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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 1 1999

OFFICE OF
GENERAL COUNSEL

Honorable David M. McIntosh
Chairman, Subcommittee on National Economic Growth,
Natural Resources and Regulatory Affairs
Committee on Government Reform
U.S. House of Representatives
2157 Rayburn House Office Building
Washington, DC 20515-6143

Dear Mr. Chairman:

I am writing in response to your letter of October 14, 1999, which follows up on certain issues raised at the October 6, 1999, joint hearing conducted by the Government Reform Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs and the Science Subcommittee on Energy and the Environment. Attached are our responses to your questions.

Please let me know if we can be of further assistance, or please have your staff contact Alexandra Teitz of my office at 202/564-5594.

Sincerely,

Gary S. Guzy
General Counsel

1. What in your judgment is the significance of the fact that the Clean Air Act refers to carbon dioxide (CO2) only in reference to non-regulatory activities, such as research and technology development, while it specifically identifies hundreds of other substances to be regulated by the Environmental Protection Agency (EPA)?

In certain provisions of the Clean Air Act (CAA), Congress has delegated to EPA authority to regulate any air pollutant if the Administrator finds that the pollutant meets the criteria in the provision. For example, section 108 does not name any specific pollutants, but rather provides the criteria for EPA to use in determining whether to list and regulate a pollutant. In relevant part, the section requires the Administrator to list each air pollutant "emissions of which, ...may reasonably be anticipated to endanger public health or welfare...." Section 112 contains a specific list of hazardous air pollutants, but also authorizes the Administrator to add other air pollutants to that list and provides the criteria for the Administrator to apply in making such determinations. A number of other Clean Air Act provisions are similarly structured. Specific mention of a pollutant in a statutory provision is not a necessary prerequisite to regulation under many CAA statutory provisions.

2. Your testimony cites Section 103(g) as proof that CO2 is a "pollutant" within the meaning of the Clean Air Act. Yet, that very section directs the Administrator to develop "non-regulatory" strategies, and concludes with an admonition: "Nothing in this subsection shall be construed to authorize the imposition on any person of pollution control requirements." Similarly, the only provision of the Clean Air Act to mention global warming, section 602(e), stipulates: "The preceding sentence shall not be construed to be the basis of any additional regulation under this chapter." How do you interpret these Congressional restrictions?

Congress explicitly recognized CO2 emitted from stationary sources, such as fossil fuel power plants, as an "air pollutant" in section 103(g) of the Act, which authorizes EPA to conduct a basic research and technology program to include, among other things, "[i]mprovements in nonregulatory strategies and technologies for preventing or reducing multiple air pollutants, including ... carbon dioxide, from stationary sources,...." (Emphasis added.) EPA agrees that section 103(g) and section 602(e) do not themselves provide authority to regulate. However, the language that you have cited limiting the authority provided by those sections to research activities does not affect the fact that Congress recognized CO2 as an air pollutant in section 103(g). Nor does the language in sections 103(g) and 602(e) limit in any way the regulatory authority provided by other provisions of the Clean Air Act.

3. During the hearing, Professor Jeffrey Miller argued that the absence of express statutory authority to regulate CO2 is not significant because the Clean Air Act authorizes the Administrator to revise or add to the list of regulated substances. However, the Clean Air Act always confers such listing authority in the context of specific regulatory schemes designed to address specific kinds of problems. For example, there is a "criteria" pollutants program to reduce emissions of substances that adversely affect ambient air quality, a

"hazardous" pollutants program to control emissions of toxic substances, and a stratospheric ozone protection program to phase out ozone-depleting substances. There is no comparable program to reduce, control, or phase-out emission of greenhouse gases. What in your judgment is the significance of the fact that the Clean Air Act contains no subchapter or section on global climate change? What is the significance of the fact that the Act nowhere expressly authorizes the Administrator to list and promulgate regulations to control substances that may be reasonably anticipated to cause or contribute to global warming?

