Notes

TRAPPED IN THE GREENHOUSE?: REGULATING CARBON DIOXIDE AFTER FDA V. BROWN & WILLIAMSON TOBACCO CORP.

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Many have hidden for too long behind what we do not know or the uncertainties around climate change. Their shield is shrinking. The time has come for us to accept what is known and start to solve this highly complex problem. As many of the top scientists throughout the world have stated, the sooner we start to reduce these emissions, the better off we will be in the future.¹

U.S. Senator John McCain

INTRODUCTION

The policy debate over the appropriateness of environmental laws and regulations is often dominated by the notion that mitigation of environmental harms must come at the expense of economic development. The tradeoff between environmental regulation and economic development particularly impedes efforts to halt global climate change, because it requires policymakers to balance the risks and uncertainties associated with a changing climate against the costs of making the world less dependent on fossil fuels. The Kyoto Protocol,² a comprehensive effort by the international community to address the problem of global climate change, is an attempt to strike this balance by imposing caps on carbon dioxide (CO₂) emissions

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^{1.} Press Release, Senator John McCain, Senate Casts Historic Vote on McCain-Lieberman Global Warming Bill: Despite Narrow Loss, Growing Support for Action Seen as Encouraging, *at* http://mccain.senate.gov/index.cfm?fuseaction=Newscenter.ViewPressRelease &Content_id=1171 (Oct. 31, 2003) (on file with the *Duke Law Journal*).

^{2.} Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 37 I.L.M. 22.

from many countries.³ But more than a decade after its drafting, the agreement has yet to enter into force.⁴ The United States, the world's most prolific per capita emitter of greenhouse gases (GHGs),⁵ has refused to ratify the treaty,⁶ and Russia until very recently expressed serious reservations as well.⁷ Even if Russia ratifies the treaty and it enters into force, it will not bind the United States.⁸

Because of the uncertainty surrounding the Kyoto Protocol, the problem of global climate change is alive and well. It is widely accepted in the scientific community that increased concentrations of GHGs, including CO₂, methane, and others, are slowly causing an increase in the mean global temperature. Despite this consensus

- 4. The Kyoto Protocol "shall enter into force on the ninetieth day after the date on which not less than 55 Parties to the Convention, incorporating Annex I Parties which accounted in total for at least 55% of the total carbon dioxide emissions for 1990 from that group," have ratified, accepted, approved, or acceded to the treaty. United Nations Framework Convention Climate The Convention Protocol, Change, and Kyoto http://unfccc.int/resource/convkp.html (last visited Aug. 16, 2004) (on file with the Duke Law Journal). Although 124 countries have ratified or acceded to the treaty, id., the treaty will not enter into force until Annex I countries accounting for at least 55 percent of the Annex I group's CO₂ emissions ratify the treaty. Id. Annex I countries that already have ratified the treaty account for 44.2 percent of 1990 CO, emissions of this group of countries. If either the United States or Russia were to ratify, the 55 percent threshold would be met. United Nations Framework Convention on Climate Change, Kyoto Protocol Thermometer, at http://unfccc.int/resource/kpthermo_if.html (July 29, 2004) (on file with the Duke Law Journal).
- 5. Envtl. Prot. Agency, Global Warming—Emissions: Individual, *at* http://yosemite.epa.gov/oar/globalwarming.nsf/content/emissionsindividual.html (last modified Jan. 7, 2000) (on file with the *Duke Law Journal*).
 - 6. Alex Rodriguez, Russia Balks at Backing Kyoto, CHI. TRIB., Dec. 3, 2003, at C1.
- 7. Id. In a recent and surprising development, the Russian cabinet endorsed the Kyoto Protocol, sending it to Parliament for approval. Seth Mydans & Andrew C. Revkin, With Russia's Nod, Treaty on Emissions Clears Last Hurdle, N.Y. TIMES, Sept. 30, 2004, at A1. Both the lower and upper houses of the Russian Parliament have approved the treaty, which will enter into force ninety days after the ratification documents are transmitted to the United Nations. Steven Myers, Putin Ratifies Kyoto Protocol on Emissions, N.Y. TIMES, Nov. 6, 2004, at A10.
 - 8. Mydans & Revkin, *supra* note 7.
- 9. Naomi Oreskes, *The Scientific Consensus on Climate Change*, 306 SCIENCE 1686, 1686 (2004). For a detailed discussion of the scientific basis for global climate change predictions, see generally Intergovernmental Panel on Climate Change, Climate Change 2001: The SCIENTIFIC BASIS (J.T. Houghton et al. eds., 2001).

