042) argue that a final endangerment finding would force states to engage in a massive and costly regulatory effort that will only succeed in forcing American businesses, the jobs they provide, and their emissions overseas. Commenters note that without an international accord, emissions will simply move from the United States, and there will be no environmental gain from EPA's regulations.

Response (11-11):

See the Findings, Section III.F, and in our response (11-7) and other responses in this volume for our responses to comments that EPA should consider the economic impacts of potential future regulation. The question of whether air pollution may reasonably be anticipated to endanger public health or welfare is different than the question of the environmental or economic impact of proposed measures to address that air pollution if there is endangerment.

The issues before EPA concern the contribution of emissions from new motor vehicles and the impacts of the air pollution on the public health or welfare. An analysis of the global environmental benefit achieved by any subsequent standard-setting or other mitigation measure is not relevant to deciding the statutory question before EPA concerning contribution and endangerment. The standard-setting phase when regulations are proposed is the appropriate forum for considering and weighing the types of factors and economic impacts raised by commenters, such as the potential for impacting job loss and/or job gains.

We note that when conducting economic analyses for standard setting (called a Regulatory Impact Analysis), we follow the principles and guidance set out in Executive Order 12866 (September 30, 1993). Typically, these analyses focus on the costs and benefits of the proposed and final regulations (and alternatives) to society overall and to affected entities (e.g., assessing financial and revenue impacts at the firm-level). These analyses typically do not include estimates of employment impacts.

Comment (11-12):

Several commenters (e.g., 0308.1, 2818, 2895, 2895.1, 3396, 4036.5, 4746, 6809) voice their support for the endangerment and cause or contribute findings as the first step towards reducing GHGs. They ask EPA to consider the economic consequences of “business-as-usual” (i.e., continued carbon emissions). Many commenters (e.g., 0168, 0405, 1633, 3035, 3971, 4827, 5205, 6809, 9297, 9644, 10640, 10113) state that “the cost of inaction far outweighs the costs of action.”

The commenters argue that addressing climate change presents economic opportunities, not just challenges, as the country transitions to a clean energy economy. One commenter (4036.5) cites a number of examples of where innovation and new technologies have cut pollution regulated under the CAA at far lower costs than predicted while creating new jobs in the manufacturing and supporting industries. Numerous commenters (1318.1, 1520, 4660, 4895, 10408, 10412, 10486, 10587, 10589, 10590, 10608, 10612, 10674) state that GHG emission regulations would lead to improvements in the U.S economy due to new green industries, thereby creating jobs and increasing economic prosperity. They note that time and again, the cost of reducing pollution has proved to be much lower than some in industry projected, and that that businesses can and must find cost-effective ways to implement government regulations. These commenters urge EPA to move forward.

Several commenters (0180, 0293, 0489, 2147, 2402, 3142, 3494.1, 3618, 3759, 4747) encourage EPA to avoid being “swayed” by corporate or political interests in the development of regulations, requesting the “most stringent” or “toughest” regulations possible. Many commenters (e.g., 2419, 2642, 2634, 2915, 3151, 10012, 10014, 10090, 10170) express concern that vested economic and political interests are attempting to weaken any new laws from EPA on this issue and encourage EPA to proceed. See Appendix A of this volume for a more detailed summary of comments pertaining to the various economic implications of regulation under the CAA.

Response (11-12):

As discussed in the Final Findings and in our response (11-7) and other responses in this volume, this action does not include an analysis of economic costs, benefits, or impacts related to any mitigation efforts that may follow these Final Findings.

11.6 Procedural Issues

11.6.1 Timing of Final Findings and Regulations

Comment (11-13):

Several commenters (e.g., 3449.1, 3555.1, 3605.1, 3764.1) note that the Supreme Court did not establish a deadline for EPA to act on remand. Some commenters cite language in the Supreme Court decision regarding EPA's discretion regarding "the manner, timing, content, and coordination of its regulations," 549 U.S. at 533, and the Court's declining to rule on "whether policy concerns can inform EPA's actions in the event that it makes" a CAA Section 202(a) finding to support their position.

Commenters (e.g., 3605.1, 3704.2) note that EPA has already successfully defended against an action requesting a writ of mandamus, and that last year the D.C. Circuit and a federal district court in California both agreed that EPA had not unreasonably delayed responding to the Supreme Court's remand. Several commenters set forth the test courts apply for determining whether an agency has unreasonably delayed acting. Commenters (3327.1, 3379.1, 3569.1) urge EPA to take more time before issuing a final endangerment finding. Some commenters (e.g., 3327.1, 3435.1, 7025) note that EPA should defer issuing a final endangerment finding while Congress considers legislation. Some express concern that future legislation may conflict with the proposed actions or because EPA action may remove the impetus for Congressional action. Others (3631, 6810, 3320.1, 4037.1) simply believe that Congress is better suited than EPA to tackle the myriad of tough decisions involved in addressing climate change.

Many commenters (3252.1, 3704.2, 7025) note the ongoing international discussions regarding climate change and indicate they believe unilateral EPA action would interfere with those negotiations. Others (3322.2) suggest deferring the EPA portion of the joint Department of Transportation (DOT)/EPA rulemaking because they argue that the new CAFE standards will effectively result in lower GHG emissions from new motor vehicles, while avoiding the inevitable problems and concerns of regulating GHG emissions under the CAA. These and other commenters noted that EPA's regulation of GHGs from mobile sources may conflict or overlap with regulations by other federal agencies (e.g., NHTSA, Federal Aviation Administration).

Many commenters (3597, 3605.1, 3704.2, 4457.1) urge EPA to take additional time to consider the impact of the finding and attendant motor vehicle rules under the CAA. They argue that the issuance of an endangerment finding will reverberate throughout the CAA, and that 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. Commenters contend that until EPA has the ability to thoroughly analyze the potential impact of CAA regulation, it cannot make an informed decision. At least one commenter suggested that EPA delay regulating CO₂ under the CAA until the Agency had more experience regulating other GHGs.

Still other commenters (3322.2, 3397, 3631) suggest that if EPA were to make a final positive endangerment finding, it should delay issuing the Section 202(a) emissions standards. Commenters (3322.2, 3397) argue that EPA can fill the gap left by Congress regarding the timing of such standards (citing *Chevron U.S.A. v. NRDC*, 467 U.S. 837, 843 (1984) and *Morton v. Ruiz*, 415 U.S. 199, 231 (1974), in support of their argument that administrative agencies may formulate policy for the purpose of "gap-filling" to effectuate Congressional intent). Commenters (3322.2, 3605.1) note that in *Mass v. EPA*, the Court recognized EPA's "significant latitude" regarding the timing, content, and other considerations related to its regulations. These commenters (3322.2) also argue that the D.C. Circuit has recognized that policy considerations are unavoidable situations where EPA must weigh and balance scientific uncertainties in developing regulatory standards, citing *Lead Indus. Ass'n, Inc. v.*

EPA, 647 F.2d 1130, 1146-47 (D.C. Cir. 1980). Thus, they conclude, if EPA proceeds with a positive endangerment finding under Section 202(a), it is well within the Agency’s discretion to defer promulgation of GHG emission standards in order to consider a number of policy and legal issues, and allow Congress to pass legislation designed to address the unique and global challenges presented by GHG emissions.

Finally, many commenters (3475.1, 3494.1, 3502.1, 4945) urge EPA to take action quickly. They note that it has been 10 years since the original petition requesting that EPA regulate GHG emissions from motor vehicles was submitted to EPA. They argue that climate change is a serious problem that requires immediate action. Other commenters (3475.2) argue that EPA must go forward to fulfill its public health and welfare mandate, and NHTSA may need to adapt its standards accordingly, quoting the Supreme Court’s decision. These commenters believe that the agencies can continue to work cooperatively together.