To answer your question, it is critical to understand how the structure of the Clean Air Act has evolved over time. The current Clean Air Act is the product of a series of enactments over the last 30 years, most importantly the amendments of 1970, 1977, and 1990. In the 1970 Clean Air Act, for example, Congress provided the Agency general authority to identify and regulate various types of air pollutants or sources (e.g., criteria pollutants under sections 108 and 109, new sources under section 111, or hazardous air pollutants under section 112). These 1970 provisions generally did not name specific pollutants or source types. EPA used those authorities in the following years to identify and set standards for a number of air pollutants (e.g., the National Ambient Air Quality Standards (NAAQS) for such air pollutants as ozone, sulfur dioxide, and particulate matter). After EPA took action under these general authorities, Congress has sometimes provided more specific authority. For example, the 1977 and 1990 amendments included specific mandates to periodically review and update the NAAQS that EPA had already set, and set forth refined approaches to the implementation of those standards. In this context it is not surprising to find 1977- and 1990-vintage provisions that specifically name ozone or other pollutants that EPA had already placed under regulation. In some areas, the 1977 and 1990 amendments include specific provisions mandating the regulation of one or more pollutants as to which EPA had not yet used its general authority. These more specific enactments generally left intact, and in some cases extended, EPA's general authority to identify and regulate additional air pollutants if they meet the criteria of relevant sections of the Act. Thus, the absence of specific provisions addressing a particular air pollution problem does not mean that EPA lacks authority to address that problem.

Since 1970, the Clean Air Act has contained various provisions authorizing regulation to address air pollutants' actual or potential harmful effects on public health, welfare or the environment. For example, sections 107, 108, 109, 111(b), 112, 202, and 231, among others, date from the 1970 Act, although they have been modified since. The courts have long recognized that Congress need not address every question that could arise under a statutory scheme for an agency to have authority to act. "The power of an administrative agency to administer a congressionally created . . . program necessarily requires the formulation of policy and the making of rules to fill any gap left, implicitly or explicitly, by Congress. *"Chevron v. NRDC*, 467 U.S. 837, 843 (1984), *quoting Morton v. Ruiz*, 415 U.S. 199, 231 (1974)." In *Chevron*, the court discussed the variety of reasons why Congress might not have addressed a particular issue. "Perhaps that body consciously desired the Administrator to strike the balance at this level, thinking that those with great expertise and charged with responsibility for administering the provision would be in a

better position to do so; perhaps it simply did not consider the question at this level; and perhaps Congress was unable to forge a coalition on either side of the question, and those on each side decided to take their chances with the scheme devised by the agency." *Id.* at 865. The court in *Chevron* recognized that Congress' failure to direct an agency on a specific issue, where Congress has given the agency broad power to act, constitutes an explicit or implicit delegation of authority for the agency to decide the issue. Thus, where Congress has provided EPA broad authority, with criteria for exercising such authority, the fact that Congress did not speak to how the Agency should exercise such authority with respect to each individual air pollutant or air pollution issue, does not limit EPA's delegated authority.

4. In section 112 of the Clean Air Act, Congress specifically named 190 hazardous air pollutants (HAPs), but did not include CO2 in the list. Each of the substances listed is highly toxic and endangers health or the environment through direct exposure, not indirectly through a chain of secondary effects as in the supposed case of greenhouse warming. By what scientific logic or statutory construction could EPA list CO2 as a HAP?

EPA has not concluded that CO2 is a hazardous air pollutant. As we have stated, EPA would have authority to regulate CO2 under section 112 *if* a finding were made that CO2 presented a threat of "adverse environmental effects," as section 112 uses that phrase. Section 112(a)(7) defines "adverse environmental effect" as "any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas." Furthermore, air pollutants may be added to the list due to adverse environmental effects that occur not only through ambient concentrations, but also "bioaccumulation, deposition or otherwise." Thus, the substances that may be added to the list of hazardous air pollutants under section 112(b) are not limited to those that are "highly toxic and endanger[] health or the environment through direct exposure."

5. Could EPA have phased out Freon 12 and other non-toxic ozone-depleting substances under its authority to regulate HAPs, or did EPA require new and specific authority such as conferred by Subchapter VI? If the HAPs regulatory framework is unsuited to control substances that deplete the ozone layer, why is it not also unsuited to control substances suspected of enhancing the greenhouse effect?

EPA has not evaluated whether it would have had authority to phase out ozone-depleting substances under section 112 of the Act. Congress gave EPA explicit and more detailed authority to address ozone-depleting substances under section 157 of the 1977 Clean Air Act and under Title VI of the Clean Air Act as Amended in 1990. Thus, the issue of whether EPA had authority under other provisions of the Act never arose.