The SAR [Second Assessment Report] concluded: "The balance of evidence suggests a discernible human influence on global climate." That report also noted that the anthropogenic signal was still emerging from the background of natural climate variability. Since the SAR, progress has been made in reducing uncertainty, particularly with respect to distinguishing and quantifying the magnitude of responses

^{3.} See id. art. 3 ("The Parties included in Annex I shall... ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed... do not exceed their assigned amounts....").

about the overall mechanisms of global climate change, scientists are still debating the potential effects of this temperature increase. These effects may include rising sea levels, melting polar ice caps and glaciers, migrating malaria and dengue zones, and changing agricultural productivity. Yet the cost of shifting the world economy away from its reliance on fossil fuels hinders efforts to combat these effects of climate change.

Whether the United States should share in incurring these significant economic costs to avoid the potentially catastrophic harm caused by global climate change is a policy question. However, if national policymakers decide that reducing GHG emissions is necessary, several legal tools may be used to achieve such a reduction. One option is to join global agreement similar in objective to the Kyoto Protocol. Another option is unilateral reduction of domestic emissions. This domestic mandate could come in the form of either a new federal statute or administrative action pursuant to an existing statute. This Note considers the legal propriety of such administrative

to different external influences. Although many of the sources of uncertainty identified in the SAR still remain to some degree, new evidence and improved understanding support an updated conclusion.

. . . .

In the light of new evidence and taking into account the remaining uncertainties, most of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations.

Furthermore, it is very likely that the 20th century warming has contributed significantly to the observed sea level rise, through thermal expansion of sea water and widespread loss of land ice. Within present uncertainties, observations and models are both consistent with a lack of significant acceleration of sea level rise during the 20th century.

Id. at 10 (footnotes omitted); see also John Carey, Global Warming, Bus. Wk., Aug. 16, 2004, at 60:

[T]he growing consensus among scientists and governments is that we can—and must—do something. Researchers under the auspices of the National Academy of Sciences and the Intergovernmental Panel on Climate Change (IPCC) have pondered the evidence and concluded that the earth is warming, that humans are probably the cause, and that the threat is real enough to warrant an immediate response.

- 10. See, e.g., James V. Titus & Vijay Narayanan, The Risk of Sea Level Rise: A Delphic Monte Carlo Analysis in Which Twenty Researchers Specify Subjective Probability Distributions for Model Coefficients Within Their Respective Areas of Expertise, 33 CLIMATIC CHANGE 151 (1996) (incorporating scientific estimates from a range of researchers into a study predicting the probability of sea level rise), available at http://yosemite.epa.gov/OAR/globalwarming.nsf/UniqueKeyLookup/SHSU5BVPGF/\$File/risk_of_rise.pdf.
- 11. See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2001: SYNTHESIS REPORT: SUMMARY FOR POLICY MAKERS 9–12 & n.3 (R. T. Watson et al. eds., 2001) (listing "regional and global climatic, environmental, and socio-economic consequences . . . associated with a range of greenhouse gas emissions"), available at http://www.grida.no/climate/ipcc_tar/vol4/english/index.htm.

action, examining whether the Environmental Protection Agency (EPA) currently has the authority to regulate GHGs, and CO₂ in particular, under the Clean Air Act (CAA).¹²