Response (11-13):

See the Findings, Section I.C, “Public Involvement,” for EPA’s response to comments regarding the timing of these Final Findings. In addition, EPA notes that it has proposed light-duty vehicle standards as part of its efforts to respond to the Supreme Court’s April 2007 decision, which involves a rulemaking petition that is over 10 years old. EPA takes very seriously the obligation to respond to the Supreme Court’s opinion. In the joint “Notice of Proposed Rulemaking to Establish Light-Duty GHG Emission Standards and Corporate Average Fuel Economy Standards” (74 FR 49454; September 28, 2008), both EPA and NHTSA fully discuss how each agencies’ proposals are fully justified under their respective statutory authorities.

The commenter has asked that EPA defer issuance of final motor vehicle standards under Section 202(a) of the CAA, in response to EPA’s proposal to issue emissions standards for light-duty vehicles and trucks. See 74 FR 49454 (September 28, 2009). The commenter’s request is directed at that rulemaking concerning adoption of motor vehicle standards. However, it is not relevant to this rulemaking, which addresses the issues of endangerment and cause or contribute, but does not address either the content or timing of any appropriate emission standards under Section 202(a).

11.6.2 Petition for Formal Rulemaking Proceeding

Comment (11-14):

One commenter (3411.1), with the support of others, requests that EPA undertake a formal rulemaking process for the findings, on the record, in accordance with the procedures described in Sections 556 and 557 of the Administrative Procedure Act (APA). The commenter requests a multi-step process, involving additional public notice, an on-the-record proceeding (e.g., formal administrative hearing) with the right of appeal, utilization of the Clean Air Scientific Advisory Committee (CASAC) and its advisory proceedings, and designation of representatives from other executive branch agencies to participate in the formal proceeding and any CASAC advisory proceeding.

The commenter (3411.1) asserts that while EPA is not obligated under the CAA to undertake these additional procedures, the Agency nonetheless has the legal authority to engage in such a proceeding. The commenter believes this proceeding would show that EPA is “truly committed to scientific integrity and transparency.” The commenter cites several cases to argue that refusal to proceed on the record would be “arbitrary and capricious” or an “abuse of discretion.” The allegation at the core of the commenter’s argument is that profound and wide-ranging scientific uncertainties attend both of the core issues at stake in the Proposed Finding and its TSD—causation and predicted impacts on health and welfare. To support

this argument, commenter provides lengthy criticisms of the science. The commenter also argues that the regulatory cascade that would be “unleashed” by a positive endangerment finding warrants the more formal proceedings.

Response (11-14):

See the Findings, Section I.C, “Public Involvement,” for our response to the petition to undertake a formal rulemaking under the Administrative Procedure Act.

11.6.3 Responding to ANPR Comments

Comment (11-15):

Several commenters (e.g., 3307.1, 3384.1, 3476.1, 3553.1, 3596.1) argue that EPA must respond to all of the comments received on the July 2008 ANPR (73 FR 44354), and not just a few key comments. They contend it is incumbent upon the Agency to respond to those comments in compliance with the Administrative Procedure Act (APA). In the alternative, they request that the Agency fully respond to the detailed science comments that were submitted on the ANPR.

Response (11-15):

EPA uses ANPRs to notify the public about actions we are considering and to gather information on specific topics and the appropriate scope for rulemaking, but there is no requirement under the APA or CAA for the Agency to respond to comments filed as public comments during the comment period for the ANPR. To the extent commenters are suggesting that existing law prescribes such a requirement, they are incorrect. EPA did review the key comments on the ANPR related to endangerment. Moreover, many commenters re-submitted their ANPR comments in this proceeding, and EPA considered all relevant, significant comments that were submitted in connection with this proceeding.

Comment (11-16):

At least one commenter (2750) suggests that EPA should discuss whether the federal agencies that submitted comments on the ANPR were asked to submit new comments on the Proposed Findings, whether in fact they did submit new comments, whether any new comments were different, and how EPA has addressed any such comments.

Response (11-16):

The Proposed Findings, and these Final Findings, have undergone interagency review pursuant to Executive Order 12866. The interagency comments submitted by OMB during both interagency review periods are placed in the docket. As noted previously, the director of OMB issued a statement stating that “OMB would have not concluded [preliminary] review [of the proposal], which allows the finding to move forward, if we had concerns about whether EPA’s finding was consistent with either the law or the underlying science.” (<http://www.whitehouse.gov/omb/blog/09/05/12/ClearingtheAir/>.)

11.6.4 Transparency

Comment (11-17):

Some commenters (3553.1, 4932.1, 11453.1) assert that EPA’s process has been “veiled in secrecy” and void of “transparency and accountability,” noting comments from Congressmen Issa and Sensenbrenner. The commenter (3553.1) suggests that EPA has a “desire to promote an environmental agenda dominated by extreme special interest groups,” asserts that the Congressmen’s Freedom of Information Act (FOIA)

request was not properly handled, and reserves the right to supplement comments with information received from FOIA requests.

Response (11-17):

EPA has responded and will continue to respond to all FOIA requests in a timely and transparent manner. Congressmen Issa and Sensenbrenner received all materials requested in a timely fashion in light of the scope of their requests. The Administrator and EPA staff have not accorded privileged status to any special interest and have conducted a careful, critical, and independent examination of the options with regard to the proposed and final findings. We maintained an open-door policy on the Proposed Findings and discussed the proposed action with multiple audiences. EPA remains committed to maintaining an open and transparent rulemaking process on all of our efforts.

Comment (11-18):

Several commenters (3323.1, 4041.1, 4932.1, and 5158) argue that EPA's office responsible for developing the endangerment finding ignored internal EPA comments presented in a memorandum. This memorandum, *Proposed NCEE Comments on the Draft Technical Support Document for Endangerment Analysis for GHG Emissions Under the Clear Air Act*, was developed by Alan Carlin in EPA's National Center for Environmental Economics (Carlin, 2009). One commenter (11460) states that EPA should take no further action until it publicly apologizes for trying to suppress the Carlin document. In addition, the commenter states that because EPA suppressed the Carlin document, which raises serious doubts about EPA's credibility, the Agency should present all its evidence to an impartial agency judge, who will require that testimony on both sides be under oath and subject to cross-examination.

Response (11-18):

EPA did not ignore the Carlin document. Our response regarding the review and evaluation of the issues it raised is provided in Volume 1 of the Response to Comments document, and (as noted there) we address specific scientific issues raised in the document in other relevant volumes.

The more inflammatory allegations of the commenters with respect to "suppression" and their demands for "an apology" are not germane to this action. The document has not been suppressed. It has been on EPA's web-site for several months, and has been reviewed and addressed through the public comment process. We respond to the commenter's suggestion that EPA should present all its evidence to an impartial judge in the preceding Section 11.6.2 "Petition for Formal Rulemaking Proceeding."

11.7 Statutes and Executive Orders

11.7.1 Regulatory Flexibility Act

Comment (11-19):

Several commenters (e.g., 3261.1, 3721.1, 4164) challenge the finding of no significant impact on a substantial number of small entities under the Regulatory Flexibility Act (RFA). They argue that even if the endangerment findings themselves do not impose any requirements, they are the first step in a process that ends in full application of the CAA to GHGs because a final endangerment proposal does impose on EPA the obligation to issue regulations for new motor vehicles, which will, in turn, trigger PSD. Thus, commenters continue, a final endangerment finding will represent a legally binding commitment by EPA to regulate, and it should therefore have been accompanied by a complete statement of the risks and dangers posed by such commitment. Commenters (e.g., 3214, 3324.1, 3423.2) in particular indicate concern about the impact of Title V and PSD permit programs, and they note that some environmental

groups already indicate their belief that a final endangerment proposal will trigger PSD, which is another impact of the final finding that EPA fails to assess.