6. Could EPA have phased out Freon 12 and other ozone-depleting substances under the National Ambient Air Quality Standards (NAAQS) program, or did EPA require new and specific authority such as conferred by Subchapter VI? If the NAAQS regulatory framework is unsuited to control substances that deplete the ozone layer, why is it not also unsuited to control substances suspected of enhancing the greenhouse effect?

EPA has not evaluated whether it has authority to phase out ozone-depleting substances under the NAAQS program. Please see the answer to question 5.

7. EPA contends that the NAAQS program is a potential source of authority to regulate emissions of CO2. However as section 107(a) of the Clean Air Act makes clear, "ambient" air is that which surrounds people and communities in particular "geographic" areas or regions. Indeed, EPA's own definition of "ambient air" is "that portion of the atmosphere, external to buildings, to which the general public has access" (40 C.F.R. section 50.1(e)). In contrast, the supposed enhancement of the greenhouse effect by CO2 emissions is a global phenomenon of the troposphere, a layer of the atmosphere to which the general public does not normally have access. Furthermore, CO2 emissions have nothing to do with the "quality" (breathability or clarity) of ambient air. By what logic, then, might EPA ever classify CO2 emissions as an "ambient air quality" problem? By what logic might EPA ever regulate CO2 under the same authority that it now regulates soot and smog?

It is important to note, as a threshold matter, that EPA does not have under active consideration use of the NAAQS provisions to regulate CO2, as posed by this question. As stated in the April 10, 1998 Cannon memorandum on authority to regulate pollutants from electric power generation prepared for the Administrator and reiterated in my testimony, "[w]hile CO2, as an air pollutant, is within EPA's scope of authority to regulate, the Administrator has not yet determined that CO2 meets the criteria for regulation under one or more provisions of the Act." I further stated in my testimony that EPA has not proposed and has no current plans to propose to regulate CO2.

That said, I would like to clarify several apparent misunderstandings regarding EPA's authority to establish National Ambient Air Quality Standards or take other actions under Title I of the Act.

First, your question appears to be premised on the proposition that the troposphere does not include the air at ground level, to which people ordinarily have access. It is our understanding, however, that the troposphere extends from the earth's surface up to a boundary layer some miles overhead that demarcates the lower reaches of the stratosphere (the "tropopause"). For example, a standard dictionary definition of the "troposphere" is: "[t]he lowest atmospheric region between the earth's surface and the tropopause." Webster's II New Riverside Dictionary. As you note, global warming is largely attributed to elevated levels of greenhouse gases in the troposphere.

Second, EPA currently regulates under Title I substances that are emitted and/or transported through parts of the troposphere above the height to which the public generally has access. For example, humans generally do not have access to the area immediately surrounding the top of tall

smoke stacks. Nor do people generally have access to the altitudes through which air pollutants travel as they mix and move to areas downwind.

Finally, the authority of sections 108 and 109 is not limited to pollutants that affect the "breathability or clarity...of ambient air." Sections 108 and 109 refer to adverse effects on public health, without specifying inhalation as the only relevant mode by which adverse health effects may be caused. Further, EPA is authorized to set national secondary ambient air quality standards "to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air." Section 302(h) provides that "[a]ll language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, *weather*, visibility, and *climate*, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants." (Emphasis added.) Thus, effects on climate would be a valid basis for a secondary NAAQS, and Congress' considerations were not limited solely to concerns about "breathability" or "clarity" of the air.

8. As noted, EPA defines "ambient air" for purposes of the NAAQS program as "that portion of the atmosphere, external to buildings, to which the general public has access" (40 C.F.R. section 50.1(e)). The general public does not normally have access to the troposphere, where CO2 enhancement of the greenhouse effect supposedly occurs. Would EPA have to change this definition in order to promulgate a NAAQS for CO2?

While EPA has not considered any of the specific regulatory language that would be associated with promulgation of a NAAQS for CO2, the question above appears likely to be an academic question, given the specific properties of greenhouse gases. We understand concentrations of greenhouse gases to be essentially identical between the portions of the troposphere to which the public has access and the portions of the troposphere to which it does not have access. Thus, measures addressed to limiting the concentration of greenhouse gases in the lower reaches of the troposphere would be identical to those intended to limit the concentration in the troposphere as a whole.