The question of whether the EPA has the authority to regulate CO₂ is anything but hypothetical. It received serious attention in 1998 when the Clinton administration left "a ticking time bomb hidden away at the Environmental Protection Agency"13 in the form of a statement by then Administrator Carol Browner that CO, is an air pollutant under the CAA and is subject to regulation.¹⁴ A legal opinion, written by EPA General Counsel Jonathan Z. Cannon, followed soon thereafter and outlined the legal basis for statement.15 Environmental Administrator Browner's responded by petitioning the EPA to regulate CO,, and, after suits by environmental groups and a change in presidential administrations, the EPA issued a final decision denying the petition.¹⁶ This decision was supported by a legal opinion prepared by then EPA General Counsel Robert E. Fabricant.¹⁷ Although the initial lawsuits were mooted, voluntarily dismissed, or possibly settled after the final environmental decision. several states, organizations, municipalities filed petitions for review in the U.S. Court of Appeals for the D.C. Circuit.18 In addition, each petitioner filed a separate

^{12. 42} U.S.C. §§ 7401–7671q (2000). Although a myriad of compounds are suspected of contributing to the greenhouse effect, this Note focuses on CO₂, which is the single most emitted GHG and is the most common GHG in the atmosphere. However, the analysis applies equally well to other GHGs.

^{13.} Peter Glaser, "Greenhouse Gas" Debate Enters the Courthouse, ANDREWS ENVTL. LITIG. REP., Dec. 5, 2003, at 11.

^{14.} Departments of Housing and Urban Development and Independent Agencies Appropriations for 1999: Hearings Before a Subcomm. of the House Comm. on Appropriations, 105th Cong. 199–200 (1998) (testimony of Carol Browner, Administrator, United States Environmental Protection Agency).

^{15.} Memorandum from Jonathan Z. Cannon, EPA General Counsel, to Carol M. Browner, EPA Administrator (Apr. 10, 1998) [hereinafter Cannon Memorandum] (on file with the *Duke Law Journal*).

^{16.} Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,922, 52,933 (Sept. 8, 2003).

^{17.} Memorandum from Robert E. Fabricant, EPA General Counsel, to Marianne L. Horinko, Acting EPA Administrator, *at* http://www.epa.gov/airlinks/co2petitiongcmemo8-28.pdf (Aug. 28, 2003) [hereinafter Fabricant Memorandum] (on file with the *Duke Law Journal*).

^{18.} Glaser, *supra* note 13. Under section 307(b) of the CAA, 42 U.S.C. § 7607(b) (2000), the Court of Appeals for the D.C Circuit has jurisdiction to review "nationally applicable regulations promulgated, or final action taken, by the Administrator." *Id*.

petition challenging the Fabricant legal opinion.¹⁹ A key question in this legal battle will be whether the EPA has the authority to regulate CO₂ under the CAA.

This Note does not address directly the merits of the current petitions to compel regulation of CO₂. Rather, it analyzes the preliminary question of whether or not the EPA has the legal authority to regulate CO₂ under the CAA. After examining both sides of the legal debate, this Note argues that the EPA does have the authority to regulate CO₂. This authority is clear because the CAA is a broad, constitutional grant of authority to regulate air pollutants and because an agency determination that the CAA is applicable to CO₂ would be entitled to deference if supported by agency findings on the record.²⁰ This Note argues that the Fabricant Memorandum's heavy reliance on FDA v. Brown & Williamson Tobacco Corp. 21 to support the contrary conclusion is misguided. The Brown & Williamson Court held that Food and Drug Administration (FDA) regulation of tobacco under the Federal Food, Drug, and Cosmetic Act (FDCA) was inappropriate because such regulation contravened the "unambiguously expressed intent of Congress,"22 and because a separate and comprehensive regulatory scheme had been established for tobacco.²³ Because neither of these key factors is present in the case of CO₂, Brown & Williamson is inapposite. Neither the sparse and ambiguous legislative history nor Congress's limited subsequent legislative action is enough to overcome the CAA's clear language authorizing the EPA to identify and regulate air pollutants, including CO,.