Many commenters (e.g., 3499.1, 3564.1, 3595.1, 3721. 1, 4164) express concern that regulating CO₂ for the first time under the CAA will be complex and disruptive and will negatively impact small entities (including small businesses, small communities, and local municipalities) because these entities are disproportionately impacted by the cost of compliance with regulation. Accordingly, they argue EPA must consider the views of small entities as required by the RFA as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). Commenters (3575.1) recommend that EPA: 1) defer to ongoing efforts by Congress to enact climate change legislation; 2) defer any decision to regulate CO₂ until the Agency has gained experience with regulating other GHGs; 3) establish applicability thresholds for GHG regulations that exempt small entities; and 4) conduct Small Business Advocacy Review Panels for sectors of the economy where small entities are heavily affected by GHG regulations. Commenters (e.g., 3721.1) assert that EPA must assemble “multiple SBREFA panels” to ensure that small business has a “meaningful seat at the rulemaking table as required by the RFA.” A commenter suggests that EPA withdraw the proposal to address these concerns.

Response (11-19):

In compliance with the requirements of the RFA, EPA certified that the proposal as promulgated would not have a significant economic impact on a substantial number of small entities. However, EPA has acknowledged that small entities might have concerns about the potential impacts of the statutory imposition of PSD requirements that might occur given EPA’s various GHG rulemaking efforts. As the potential burdens of such stationary source regulation are being addressed in the Proposed Prevention of Significant Deterioration and Title V GHG Tailoring Rule (74 FR 55292), EPA is “using the discretion afforded to it under Section 609(c) of the RFA to consult with OMB and the Small Business Administration (SBA), with input from outreach to small entities, regarding the potential impacts of PSD regulatory requirements that might occur as EPA considers regulations of GHGs” as part of the tailoring rule package. EPA will continue to assess any potential PSD impacts on small entities as we consider comments from the various rulemaking packages and conduct our discretionary outreach.

As for the rest of the four specific recommendations summarized above, the first two recommendations regarding deferring final decisions are addressed elsewhere, and the third regarding applicability thresholds is addressed by the Proposed PSD and Title V Tailoring Rule.

11.7.2 E.O. 13175 (Consultation With Tribes)

Comment (11-20):

One Indian tribe (4157) submitted a comment supporting EPA’s findings, as well as EPA’s approach not to issue standards concurrently with the finding but instead to issue the finding first while standards are being developed. The tribe noted its particular concern about the impact of global climate change on natural resources on which its members rely and on the environment of its reservation lands, forests, and waters. The tribe also expressed its views that separate actions proposing standards for regulation of GHGs will have important implications for Indian tribes and that EPA would be required to consult with tribes on any such actions.

Response (11-20):

EPA welcomes the tribe’s expression of its interest in issues relating to climate change in connection with potential separate EPA actions developing standards. EPA notes that, as appropriate, the Agency works and consults with federally recognized Indian tribes on EPA’s actions and that EPA will consider tribal interests as relevant separate actions relating to climate change are developed.

Regarding the tribe's concern about the impacts of climate change on natural resources, we agree that certain Native American tribes, particularly those that are dependent on one or a few natural resources, possess unique vulnerabilities to the risks of climate change (Karl et al., 2009; Field et al., 2007; ACIA, 2004). These and other impacts of climate change are summarized in the TSD and are part of the information the Administrator drew upon in her endangerment analysis.

11.7.3 E.O. 13211 (Energy Supply, Distribution, or Use)

Comment (11-21):

Some commenters (e.g., 3329.1, 3452.1, 4002) strongly disagree with the Agency's decision that the finding does not constitute a "significant energy action" as defined in Executive Order 13211 (66 Fed. Reg. 28,355 (May 22, 2001)), "because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy." They contend that the very basis of the findings, under Section 202(a) of the Act, revolves around motor vehicles, which require "energy" (in the form of motor fuels) to operate. The commenters continue that any and all regulation governing the future of motor fuel usage will ipso facto have a significant adverse effect on the supply, distribution, and use of energy. One commenter argues that there is no discussion regarding the potential for reduced supply that will ultimately drive up consumers' energy costs, and/or increase foreign imports of energy supplies. They request the EPA reevaluate the impacts of its proposed actions on the nation's energy sources, supply, distribution, use, in accordance with Executive Order 13211.

Response (11-21):

As described in other responses in this volume, the Final Findings are not a regulation promulgated under Section 202(a) of the CAA. They do not include any regulatory text, and they do not impose any requirements on any person other than EPA. Thus, the Final Findings do not impose requirements on the supply, distribution, or use of energy, and the fact that motor vehicles use energy does not mean that this action impacts the supply, distribution, or use of energy. To the extent the commenters are arguing that any and all motor vehicles and fuels regulations will be a significant energy action, those comments must be made in the context of those particular rulemakings, not this action.

11.8 Roles of the Clean Air Act and Legislation

Comment (11-22):

Numerous commenters (e.g., 0639.1, 1927, 3012, 3324.1, 3327.1, 3509.1, 3530.1, 3558.2, 3605.1, 3916, 4457.1, 10697) argue that the CAA is not the appropriate mechanism to address climate change, and urge EPA to reconsider use of the CAA. They raise a "cascade of unintended regulatory consequences" that they argue will flow inextricably from a final endangerment finding; some cite to Congressman Dingell's reference to a "glorious mess." At least one commenter (3530. 1) refers to "a Pandora's box of devastating regulation and uncertain environmental benefit." Commenters (e.g., 1927, 3012, 3324.1, 3327.1, 3384.1, 3476.1, 4457.1), argue that there are implications for almost every facet of the economy and the effects in businesses, consumers, auto users, homeowners, and the population in general, and that the CAA is ill-equipped to deal with these issues. Some commenters (4457.1) cite statements from other federal agencies included in the July 2008 ANPR (73 FR 44354) to support their arguments that the CAA is ill-suited to address climate change. Some commenters (3012, 3558.2, 3916, 10697) describe EPA's use of the CAA as a power grab aimed at controlling the country's economy. Numerous commenters (e.g., 1927, 3327.1, 3384.1 3423.2, 3324.1, 3605.1) specifically discuss broadly how various sections of the CAA are not appropriate mechanisms to address GHGs (e.g., Sections 108, 111,

112). Some commenters (e.g., 3384.1, 3423.2, 3476.1) tie these comments to endangerment language in various sections of the CAA, while others talk more generally.

On a related matter, several commenters (3360, 3394.1, 3704.2, 3430.1) urge EPA to defer regulating GHGs under the CAA until Congress has further debated and developed comprehensive climate change legislation. Commenters (2892.1, 2895, 3555.1, 4457.1) note that the President and the Administrator have both indicated their preference for legislation. Many commenters (3198.1, 3509. 1, 3553.1, 4457.1, 5400, 11341) indicate their preference for legislation to address climate change. Some commenters (2039, 4109, 4184, 4457.1) set forth their proposed approaches for such legislation.

Other commenters (3475.2, 4036.5), some of whom also support legislation, argue that the claim by some opponents of EPA action that the Agency cannot sensibly tailor its GHG emission mitigation policies under the CAA is just another effort to delay and forestall any federal action on GHGs. These commenters note that EPA has ample discretion to tailor policies under the CAA, and that part of the CAA's success in securing critical protections for human health and the environment is due to the inherent flexibility the Act affords EPA in carrying out its statutory mandates.

Response (11-22):

Administrator Jackson has expressed her preference for comprehensive climate change legislation over the use of the current CAA to tackle climate change, but she has also described her duty to respond to the Supreme Court's remand. As noted in the Final Findings, more than two-and-a-half years have passed since the remand from the Supreme Court, and 10 years have passed since EPA received the original petition. EPA has a responsibility to respond to the Supreme Court's decision and to fulfill its obligations under current law, and there is good reason to act now given the urgency of the threat of climate change and the compelling scientific evidence.

We agree with the commenters who believe that EPA has the ability to fashion a reasonable and common-sense approach to address GHG emissions and climate change. EPA has and will continue to take a measured approach to address GHG emissions. For example, the Agency's recent Mandatory Reporting Rule and Proposed PSD and Title V Tailoring rule focus on only the largest sources of GHGs in order to reduce the burden on smaller facilities.

This action is not the forum for debate on the appropriate form and scope of new climate change legislation. Thus, we are not opining on any of the suggested approaches to legislation contained in the comments.