9. Assume for the sake of argument that EPA decided to publish a NAAQS for CO2?

The types of questions posed below are ones that typically would be resolved through an extensive rulemaking process. For issues of this kind, such a process would typically include scientific studies, peer-review processes, legal and policy analyses, economic assessments, stakeholder involvement through meetings and public comments, and a proposed and final rulemaking. EPA has not begun such a rulemaking process, and the assumptions underlying this question and the following hypotheticals are not linked to any current or planned EPA activities. Thus, EPA believes it would be inappropriate for the Agency to speculate with regard to most of these questions before engaging in any rulemaking process. Responses are given below to those questions which can be answered without such speculation.

a. Would EPA set the NAAQS above or below the current atmospheric concentrations (360 parts per million) of CO2?

Please see the response to question 9, above.

b. If EPA set the NAAQS above current concentrations, would not every area of the country be in attainment, even if U.S. CO2 production suddenly doubled?

Please see the response to question 9, above.

c. If EPA set the NAAQS below current concentrations, would not every area of the country be out of attainment, even if all power plants and factories were to shut down?

Please see the response to question 9, above.

d. Has EPA ever published a NAAQS that, at the time of publication, put every area of the country either in attainment or out of attainment?

No, none of the NAAQS that EPA has published to date have, at the time of publication, put every area of the country either in attainment or out of attainment.

e. Is it EPA's contention that the NAAQS provisions of the Clean Air Act authorize designation of nonattainment areas where attainment cannot be achieved without coordinated international action? If the answer is yes, how could EPA assure attainment of a CO2 NAAQS within the deadlines set forth in section 172(a)(2) if attainment depends on the actions of other countries?

EPA has not considered or taken a position on the question of whether the Clean Air Act authorizes designation of nonattainment areas where attainment cannot be achieved without international action. Thus, EPA also is unable to speculate on the second part of your question above. EPA notes, however, that Congress has contemplated that a situation could arise under the Clean Air Act in which an area would be unable to attain a NAAQS because of pollution transported from other countries. Section 179B provides that EPA must approve an implementation plan for such an area if the State establishes that the implementation plan would be adequate to attain and maintain the NAAQS, but for emissions emanating from outside of the U.S., thereby allocating an appropriate portion of responsibility for the air pollution problem to the local area or region.

f. In light of the foregoing questions and your answers to them, does the NAAQS program have any rational application to a global phenomenon of the troposphere, such as the greenhouse effect? If your answer is yes, please describe the actions a State would be required to take in an implementation plan to demonstrate attainment of a CO2 NAAQS set below current atmospheric concentrations.

EPA agrees that these are issues that would have to be resolved if the Agency were to consider setting a NAAQS for CO2. As explained above, these issues would be addressed through an extensive rulemaking process, and hence they are not ones to which EPA can respond at this time. EPA also has not specifically evaluated the suitability of the NAAQS framework for regulating greenhouse gases. However, the April 10, 1998 Cannon memo noted that with respect to the control of emissions from electric power generating sources, the authorities potentially available under the Act "do not easily lend themselves to establishing market-based national or regional cap-and-trade programs, which the Administration favors for addressing these kinds of pollution problems."

10. Rep. John Dingell, in a letter to Rep. McIntosh dated October 5, 1999, states: "While it [section 103 of the Clean Air Act] refers, as noted in the EPA memorandum, to carbon dioxide as a 'pollutant,' House and Senate conferees never agreed to designate carbon dioxide as a pollutant for regulatory or other purposes." Mr. Dingell further states: "Based on my review of this history and my recollection of the discussions, I would have difficulty concluding that the House-Senate conferees, who rejected the Senate regulatory provisions (with the exception of the above-referenced section 821)[1] contemplated regulating greenhouse gas emissions or addressing global warming under the Clean Air Act." Do you agree with Mr. Dingell's account of the legislative history? If not, please explain why.

EPA agrees with Congressman Dingell that Congress did not specifically address the question of regulation of CO2 or greenhouse gas emissions in the 1990 Amendments. However, the relevant question here is whether the 1990 Amendments removed or limited in some way EPA's pre-existing general authority under various provisions of the Act to regulate air pollutants that meet the criteria for regulation under those specific provisions. The fact that Congress did not enact a proposed provision that would have mandated a pollutant's regulation on climate change grounds did not limit or revoke the general discretionary authority already contained in the Clean Air Act, prior to the 1990 Amendments.