This Note discusses the validity of the EPA's authority to regulate CO₂ in three Parts.²⁴ Part I briefly introduces the CAA

^{19.} Glaser, *supra* note 13.

^{20.} For a recent and similar analysis of the Cannon and Fabricant Memoranda, as well as a discussion of the level of deference with which courts ought to treat the Fabricant Memorandum, see generally Nicholle Winters, Note, *Carbon Dioxide: A Pollutant in the Air, But Is the EPA Correct That It Is Not an "Air Pollutant"*?, 104 COLUM. L. REV. 1996 (2004).

^{21. 529} U.S. 120 (2000).

^{22.} *Id.* at 125–26 (quoting Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 843 (1984)).

^{23.} Id. at 126.

^{24.} In discussing the legal authority of the EPA to regulate CO₂, this Note focuses on the legal issue rather than the complex policy dynamics. Furthermore, it assumes that to support a CO₂ rule, the EPA would be able to generate a sufficient administrative record demonstrating that CO₂ is a threat to human welfare. This assumption is by no means trivial:

before describing the arguments of two conflicting General Counsel opinions. Part II analyzes whether CO₂ is an air pollutant as defined by the CAA in light of the appropriate level of deference that, under *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, the courts would give such a determination. Part II argues that the courts likely would uphold an EPA rule regulating CO₂ that was supported by a sufficient factual record. Part III assesses, and rejects, the primary argument of the Fabricant Memorandum—that *Brown & Williamson* precludes the EPA from promulgating a CO₂ rule.

I. INTRODUCING THE LEGAL DEBATE OVER CARBON DIOXIDE

Before addressing the EPA's authority to regulate CO₂ under the CAA, some background information is necessary. Section A provides a primer on the CAA and outlines the provisions pertinent to the Note's analysis. Section B discusses in turn each of the EPA General Counsel Memoranda. It first outlines the Cannon Memorandum, which argues that the EPA has the authority to regulate CO₂, then briefly recites the Fabricant Memorandum, which concludes that the Supreme Court's decision in *FDA v. Brown & Williamson Tobacco Corp.* ²⁶ precludes the EPA from regulating CO₂.

A. The Clean Air Act

The modern CAA was enacted in 1970²⁷ and was substantially amended in 1977²⁸ and 1990.²⁹ It "establishes a framework for the

Whenever an agency issues a regulation designed to diminish risks to health, safety, or the environment, it should attempt to identify the gains sought by the particular regulation it has chosen, and it should compare these gains to those under at least two reasonable alternative regimes, one stricter and one more lenient. In this light, the most serious problem with EPA's performance in issuing national air quality standards is that it usually fails to explain, in simple, concise terms, its decision to require a particular level of ambient air quality.

Cass R. Sunstein, Is the Clean Air Act Unconstitutional?, 98 MICH. L. REV. 303, 379 (1999).

- 25. 467 U.S. 837 (1984).
- 26. 529 U.S. 120 (2000).
- 27. Clean Air Act Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (codified as amended in scattered sections of 42 U.S.C.); Theodore L. Garrett & Sonya D. Winner, *A Clean Air Act Primer: Part I*, 22 Envtl. L. Rep. (Envtl. L. Inst.) 10,159, 10,161 (1992). For a comprehensive history of the Clean Air Act, from original passage through its most recent amendment, see generally *id.* at 10,159–65.
- 28. Clean Air Act Amendments of 1977, Pub. L. No. 95-95, 91 Stat. 685 (codified as amended in scattered sections of 42 U.S.C.).
- 29. Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (codified as amended in scattered sections of 42 U.S.C.).

attainment and maintenance of air quality standards" and "sets emission standards for motor vehicles and fuels, regulates hazardous air pollutants, protects stratospheric ozone, and deals with acid rain." Most importantly for purposes of this Note, the Act delegates to the EPA the authority to regulate the emission of air pollutants, which section 302(g) of the Act defines as any "physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air." With the exception of certain hazardous air pollutants, several of which are specifically enumerated in section 112, the Act does not mandate that the EPA regulate any specific compound or class of chemicals. Rather, Congress delegated to the EPA the authority to determine which substances pose a threat to public health, welfare, or the environment.