11.9 PSD and Title V Programs

Comment (11-23):

Some commenters (2898.1, 3217.1, 3232.1, 3324.1, 3423.2, 3476.1, 3704.2) appear to believe that a final endangerment finding would trigger PSD for GHGs. They state that once GHGs are declared an "air pollutant" for purposes of motor vehicles in Section 202, they will certainly be an "air pollutant" for purposes of Section 169, and that PSD will apply. Certain commenters (3414.1) reiterate their disagreement with EPA's current position that a final endangerment finding would not trigger PSD, noting that while they appreciate EPA's reconsidering the memorandum adopting this position, the commenter has sued EPA over the memorandum; the commenter also reiterates the reasons why it disagrees with EPA. Still other commenters agree with EPA's statements in the proposal that a final endangerment finding would not trigger PSD.

Response (11-23):

It is EPA's current position that these Final Findings do not make well-mixed GHGs "subject to regulation" for purposes of the CAA's PSD program. (See Johnson, 2008.) While EPA is reconsidering this memorandum and is seeking public comment on the issues raised in it generally, including whether a final endangerment finding should trigger PSD, the effectiveness of the positions provided in the memorandum was not stayed, pending that reconsideration. (Prevention of Significant Deterioration (PSD): Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by the Federal PSD Permit Program, 74 FR 515135, 51543-44 [Oct. 7, 2009]).

Comment (11-24):

Many commenters (e.g., 2891, 2898.1, 3217.1, 3218.1, 3232.1, 3252.1, 3286.1, 3288.1, 3297.1, 3307.1, 3324.1, 3332.1, 3476.1, 3423.2, 3704.2) express concern specifically about the impact of a final vehicle standard on stationary sources of GHG emissions. In particular, most commenters focus on the immediate impact of the PSD and Title V permitting programs once GHGs are regulated pollutants, listing concerns such as the impact on various sectors of the economy and overall economic growth more generally; severe administrative, logistical, and economic burdens on state permitting agencies and the regulated community; potential conflicts between CAA authority and existing regulatory programs of other federal agencies; and regulatory uncertainty for U.S. industries, consumers, and government stakeholders. They question EPA and state agencies' ability to deal with the increase in permitting under these programs and to tailor or phase-in applicability of the PSD and Title V programs, arguing that EPA cannot ignore the statutory thresholds. Commenters (2898.1, 3217.1, 3232.1, 3704.2) also question the ability of members of two major environmental groups to represent the views of all environmental groups when saying they will not challenge EPA's ability to tailor the permit programs. They attack other concepts discussed in the ANPR, including presumptive Best Available Control Technology (BACT) and revised approach to "potential to emit." Commenters (3324.1, 3476.1, 3423.2) also challenge EPA's analysis in the ANPR, arguing that EPA underestimated the impact on the PSD and Title V programs. Commenters associated with the agriculture industry (3600.1, 3615.1, 4169) raise concerns about the so-called "cow tax" that they allege would result from regulation of GHGs under CAA Title V.

Other commenters (3475.2, 3605.1, 4036.5) agree with EPA's ability to tailor and phase-in stationary source permitting programs for GHGs.

Response (11-24):

As discussed in our preceding response (11-23), these Final Findings do not make well-mixed GHGs "subject to regulation" for purposes of the PSD or Title V programs.

Note, however, that EPA has proposed new thresholds for GHG emissions that define when PSD and Title V permits are required for new or existing facilities. (PSD and Title V GHG Tailoring Rule [74 FR 55292, October 27, 2009]). That rulemaking is the appropriate forum for raising the concerns in this comment. The proposed thresholds would "tailor" the permit programs to limit which facilities would be required to obtain PSD and Title V permits. Specifically, the proposed rulemaking establishes a first phase, lasting six years, which would establish the threshold for PSD and Title V applicability at 25,000 tons per year on a CO₂equivalent basis. After six years, EPA would complete another rulemaking that would promulgate, as the second phase, revised applicability thresholds, as appropriate. 74 FR at 55292.

As noted in the preamble for the proposal, EPA also intends to evaluate ways to streamline the process for identifying GHG emissions control requirements and issuing permits. This would reduce costs and increase efficiency for both sources and for state permitting agencies, which in most cases are responsible for issuing the permits. EPA also plans to develop supporting information to assist permitting authorities as they begin to address permitting actions for GHG emissions for the first time. Although EPA has not yet identified specific source categories, the Agency plans to develop sector- and source-specific guidance

that would help permitting authorities and affected sources better understand GHG emissions for the selected source categories, methods for estimating those emissions, control strategies for GHG emissions, and available GHG measurement and monitoring techniques. This guidance also will include approaches for making BACT determinations as required for a PSD permit. EPA expects that “[t]his information will be particularly helpful to permitting authorities in making BACT determinations for GHG for sources trigger PSD during the phase-in period.” 74 FR at 55348.

Regarding concerns about the so-called “cow tax” under CAA Title V, EPA assures commenters that it is not proposing a cow tax. As discussed previously, EPA has proposed a rule focusing on large facilities emitting more than 25,000 tons of GHGs a year. Small farms, restaurants, and many other types of small facilities are projected to be below this threshold.

11.10 Impact of Final Findings on Other CAA Sections With Endangerment Language

Comment (11-25):

Numerous commenters (3214.2, 3560.2, 3592.1, 3699.1, 4155, 4173) discuss how final endangerment and cause or contribute findings under Section 202(a) may impact other provisions in the CAA that contain similar endangerment language. At least one commenter (4173) states that the tests for endangerment differ significantly throughout the CAA and that, in crafting those various tests, Congress intended that any endangerment finding under the CAA should be specific to a source and reflect its relative contribution of the particular pollutants that served as the basis for the finding. The commenter then provides an analysis of various sections in support of its statement. This commenter makes similar statements and arguments regarding the cause or contribute findings. Similarly, one commenter (4155) notes that extending a finding of endangerment to other sections of the Act would depend on: 1) the basis for the finding, 2) the pollutant at hand (e.g., pollutants considered as a group or as individual pollutants), 3) the statutory tests in each CAA section, and 4) the underlying facts. At least one commenter (3394.1) provides similar analyses explaining why they believe a final Section 202(a) endangerment finding does not trigger a similar finding under other parts of the CAA (e.g., Sections 108, 115).

Other commenters (3347.1, 3509.1, 3560.2, 3592.1, 3699.1) note that although the endangerment language in each CAA section is slightly different, each section generally calls for similar analysis of the impact of the air pollution at issue; thus, a positive GHG endangerment finding under one provision is likely to flow over into other provisions. These commenters (3347.1, 3509.1, 3560.2, 3592.1, 3699.1) express concern that a regulatory “cascade” of consequences will reverberate throughout the Act, because the endangerment finding cannot be self-contained by EPA.

Mobile Sources

At least one commenter (3609.1) argues that the judgment triggering EPA’s Section 202(a)(1) authority is essentially the same as that triggering EPA’s authority under Sections 211, 213, and 231, thus if the Administrator determines that emissions from the source at issue are sufficiently connected with “air pollution which may reasonably be anticipated to endanger public health or welfare,” then the Administrator is empowered to regulate those emissions. This commenter states that EPA cannot avoid considering the key questions underlying the marine vessels and aircraft petitions.

Other commenters (2892.1, 3704.2) suggest that EPA exercise care and proceed thoughtfully and cautiously before regulating mobile sources under the CAA. They note that mobile source regulation in general is complex and involves overlapping layers of federal and international authority that must be accommodated and respected. Commenters (e.g., 2892.1) argue that EPA must work with other pertinent agencies to identify those sector-specific and agency-specific options that are most appropriate to regulate GHG emissions, some of which may not necessarily fall under the auspices of the CAA.

At least one commenter (3348.1) requests that marine shipping be considered separately from other sectors due to its international nature and low carbon footprint, and that it is already being addressed by the International Maritime Organization.