11. Section 302(j) of the Clean Air Act defines "major stationary source" and "major emitting facility" as any stationary source or facility that emits 100 tons or more per year of any air pollutant. Has EPA estimated how many small- and mid-sized businesses and farms emit 100 tons or more of CO2 per year? If so, how many? As "major sources" of CO2 emissions, might not tens or even hundreds of thousands of small entities suddenly become subject to pollution control requirements, were EPA to regulate CO2?

EPA has not undertaken any estimate of the number of small- and mid-sized business and farms that emit 100 tons or more of CO2 per year. I would note, however, that some provisions of the Clean Air Act apply to "major stationary sources" and "major emitting facilities," but others do not.

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[1]This section requires EPA to monitor – not control – CO2 emissions from certain sources.

12. At the hearing, the Subcommittees questioned you about the apparent contradiction between the Administration's commitment not to implement the Kyoto Protocol before ratification and EPA's claim of authority to regulate CO2. Rep. Bob Barr asked: "Can you assure the Subcommittees that, even though EPA believes it already has the authority to regulate CO2, EPA will not do so until and unless the Protocol is ratified? Can you give us that assurance?" You replied that "we have no plans to use our existing authority to regulate carbon dioxide." This is not very assuring, because your response may mean merely that EPA has no plans *at this time* to regulate CO2. Please confirm or deny the following statements:

a. "EPA will not propose or issue rules, regulations, decrees, or orders to control emissions of CO2, or prepare to control such emissions, until and unless the Kyoto Protocol is ratified."

Please see response to 12b. below.

b. "EPA will not spend taxpayer dollars to advocate or develop programs or initiatives designed to lay the groundwork for possible future regulation of CO2 emissions, until and unless the Kyoto Protocol is ratified."

It would not be responsible for EPA to pledge under all circumstances not to exercise authorities or otherwise discharge responsibilities delegated to EPA by Congress for the purpose of protecting public health and the environment. However, I would like to reassure you again that EPA has no plans to use existing authority to regulate CO2 emissions.

The Administration has repeatedly stated that it will not implement the Kyoto Protocol prior to Senate advice and consent to ratification. EPA has at all times complied, and will continue to comply, with the Knollenberg appropriations restriction. As discussed in numerous pieces of previous correspondence, there is a clear and sound distinction, however, between implementation of the Kyoto Protocol and any other appropriate actions regarding greenhouse gases under existing authorities for the purposes specified in the Clean Air Act, and in the 1992 Framework Convention on Climate Change, which was ratified by the Senate.

13. Rep. Barr also asked: "Are you saying that, if EPA determines that CO2 emissions endanger public health, welfare, or the environment, EPA may regulate CO2, even if the Senate does not ratify the Kyoto Protocol?" Your response did not address this question but rather reiterated EPA's general position the Clean Air Act "did cite carbon dioxide to be within the class of substances that could be subject to regulation." Therefore, please answer this question: Does EPA believe that the Administration's promise not to implement the Kyoto Protocol prior to ratification is, *inter alia*, a promise not to regulate CO2 emissions prior to ratification?

As noted above, and as we have repeatedly discussed in correspondence with you, there are many regulatory actions that have the effect, or even the purpose, of reducing greenhouse gases (sometimes including CO2), but not the purpose of implementing the Kyoto Protocol. As we have explained in previous letters, some regulatory actions addressed to conventional air quality objectives (e.g., measures to address emissions of nitrogen oxides or sulfur dioxide) can have the indirect effect of reducing greenhouse gases, depending on technological approaches that individual firms choose for compliance. Some provisions of the Clean Air Act authorize regulatory actions that directly address emissions of greenhouse gases (e.g., certain provisions of Title VI). None of these actions has the purpose of implementing the Kyoto Protocol. The Administration's commitment not to implement the Kyoto Protocol prior to ratification is not a commitment to forego implementing the Clean Air Act. However, as stated above, EPA has no plans to use existing authority to regulate CO2 emissions.