If the EPA determines that an air pollutant poses a threat, it must set primary and secondary air quality standards, known as

- 30. Garrett & Winner, supra note 27, at 10,161.
- 31. Clean Air Act § 302(g), 42 U.S.C. § 7602(g) (2000).
- 32. Id. § 112, 42 U.S.C. § 7412.
- 33. See id. § 108(a)(1), 42 U.S.C. § 7408(a)(1):

For the purpose of establishing national primary and secondary ambient air quality standards, the Administrator shall . . . publish, and shall from time to time thereafter revise, a list which includes each air pollutant—(A) emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare

Id. § 109(a)(2), 42 U.S.C. § 7409(a)(2) ("With respect to any air pollutant for which air quality criteria are issued... the Administrator shall publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant."); id. § 111(b)(1)(A), 42 U.S.C. § 7411(b)(1)(A) ("The Administrator shall... publish... a list of categories of stationary sources. He shall include a category of sources in such list if in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare."); id. § 111(b)(1)(B), 42 U.S.C. § 7411(b)(1)(B) ("[T]he Administrator shall publish proposed regulations, establishing Federal standards of performance for new sources within such category."); id. § 112(b)(2), 42 U.S.C. § 7412(b)(2) ("The Administrator shall periodically review the list established by this subsection and... where appropriate, revise such list by rule, adding pollutants which present, or may present, through inhalation or other routes of exposure, a threat of adverse human health effects... or adverse environmental effects...."); id. § 202(a)(1), 42 U.S.C. § 7521(a)(1):

The Administrator shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.

Id. § 231(a)(2)(A), 42 U.S.C. § 7571(a)(2)(A) ("The Administrator shall... issue proposed emission standards applicable to the emission of any air pollutant from any class or classes of aircraft engines which in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.").

National Ambient Air Quality Standards (NAAQS),³⁴ for each air pollutant under section 108.³⁵ If the concentration of any air pollutant in an area exceeds the NAAQS, the area may be designated a nonattainment area with respect to that pollutant.³⁶ The state, municipality, or regional air pollution control authority is then required to take steps to reduce the emission of the air pollutant that exceeds the standard.³⁷ NAAQS have been established for particulate matter,³⁸ ozone,³⁹ carbon monoxide,⁴⁰ nitrogen dioxide,⁴¹ sulfur dioxide,⁴² and lead.⁴³ In addition, section 111 of the CAA authorizes the EPA to regulate stationary sources of air pollution, such as power plants.⁴⁴ Finally, section 202 of the Act authorizes the EPA to promulgate regulations to limit emissions from motor vehicles.⁴⁵

One of the most important roles for the EPA in administering the CAA is the setting of standards.⁴⁶ Whether the EPA has the authority to set national standards for CO₂ is the focus of both the Cannon and Fabricant Memoranda. The answer turns on whether CO₂ fits the definition of an "air pollutant" under section 302(g) of

- 41. Id. § 50.11.
- 42. Id. § 50.4.
- 43. *Id.* § 50.12.
- 44. Clean Air Act § 111(b)(1)(B), 42 U.S.C. § 7411(b)(1)(B) (2000).

^{34.} See, e.g., National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652 (July 18, 1997) (codified at 40 C.F.R. § 50.6 (2003)).

^{35.} Id. § 108, 42 U.S.C. § 7408.

^{36.} See § 107(d)(1)(A), 42 U.S.C. § 7407(d)(1)(A) (requiring states to designate as "nonattainment" those areas within their territory that do not meet the national or secondary ambient air quality standards for a given pollutant).

^{37.} Id. § 174, 42 U.S.C. § 7504.

^{38. 40} C.F.R. § 50.6 (2003).