NAAQS

Some commenters (3217.1, 3384.1, 3560.2, 3704.2, 3764.1) argue that an endangerment finding under one section of the statute will have a domino effect throughout the act, contending that the issuance of an NAAQS for that air pollutant would not be discretionary. They question EPA's statements in the ANPR that EPA could issue an endangerment finding for GHGs under CAA Section 202 but not promulgate a GHG NAAQS under Title I, by abstaining from setting air quality criteria under CAA Section 108. (73 Fed. Reg. at 44478.) Commenters note that EPA already attempted this maneuver to avoid promulgating an NAAQS for lead, and failed (citing *NRDC v. Train*, 545 F.2d 320 (D.C. Cir. 1976)). Numerous commenters (3217.1, 3318.1, 3384.1, 3560.2, 3567.1) provide detailed analyses of how they believe regulation of GHGs through the NAAQS system does not make sense.

Other commenters (2892.1, 3252.1, 3320.1, 3394.1) contend that an endangerment finding under Section 202 of the CAA would not necessitate listing under Section 108, noting that there is a third element to the listing requirements of Section 108. Some commenters (3252.1, 3320.1, 3394.1) believe that the reason a Section 202 endangerment finding would not satisfy the Section 108 endangerment finding test is because the record for the Section 202 finding is not limited to "ambient air."

Stationary Source Emissions Standards

Many commenters (3217.1, 3384.1, 3560.2) contend that the issuance of an endangerment finding under Section 202 would necessitate the same under Section 111 regarding New Source Performance Standards (NSPS). Commenters (e.g., 3322.3) note the various petitions or lawsuits already filed regarding EPA's regulation of GHGs under Section 111. Some commenters (3394.1, 3605.1, 3704.2) request that EPA exercise its discretion, as noted in the final NSPS revisions for petroleum refineries, to abstain from regulating GHGs under Section 111 at this time. Other commenters (2892.1, 2898.1, 3335.1, 3491.1) express concern that an endangerment finding under Section 202 could lead to regulation under Section 112 and discuss how this would be undesirable.

Response (11-25):

EPA reviewed the comments analyzing various provisions of the CAA and how they may be impacted by final findings under Section 202(a). However, these Final Findings are being made solely under Section 202(a) of the CAA regarding new motor vehicles and new motor vehicle engines. Consistent with the Supreme Court's decision, the Final Findings were based on the science and the statutory language of Section 202(a). Although several sections of the CAA contain similar endangerment and cause or contribute language, the Administrator is not making any endangerment or cause or contribute findings under any other CAA sections by this action. EPA does have before it several pending petitions, rulemakings and judicial cases in which stakeholders argue that EPA should regulate GHG emissions under various sections of the CAA. The Agency continues to evaluate those requests. However, it is not opining about them in this Section 202(a) action. If and when EPA takes action under other sections of the CAA regarding GHGs, the Agency will make any required determinations concerning endangerment and/or cause or contribute.

We note that the ANPR published in July 2008 provides detailed discussions on various sections of the CAA, and how they may be applicable to the regulation of GHGs. 73 FR 44354. We encourage interested stakeholders to review it for further information. In particular, Section IV of the ANPR provides an overview of the CAA and interconnections among various CAA provisions, including a discussion of the similar endangerment language that appears in numerous sections of the CAA and the

potential impact across the CAA from an endangerment finding under one section of the Act. 73 FR at 44417-21. The rest of the ANPR sets forth details of the various CAA sections that may apply to both mobile and stationary sources of GHGs. For example, Section VII.A. covers the NAAQS and Sections 107-110. *Id.* at 44477-86. It discusses the requirements for setting and implementing a NAAQS, including listing an air pollutant under Section 108(a)(1), noting that there are three criteria for listing under Section 108(a)(1), but only the first two are potentially impacted by a positive endangerment finding for GHGs under Section 202(a). *Id.* at 44477. The ANPR then proceeds to set forth in detail the steps and timeline for setting a NAAQS under Section 109, designating areas as attainment or nonattainment under Section 107, and submitting and approving state implementation plans under Section 110.

Regarding the commenter's suggestion that EPA exercise care and proceed thoughtfully and cautiously in regulating mobile sources under the CAA, EPA will continue to exercise care and consideration as we pursue a number of initiatives to address climate change. We have and will continue to coordinate with the appropriate federal agencies, as we have demonstrated with our joint proposal with the Department of Transportation's National Highway Traffic Safety Administration for light-duty vehicle GHG emissions standards and CAFE standards for new light-duty cars and trucks sold in the United States.

11.11 Suggested Alternatives to Section 202(a)

Comment (11-26):

In response to language in the proposal providing tips about how to prepare comments (i.e., "offer alternatives"), several commenters (3354.1, 3509.1, 3577.1) suggested that EPA use Section 115 before Section 202 if addressing GHGs under the CAA. Commenters (3509.1, 3577.1) note that although addressing global GHG pollution under Section 115 alleviates some of the concerns related to an endangerment finding under Section 202, it has its own limitations and concerns, including most importantly, that it would require states and localities to address at a local level what is clearly a global issue. Nonetheless, commenters (3509.1, 3577.1) argue that EPA's attempt to address a global air pollution matter by relying on an international report without evaluating the requirements under Section 115 is arbitrary and a violation of the CAA. They contend that when EPA receives an international report and EPA has reason to believe that emissions in the United States cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare in a foreign country, Section 115 appears to be the more appropriate section under the Act. They note that this section is different than EPA's proposed endangerment finding under Section 202, in that it is the only provision of the Act allowing consideration of international endangerment. They admit that although to date, Section 115 has not been used to regulate domestic emissions that are connected to international air pollution, this is only because each time its use was considered, Congress enacted legislation (citing acid rain and stratospheric ozone). Commenters (3509.1, 3577.1) continue that because each time Congress enacted legislation that avoided the need to turn to Section 115, Section 115 was left in place, Congress must have intended Section 115 to have some purpose. Despite this history, they note that EPA has not addressed Section 115 in any manner in the proposal. They request that EPA withdraw the proposal and evaluate Section 115 as an alternative vehicle if EPA moves under the CAA.

At least one commenter (3252.1) argues that a final endangerment finding under Section 202 of the CAA would not satisfy the criteria necessary to regulate under Section 115 of the Act. They note that before regulating under Section 115, EPA would need to examine issues such as whether the foreign nation in question gives the United States reciprocal rights (a prerequisite to any Section 115 regulation) and whether revisions to state implementation plans resulting from any EPA decision under Section 115 could "prevent or eliminate the endangerment" (another Section 115 requirement). EPA would also have to

show that it has “sufficient evidence correlating the endangerment to sources of pollution within a particular State,” a criterion EPA and the courts have drawn from Section 115.

Response (11-26):

EPA does not believe that Section 115 means that EPA can refuse to make the decision pending before it under Section 202(a) for regulation of GHG emissions from new mobile sources. These Final Findings are being made in response to the International Center for Technology Assessment (ICTA) petition submitted in October 1999, which specifically requested that EPA regulate GHG emissions from new motor vehicles under Section 202 of the CAA. Per the Supreme Court’s instructions, “EPA can avoid taking further action [under Section 202] only if it determines that GHGs do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do.” (549 U.S. at 533.) As discussed elsewhere, any such reasonable explanation “must relate to whether an air pollutant ‘cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare.’” *Id.* at 532-33. Thus, EPA must make a decision under Section 202(a) based on the science; it could not decline to regulate under Section 202(a) based on any potential policy preferences to use another section of the CAA instead. Indeed, this argument is very similar to arguments that EPA made in its original denial that were rejected by the Court. (*Id.* at 533 [“Although we have neither the expertise nor the authority to evaluate these policy judgments, it is evident they have nothing to do with whether GHG emissions contribute to climate change.”])