14. At the Hearing, you said that EPA has "not commenced the process" to determine whether CO2 emissions endanger health, welfare, or the environment. This is puzzling. The Administration has said repeatedly that the science underpinning the Kyoto Protocol is "clear and compelling." Are we now to understand that the basic science issues are not "settled?" The actual test in the NAAQS for regulating a substance is whether, in the Administrator's "judgment," emissions of that substance "may reasonably be anticipated to endanger public health or welfare." Are you saying that, in the Administrator's judgment, there is no reasonable basis to anticipate that CO2 emissions endanger public health or welfare?

As explained above in response to Question 9, in setting a new NAAQS, the Administrator exercises her judgment under sections 108 and 109 based on a record for rulemaking that includes a formal scientific review of the risks to public health and welfare. EPA has not commenced, with respect to CO2, the formal scientific review process that is set forth in sections 108 and 109 regarding the setting of a new NAAQS. EPA believes, as do the other Parties to the ratified U.N. Framework Convention on Climate Change, that the science supporting international action on climate change is clear and compelling.

15. Your written testimony refers to CO2 as a substance of environmental "concern." You also contend that CO2 is a "pollutant" within the meaning of the Clean Air Act. Does EPA not feel obligated to conduct an analysis of pollutants of concern to determine if they should be regulated? Why has EPA not "commenced" the process of making that determination? When will EPA begin that process?

As I have stated, EPA has no plans to use existing authority to regulate CO2 emissions, and hence, has not commenced the actions that would be necessary to regulate CO2 emissions.

16. Professor Jeffrey Miller states that EPA "could not promulgate a new source performance standard for carbon dioxide" under section 111 for any category of sources unless EPA could establish that a CO2 emissions control technology "had been adequately

demonstrated for such a category." To your knowledge, does there exist a commercially available, cost-effective technology to control CO2 emissions from coal-fired power plants?

Standards under section 111 are not limited to the application of "end-of-pipe" pollution control technologies. Rather, they can include requirements as to the design or operation of a source, precombustion cleaning or treatment of fuels, and inherently low-polluting or non-polluting technologies. Regarding coal-fired power plants, one example of commercially available, cost-effective technology to control CO2 emissions is a variety of measures to improve combustion efficiency ("heat rate improvements"). Heat rate improvements are currently being made at many such plants in response to the demand for greater efficiency as the electricity market moves towards competition. To say that controls exist that could be considered for adoption should EPA set NSPS for CO2 is, of course, far from saying that EPA plans to adopt such standards. As outlined above, EPA has no such plans.

17. The Clean Air Act expressly requires EPA to set NAAQS for particulate matter and ozone. Nonetheless, the D.C. Appeals Court in *American Trucking Associations, Inc., et. al., v. EPA* held that EPA, in setting new NAAQS for those substances, construed sections of the Clean Air Act "so loosely as to render them unconstitutional delegations of legislative authority." The Clean Air Act nowhere expressly authorizes EPA to regulate CO2. Do you think EPA regulation of CO2 would be challenged in court? If so, do you think the courts would uphold such regulation or strike it down as a usurpation of legislative power?

In response to the first question, while we cannot precisely predict the litigation strategy of private parties, it seems likely that any regulation of CO2 would be challenged in court.

In order to respond to your second question, allow us to clarify several points regarding the NAAQS for particulate and ozone and the *American Trucking Association (ATA)* case. First, as you know, EPA has requested that the Justice Department appeal the *ATA* case and does not agree with its delegation ruling. Second, as indicated in prior answers, the 1970 Clean Air Act provided EPA with authority to issue NAAQS for particulate matter and ozone without specifically naming those pollutants in the statute. Subsequent amendments specifically require periodic review and revision of the named pollutants, while maintaining EPA's authority to add other pollutants to the list if the statutory criteria for listing are met. Even if the *ATA* decision were ultimately upheld, EPA believes it would retain the authority to list and regulate additional air pollutants if the appropriate findings were made and supported in a rulemaking record. It does not appear that the listing and regulation of additional pollutants would create any special or additional problems under the theory of the *ATA* case.

18. Your July 26, 1999 letter in response to Rep. McIntosh's letter of July 1st included an "Attachment M," which is marked "Draft" and dated "2/18/99." It is entitled "Summary of Appropriations Restriction" and it is unsigned. It discusses the fiscal year (FY) 1999 VA-HUD and Independent Agencies Appropriations Act restriction and concludes: "EPA may expend funds to propose or issue a regulation for a number of purposes including the

reduction of greenhouse gas emissions, as long as the expenditures are in implementation of existing law and not for the purpose of implementing, or in preparation for implementing, the Kyoto Protocol. EPA may also expend funds on authorized nonregulatory activities."

a. Do the Clean Air Act's regulatory provisions include the term "greenhouse gas emissions"? If so, please identify the specific provisions of the Act.

The Clean Air Act sections that provide the generic regulatory authority addressed in the April 10, 1998 Cannon memo and in Attachment M do not include the term "greenhouse gas emissions." Section 821 of the 1990 Clean Air Act amendments, which required promulgation of regulations requiring monitoring of CO2 emissions from electric power plants, uses the term "greenhouse gases" in the title of the section.

b. Do you interpret the term "air pollutant" to encompass all greenhouse gases including, for example, water vapor?

Water vapor is the most abundant greenhouse gas and it contributes most to the natural greenhouse effect. Considering the abundance of water vapor from natural sources, it has not been concluded that human activities directly add amounts of water vapor to the atmosphere that have significantly changed its atmospheric concentrations. By contrast, human activities have caused atmospheric concentrations of CO2, methane, and nitrous oxide to increase by more than 30%, 145%, and 15%, respectively, since pre-industrial times. The increasing concentrations of these gases are strengthening the greenhouse effect, which is expected to lead to global warming and climatic changes. Thus, emissions of water vapor from human activities have not been a focus of U.S. or international activities to address climate change.

c. If you do interpret the term "air pollutant" to include all greenhouse gases, what is the basis for the above statement that EPA may expend funds to "propose or issue" regulations for "reduction of greenhouse gas emissions"?

Attachment M explains EPA's interpretation of the distinction between activities barred under the Knollenberg appropriations restriction and activities not barred by that provision. The full text of the sentence that you quote is: "EPA may expend funds to propose or issue a regulation for a number of purposes including the reduction of greenhouse gas emissions, as long as the expenditures are in implementation of existing law and not for the purpose of implementing, or in preparation for implementing, the Kyoto Protocol." The basis for this statement is that the appropriations restriction only limits the types of expenditures specified in the provision--regulatory activities for the purpose of implementation or in preparation for implementation of the Kyoto Protocol. Attachment M explains that to the extent that existing law authorizes regulation of greenhouse gas emissions and such regulations are not for the purpose of implementing or preparing to implement the Kyoto Protocol, issuance of such regulations would not be barred. Attachment M does not opine on the scope or source of any existing authority to regulate greenhouse gas emissions.

d. Which office prepared Attachment M? Did you review it?

The Office of General Counsel prepared, and after its preparation I had occasion to review, Attachment M.

e. What is the present status of Attachment M? Has it been provided to Congress, other than the Regulatory Affairs Subcommittee?

Attachment M was distributed within the Agency as internal guidance to EPA staff to ensure that they understood the restrictions imposed by the FY 1999 appropriations restriction. In addition to being provided to the Regulatory Affairs Subcommittee, this document was also provided to GAO on March 30, 1999.

19. In reply to questions by the House Science Committee about the Administration's new proposal for FY 2000 of a $200 million "Clean Air Partnership Fund," EPA declared that "CO2 and other greenhouse gases" are "each" an air pollutant "within the meaning of the Clean Air Act." However, it is our understanding that the United Nations Framework Convention on Climate Change (UNFCCC), which was ratified after the Clean Air Act was last amended, does not classify greenhouse gases as "pollutants." Rather, the UNFCCC defines greenhouse gases as "those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation" (Art. 1.5).

a. Do you concur that the UNFCCC does not classify greenhouse gases as pollutants?

b. Is there a conflict between EPA's classification of CO2 and other greenhouse gases as "pollutants" and the absence of such classification in the UNFCCC?

The UNFCCC is an international agreement under which member states have committed to taking certain actions and pursuing certain goals with respect to climate change. Member states continue to act, however, under domestic authorities, which may differ among member states and from the text of the international agreement. There is no reason why the Clean Air Act's definition and use of the term "air pollutant" should be reflected in the UNFCCC, nor does the absence of such identical language in any way create a conflict. Moreover, as we note above, for Clean Air Act regulatory purposes the significant question is not whether a substance meets the definition of an "air pollutant," but whether it meets the criteria for regulation under a particular provision of the Clean Air Act. To be clear, we have not taken any steps under the Act to "classify" CO2.