In addition, while the Administrator could exercise her authority under this provision if EPA were to promulgate an NAAQS for GHGs, the provision is not appropriate to address mobile source emissions. Section 115 creates a mechanism through which EPA can require states to amend their state implementation plans (SIPs) to address international transport issues. It is designed to protect public health and welfare in another country from air pollution emitted in the United States, provided the United States is given essentially reciprocal rights with respect to prevention and control of air pollution originating in the other country. The requisite finding under Section 115 has the same regulatory consequences as a finding that the state’s existing SIP is inadequate to attain the NAAQS or otherwise meet the requirements of the Act. Because a Section 115 notification would require the notified states to modify their SIPs to prevent or eliminate the endangerment, EPA reasonably interprets Section 115 to apply only in connection with the SIP program, not in connection with mobile source standards. EPA does not believe that it would be appropriate to use Section 115 as an alternative to section 202(a) for regulation of GHG emissions from new mobile sources

Finally, see Section III.D and IV.A.7 of the Final Findings for a discussion about how EPA can consider the global air pollution under Section 202, despite the presence of Section 115 in the Act.

Comment (11-27):

Other commenters (2818) suggested that EPA use the NAAQS system under Sections 108-110 before using Title II to address GHGs. They argue that EPA is putting the cart before the horse, by indicating plans to use a gram-per-mile standard on only new vehicles, when more than 70 percent of U.S. GHG emissions from other sources would remain uncontrolled.

At least one commenter (3354.1), while not advocating an NAAQS system for GHG per se and disagreeing with EPA’s historic practice of administering Section 179B, notes that in theory Section 179B offers a great deal of hope to states and counties faced with potential GHG NAAQS and nationwide nonattainment.

Response (11-27):

As discussed previously, these Final Findings are being made in response to the ICTA petition submitted in October 1999, which requested that EPA regulate GHG emissions from new motor vehicles under Section 202 of the CAA. Thus, EPA is appropriately focusing on Section 202 of the CAA in this action, and not opining about suggestions to use additional sections of the CAA as well, and/or how those sections may be implemented in the future.

11.12 Potential Other Legal Impacts of Final Findings

11.12.1 National Environmental Policy Act Considerations

Comment (11-28):

Some commenters (3347.1, 3509.1) express concern that an endangerment finding and attendant regulations could affect both compliance and the scope of environmental planning under the National Environmental Policy Act (NEPA). Specifically, they contend that the endangerment finding and language supporting the finding will likely make it more difficult and costly to meet NEPA and other environmental planning statutes because no models currently exist that forecast the potential impacts of GHGs on climate change at such levels. Yet, without a model available, they continue, federal agencies may be left with no ability to address GHG emissions in the Environmental Impact Statement (EIS), because there are no GHG emissions standards to serve as thresholds, no tools to analyze local GHG impacts, and compliance cost could easily exceed limited agency resources—leaving agencies vulnerable to litigation over potentially inadequate current and future environmental impact statements. Furthermore, they argue that language in the proposal could potentially trigger the NEPA process for federal projects that result in even the slightest changes in GHG emissions, focusing on what they consider broad conclusions regarding potential health and welfare effects that have not been demonstrated with a significant degree of scientific confidence and selectively picks and chooses the supporting science. Commenters (e.g., 3347.1) note that state environmental planning statutes pose similar problems, citing the California Environmental Quality Act (CEQA) as an example of a statute that has held up the construction of a wide range of projects, such as power plants, high-occupancy vehicle (HOV) lanes, and Wal-Mart stores.

Response (11-28):

These findings are being made under the CAA and are based on the statutory language of Section 202(a). When complying with any applicable NEPA requirements, federal agencies should follow their NEPA regulations and Council on Environmental Quality (CEQ) regulations and guidance. Further, EPA disagrees with claims that the findings contain broad conclusions regarding public health and welfare effects that have not been sufficiently demonstrated or are based on selective review of the science. See Volume 1 of the Response to Comments document and the Section III of the Final Findings for further discussion of the robust record supporting the Final Findings.

11.12.2 Potential for Increased Civil Litigation

Comment (11-29):

Many commenters (3293.1, 3347.1, 3702.1, 3704.2, 4508) express concern that a final positive endangerment finding would result in more citizen suits against industry alleging tort and environmental justice claims. For example, one commenter's (3293.1) chief concern regarding the endangerment finding is that it could potentially encourage a flood of lawsuits against companies that emit GHGs claiming that such activities constitute "negligence" or a "nuisance." The commenter describes five "global warming" tort cases have already been filed. Commenter (3347.1, 3704.2) note that Congress is better equipped than

the courts, or EPA, to tackle the issues involved in addressing a global challenge like climate change. Thus, they request that EPA clarify the endangerment finding is not intended to create evidence that could be used in tort lawsuits. Other commenters (3702.1) urge EPA to reconsider finding that current levels of GHGs endanger public health and welfare due to concern about tort litigation involving companies that supply products that contain GHGs or that directly release GHGs from manufacturing and other processes.

Still other commenters (e.g., 3347.1) express concern that EPA has paid no attention to the consequences an endangerment finding would have on environmental justice claims. They highlight the following language from the proposal in support of their concerns: “certain parts of the population may be especially vulnerable based on their circumstances. These include the poor, the elderly, the very young, those already in poor health, the disabled, those living alone, those with limited rights and power . . . and/or indigenous populations dependent on one or a few resources.”

Response (11-29):

The Final Findings are being made under Section 202(a) of the CAA and are based on the science and the applicable CAA statutory language. Regarding environmental justice issues, we note that Section I of the Findings state that “the Administrator places weight on the fact that certain groups, including children, the elderly, and the poor, are most vulnerable to these climate-related health effects.” The Administrator has considered climate change risks to minority or low income populations as part of these findings in accordance with the science and the applicable CAA statutory language. As described in other responses in this volume, the Administrator focuses her endangerment analysis on the science of GHGs and climate change, and not on the potential ramifications for civil tort litigation (corporate- or environmental justice-related) of regulations that may follow positive endangerment and cause or contribute findings.

This action is not the appropriate forum for opining on civil tort litigation. The issues before EPA concern the contribution of emissions from new motor vehicles and the impacts of the air pollution on the public health or welfare.

11.12.3 Carbon Dioxide Injection and Geologic Sequestration

Comment (11-30):

At least one commenter (3384.1) expresses concern about the impact of an endangerment finding on carbon dioxide injection and geologic sequestration projects. The commenter is worried that the finding would result in CO₂ injectate potentially being categorized as a pollutant or waste, raising the potential of the application of Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to enhanced oil recovery operations and geologic sequestration efforts. The commenter is concerned that application of such regulatory regimes to the carbon sequestration program would likely deter, or at least dramatically reduce, future investment in those areas.

Response (11-30):

Whether CO₂ injectate is a RCRA hazardous waste or a CERCLA hazardous substance, pollutant, or contaminant under either statute or applicable EPA regulations does not relate to any endangerment finding under CAA Section 202(a). EPA’s regulation of materials that are “solid waste” does not depend upon, and is unaffected by, a CAA endangerment finding. See RCRA Section 1004(27) (defining “solid waste” to include solid, liquid, semi-solid or contained gaseous material resulting from a wide range of activities). Moreover, RCRA regulations define “solid wastes” as hazardous when they are listed in, or exhibit certain characteristics as defined by, 40 CFR Part 261. Neither the listing nor characterization regulations depend on the presence or absence of any endangerment finding under CAA Section 202(a).

Similarly, the definitions of “hazardous substance” and “pollutant or contaminant” contained in Sections 101(14) and (33) of CERCLA do not reference or otherwise depend on any endangerment finding under CAA Section 202(a). *See also* 40 CFR 300.5 (regulatory definitions similar to CERCLA statutory definitions). EPA discusses the applicability of RCRA and CERCLA to CO₂ injectate and geologic sequestration in its proposed *Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO₂) Geologic Sequestration (GS) Wells*, 73 Fed. Reg. 43492, 43503-04 (July 25, 2008).

11.12.4 Preemption of State Efforts

Comment (11-31):

At least one commenter (3414.1) asks that EPA state explicitly that its endangerment finding does not in any way preempt state endangerment findings or global warming control efforts, so long as such state efforts do not provide for, or allow, less protective regulation of GHGs than under federal law.

Response (11-31):

EPA is on record as clearly supporting state action to reduce emissions of greenhouse gases. As noted in the Mandatory Reporting of Greenhouse Gases, Final Rule, EPA stated: “EPA supports and recognizes the success and necessity of State programs as a vital component in achieving GHG emissions reductions, particular focused on energy efficiency improvements.” (74 FR 56284). However, for purposes of this action EPA did not propose for consideration any position on preemption and at this time takes no position on whether this action preempts any particular state endangerment finding or effort to reduce greenhouse gases.

Further, we note that on May 20, 2009, President Obama issued a Memorandum on Preemption, which cites Executive Order 13132, Federalism (August 4, 1999) with approval. The memorandum stated President Obama’s policy that “preemption of State law by executive departments and agencies should be undertaken only with full consideration of the legitimate prerogatives of the States and with a sufficient legal basis for preemption. Executive departments and agencies should be mindful that in our Federal system, the citizens of the several States have distinctive circumstances and values, and that in many instances it is appropriate for them to apply to themselves rules and principles that reflect these circumstances and values.” Moreover, the preemption provisions of EO 13132 on Federalism state that agencies should construe federal statutes as preempting state law or issue regulations authorizing preemption only where the statute contains an express preemption provision, there is clear evidence that Congress intended to preempt state law, or the exercise of state authority conflicts with the exercise of federal authority. EO 13132, Section 4 (a)-(b).

11.13 Other Miscellaneous Comments

Commenters provide a variety of information not germane to the specific statutory issues before EPA. Such information ranges from detailed, specific comments on all parts of the ANPR, to lengthy descriptions of potential regulatory or legislative approaches for reducing GHGs, to concerns about energy security, to EPA’s moral obligation to regulate GHGs. A summary sampling of these comments is provided below to illustrate the breadth of the scope of comments received.

Comment (11-32):

Many commenters attach their comments on the ANPR in their entirety, rather than those sections related to this action. Thus, for example, they include comments about EPA’s authority to adopt cap and trade

approaches under various sections of the CAA. Commenters also include opinions about various technology issues discussed in the ANPR. They also include detailed comments about other pending petitions before EPA and EPA's authority under various sections of the CAA not at issue in this action (e.g., EPA's authority under Section 231 to regulate aircraft, EPA's authority under Section 213 regarding marine vessels, EPA's authority under Section 615). Several commenters provide their preferences for how EPA should address GHG emissions from stationary sources—some strongly urging EPA to control GHG emissions from stationary sources, and others advise that EPA restrain from doing so. One commenter (3435.1) requests that the finding recognize that biomass-derived fuels are carbon neutral. Another commenter (3414.1) urges EPA to grant California's request for a waiver under Section 209 of the CAA.

Several commenters (e.g., 2895, 3561.1, 4039.1) suggest expanding the source categories. One commenter (1191.1) notes that if the EPA can include in the Findings sulfur hexafluoride and perfluorocarbons, which are not Section 202(a) gases, then it is arbitrary and capricious to not also include the 76% of GHGs from non-mobile sources as well, and encourages broad inclusion of sources. Another commenter (1663) states that factory farming emits more GHGs than the mobile source category and many commenters (e.g., 934, 987, 1666, 2149, 2182, 2895, 3403) address the agriculture sector. One commenter (3403) wants building construction and renovation addressed. One commenter (3295.2) supports EPA's actions, but reminds the EPA that there are pending petitions addressing ocean-going, marine shipping, aircraft, nonroad vehicles and engines, and vehicle fuels (particularly marine fuel), and mandatory reviews of stationary source performance standards under Section 111, and other commenters (e.g. 3414.1) offer similar statements in favor of aviation emission control due to the increased impact of high altitude emissions. Commenters (e.g. 3417, 3426, 4036.1) also support the EPA action, but urges inclusion of power producers and other stationary sources, especially coal fired power plants (commenter 4036.1 specifically urges action under Section 111). Commenter (2818) points out that power producers may provide electricity for electric vehicles, and therefore should be discussed in the finding. Commenter (2895) discusses the other negative impacts of coal mining and commenter requests that EPA rescind the approval of mountaintop removal permits. Commenter (2895) requests inclusion of the military-industrial complex and the explosions of fireworks. Commenter (3483.1) suggests prioritization of large stationary sources and the transport sector, due to their contributing 74% of US GHG emissions.

In contrast, another commenter (3289.1) cautions that the forestry sector should not be included as a stationary source because a forest is not a "facility" or an industrial source, nor can pollution control technologies be installed in forests. However, the commenter suggests that the forestry sector can enter into productive voluntary collaborations addressing climate change through carbon capture and storage. Similarly, a commenter (3290.1) states that agriculture should not be considered as a stationary source because that would be inconsistent with the Clean Air Act. Another commenter (3382.1) addresses the dairy sector, noting that GHG regulation of the sector will favor fixed technology standards and large operations, which will work against GHG reductions. Commenters (3754.1, 3892.1, 3964) worry about legal liability for farmers based on the ruling. One commenter (3892.1) notes that modern agricultural milk production produces only one-third of the GHG footprint as it used to in 1944.

Numerous commenters (e.g., 0572, 0920, 1310, 1561.1, 2253, 2892.1, 2984.1, 3289.1, 3302.1, 3318.1, 3975, 9398) discuss various options for addressing and regulating GHG emissions. Their recommendations include emphasizing a need for coordination involving the EPA, the Administration, and Congress; encouraging the private and public sectors to work in accord; suggesting that regulations should partially or wholly target efficiency gains; emphasizing the cumulative impacts of GHG emissions and considering life cycle analysis; encouraging the invention of new low-emission technologies; suggesting that private forests could play a key role in addressing climate change; advocating for a market-based program that supports agriculture's role as a source of carbon offsets; and suggesting that EPA should consider the potential of congestion reduction for reducing GHGs. A few commenters

(1309.1, 7031) state their belief that EPA should focus on adaptation to climate change instead of GHG regulations because it is more cost-effective than mitigation. One commenter (1561.1) states that there is a need for federal leadership on adaptation, as well as for an international funding mechanism for adaptation. Many commenters (3609.2, 4249, 8560, 9848, 10809, 11305) also indicate that “...comprehensive [Congressional] climate legislation” and/or “a coordinated federal approach” is key to managing GHG emissions.

Numerous commenters (e.g., 0276, 0362, 0524, 1018.1, 1117.1, 1118.1, 1157.1, 1158.1, 1185.1, 1189.1, 1539.1, 1919.1, 3002, 3021, 3031, 3132, 3155, 3485, 3487, 3580, 3587, 3621, 3658, 3996, 3621, 4800, 4846, 4973, 6677, 7663, 8016, 8869, 9452, 9703, 11432) request that EPA hold polluters financially accountable for the amount of GHG emissions released, stating that in this day and age everyone has to take responsibility. Commenters provide various suggestions for regulating GHG emissions. Several (0795, 3341, 4109, 7914, 11432) express their support for a cap and trade system, while others (3580, 6677, 7663, 8869) object to such a system because they believe it would not lead to real GHG emission reductions. Numerous commenters (0276, 0362, 1018.1, 1117.1, 1118.1, 1157.1, 1158.1, 1185.1, 1189.1, 1539.1, 1919.1, 3580, 3996, 4184, 4846, 6677, 7663, 8869, 9703) support a carbon tax system. Many other commenters (0362, 1018.1, 1117.1, 1118.1, 1157.1, 1158.1, 1185.1, 1189.1, 1539.1, 1919.1, 3580, 3996, 4184, 4843, 8160, 8869) believe that setting a limit on CO₂ emissions and then taxing those who break the limit will encourage companies to reduce their emissions as well as providing more money to the government that could be spent on protecting the environment.

One commenter (3271) suggests that putting more regulations on inefficient products would encourage people to purchase cleaner ones. Two commenters (3359.1, 3454.1) suggest taking a multi-pollutant approach to the regulation; one commenter in particular encourages EPA to regulate ground-level ozone, fine particulates, and mercury. One commenter (3487) states that clean air technology must be made available to every company that wants to cap greenhouse emissions and suggested tax breaks as an incentive to using these technologies. Several commenters (e.g., 0295, 0845, 3544, 3995, 8151, 10024) stress the importance of considering animal agriculture as a significant source of GHG emissions and suggested regulating this sector as such. Some commenters (2266, 7498, 11429) also request that EPA investigate the aviation and maritime industries’ contribution to global warming and take additional steps towards regulating their emissions. Some commenters (4814, 11274, 11371) state that population growth or overpopulation are issues that must be addressed to control GHGs.

In addition, some commenters (e.g., 4719, 4843, 4993, 6699, 6833, 7609, 9327, 10100, 11424) suggest various transportation policies aimed at reducing GHG emissions. These include: regulating automotive fuel efficiency; eliminating ethanol from vehicle fuels; investing in rapid transit; encouraging production of affordable and economical hybrids; providing incentives for individuals who buy hybrid cars; phasing out motor vehicles to transition to electric vehicles; subsidizing alternative technologies; and taxing fuel for gasoline and diesel vehicles.

Numerous commenters (e.g., 3345, 3490.1, 3598.1, 3696.1, 4136, 6901, 6913, 6936, 6937, 7823, 10838, 1558, 4136, 4892, 6284, 9509, 9786, 9868, 10156, 10418, 10476, 10510, 4892, 10418) state that coal-fired power plants are a major source of global warming pollution and suggest a variety of regulatory approaches to phasing out coal-fired electricity generation in order to further reduce GHG emissions. Many commenters (8561, 10402, 10476) urge EPA to resist political pressure from the fossil fuel industry and move forward with regulation. Numerous commenters (e.g., 0276, 2040, 3048, 3235_CP, 3692, 3696.1, 4926, 7618, 7646, 8318, 8560, 8918, 9479, 9664, 9896, 10044, 10081, 10152, 10925) suggest various ways to cheaply, effectively, and safely reduce global warming pollution associated with electricity generation. These include increasing energy efficiency; exploring or switching to renewable or “clean[er]” energy (including wind, solar, biomass, natural gas, nuclear, and geothermal); upgrading the U.S. electricity grid; mandating through federal legislation the widespread use of natural gas; supporting

research in alternative and renewable energy sources; and creating a strong regulatory and market-based system that ensures business investment in new technologies. One commenter (4851) objects to the use of nuclear energy as an alternative to fossil fuels, and another commenter (10510) emphasizes sharing renewable technology with developing nations.

Some commenters provide general information related to their industry (predominantly stationary sources), as well as information regarding additional approaches to address reducing GHG emissions (e.g., energy efficiency, Australia's "envelope" approach). A few commenters (1226.5, 2895, 3494.1, 3548.1) advocate the climate benefits of increased mileage standards, fuel conservation, recycling, energy-efficient lighting and other energy-efficiency measures, and a full and rapid phase-out of HFC F-gases used in refrigeration and foam blowing.. One commenter (2895) recommends that EPA institute a voluntary incentive program for schools to reduce their GHG emissions, while another (0645) questions whether GHG reductions can be achieved with current technology. Two commenters (0244.1, 3341) provide comments on methods for encouraging new pollution-control and low-emission technologies, such as outreach on technology strategies, taxes, and regulatory incentives. The commenter (0244.1) also provides a discussion of six technologies that he believes should be actively encouraged by EPA, including nuclear ships, solar/wind propelled ships, hydrogen- and battery-propelled boats, electric aircraft (and other non-carbon power plants), automotive cryogenic heat engines, and electric car grid energy storage. Others (2895, 3501, 4288) criticize the negative climate impacts from the meat industry and the ineffectiveness of and potential public health consequences of carbon capture and sequestration technology. One commenter (9243) asks that EPA consider public education on the issue to be "absolutely required." One commenter (11264) warns of the law of unintended consequences and requests that EPA read *Playing God in Yellowstone: The Destruction of America's First National Park* (Chase, 1987) for more information before moving forward with any action. Another commenter (0468) asks if the endangerment and cause or contribute findings would result in banning carbonated beverages and beer due to their release of CO₂.

Several commenters (3372.1, 3747.1, 3764.1) discuss extensively what they anticipate to be negative economic and energy security consequences of GHG regulation under the CAA, including an increased demand for foreign energy imports, particularly liquefied natural gas. Others worry that the reliability of the national electric grid will be imperiled by making it more difficult for coal power plants to operate. Many commenters (e.g., 0459, 1520, 3768, 4309, 9245) indicate that the United States should strive to end its reliance on fossil fuels; some commenters (2830, 3027) also conclude that dependence on fossil fuels leaves the United States dependent on foreign imports, which creates national security and terrorism concerns. One commenter (3372.1) states broadly that the "true national security issues" are economic and energy security, and that the EPA overlooks these in making the endangerment finding. Another commenter (3747.1) asserts that EPA stated in the ANPR that it would evaluate energy security implications of potential mitigation actions but did not do so. Similarly, a commenter (3452.1) states that EPA does not discuss the potential for reduced energy supply that would drive up consumer's energy costs and/or increase foreign imports of energy supplies. Several commenters (3372.1 and 3764.1) assert that it is a mistake to believe that foreign sources of energy can be reduced without continuing to utilize coal, and note the many uses of coal, including in transportation fuels.

Among those commenters that support EPA's position, several commenters (3361.1, 3566.1, 3986, 4179, 8665, 10510) feel strongly that this includes a moral obligation by the Agency to regulate GHGs. Commenters cite various reasons, including: 1) global warming is "one of the greatest challenges humanity has ever faced" (2263, 3000, 5009, 5020, 5051), 2) it is necessary for the United States to establish itself as a world leader in the effort to reduce GHGs (e.g., 0253, 0524, 0718, 3385.1, 3609.2, 3992, 11357.), and 3) it is the duty of the government and EPA to undertake urgent action to protect citizens from the damaging impacts of global warming (4526, 6823, 6835, 10081, 10298, 10641). One commenter (1551), though in support of EPA's actions, expressed disappointment that the proposed

findings failed to include accompanying regulation. Some commenters (3409, 3428.1, 3492.1) from the business community also stated their belief that taking responsibility for their share of GHG pollution is a moral obligation and ask for EPA's assistance to regulate these pollutants.

Several commenters (e.g., 2151, 3030, 3383.1, 3455.1, 3566.1, 3598.1, 3642, 3680.1, 8665, 8704, 3443, 3120) voice their support for EPA's Proposed Findings due to concern about the welfare of current and future generations due to GHGs. Many commenters (e.g., 0353, 0524, 1663, 2147, 0701, 6835, 3046, 10033, 9347, 9607, 9683, 3421) state that the consequences of doing nothing are too dire to not act and that the longer we wait to do something about GHG emissions, the harder it will be to get the climate stabilized, the greater the negative effects on health and well-being, and the closer we come to tipping points that will trigger more devastating change.

Response (11-32):

This action is under section 202(a) of the Act, and therefore EPA is only considering the emissions from the section 202(a) source category for purposes of making the cause or contribute determination. Emissions from other source categories are not relevant for determining whether emissions from section 202(a) sources cause or contribute to the air pollution.

Comments about how EPA, or the United States, should or could address GHGs generally are outside the scope of this action, which is about whether emissions of well-mixed GHGs from new motor vehicles and new motor vehicle emissions cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Thus, while EPA reviewed the information provided by commenters on these topics, they are not germane to this action and thus we are not responding to them.

References

Office of the Press Secretary (2009). President Obama announces national fuel efficiency policy. White House press release. May 19.

Carlin, A. (2009). *Proposed NCEE Comments on Draft Technical Support Document for Endangerment Analysis for Greenhouse Gas Emissions under the Clean Air Act*.

Chase, Alston (1987). *Playing God in Yellowstone: The Destruction of America's First National Park*.

Johnson, S.L. (2008). EPA's interpretation of regulations that determine pollutants covered by federal Prevention of Significant Deterioration (PSD) permit program. Dec. 18.

Obama, B. (2009). Preemption. Memorandum for the heads of executive departments and agencies. May 20.

Orszag, P.R. (2009). Clearing the air. <http://www.whitehouse.gov/omb/blog/09/05/12/ClearingtheAir/>. Accessed December 5, 2009.