^{39.} The history of the NAAQS for ozone is more complex than that of other pollutants, because the Supreme Court found the EPA's attempt to revise the original standards unlawful. *See* Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 486 (2001). The EPA recently promulgated a revised rule in an attempt to address the Court's concerns. *See* Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 1, 69 Fed. Reg. 23,951, 23,956–57 (Apr. 30, 2004) (to be codified at 40 C.F.R. pts. 50, 51, and 80).

^{40. 40} C.F.R. § 50.8.

^{45.} Id. § 202, 42 U.S.C. § 7521; see also id. § 302(g), 42 U.S.C. § 7602(g) (defining "air pollutant").

^{46.} The EPA delegates most primary enforcement authority to state and local governments. Under the CAA, the federal government is involved primarily in setting standards and coordinating nationwide initiatives and normally takes over state or local air pollution programs only if there is a significant history of noncompliance. *See id.* § 113(a)(2), 42 U.S.C. § 7413(a)(2) (permitting federal action when "the Administrator finds . . . violations appear[ing] to result from a failure of the State").

the Act.⁴⁷ The section 302(g) definition is broad,⁴⁸ and at least one commentator has asserted that it is ambiguous.⁴⁹ Despite its breadth and ambiguity, the definition has remained virtually unmodified since it was originally passed in 1977,⁵⁰ with the exception of an addition when Congress enacted the 1990 CAA Amendments.⁵¹

B. The Conflicting Approaches of the Cannon and Fabricant Memoranda

Although the CAA definition of "air pollutant" appears facially broad, the Cannon Memorandum and the Fabricant Memorandum disagree as to whether CO₂ fits within the definition. The Cannon Memorandum concludes that, based on a straightforward reading of section 302(g), CO₂ is an "air pollutant" and thus subject to EPA regulation. According to the Fabricant Memorandum, however, CO₂ is not an air pollutant. The Fabricant Memorandum relies on *Brown & Williamson* to argue—somewhat circularly—that because *Brown & Williamson* precludes the EPA from regulating CO₂, by extension CO₂ is neither an "air pollution agent" nor an "air pollutant." Salary of the control of the

1. The Cannon Memorandum. The Cannon Memorandum employs a two-step approach to argue that CO₂ is an air pollutant and thus that EPA regulation is permissible. In the first step, it analyzes whether CO₂ is an "air pollutant" under section 302(g) of the Act.⁵⁴ It concludes that CO₂ facially meets this definition because CO₂ is a chemical substance emitted into the ambient air, mainly as the product of combustion. That CO₂ naturally occurs in the ambient air does not preclude regulation, because "many of the pollutants that

^{47.} See id. § 302(g), 42 U.S.C. § 7602(g); supra note 31 and accompanying text.

^{48.} Ala. Power Co. v. Costle, 636 F.2d 323, 353 n.60 (D.C. Cir. 1980).

^{49.} See Arnold W. Reitze, Jr., Global Warming, 31 Envtl. L. Rep. (Envtl. L. Inst.) 10,253, 10,257 (2001) ("The § 302(g) definition of pollutant is broad and ambiguous." (footnote omitted)).

^{50.} Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 301(c), 91 Stat. 685, 770 (codified as amended at 42 U.S.C. § 7602(g) (2000)).

^{51.} Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 108(j)(2), 104 Stat. 2399, 2468 (codified as amended at 42 U.S.C. § 7602(g) (2000)) ("Such . . . term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term 'air pollutant' is used.").

^{52.} Cannon Memorandum, supra note 15, pt. II.A.

^{53.} Fabricant Memorandum, supra note 17, at 10.

^{54.} See Clean Air Act § 302(g), 42 U.S.C. § 7602(g) (2000); see also supra note 31 and accompanying text.

EPA currently regulates are naturally present in the air in some quantity and are emitted from natural as well as anthropogenic sources."55

After determining that CO₂ generally is an "air pollutant," the Memorandum proceeds to the second step of its analysis, examining whether CO₂ "meets the specific criteria for EPA action under a particular provision of the Act." Although the Memorandum does not analyze CO₂ under any specific section of the CAA, it notes that many specific sections "share a common feature in that the exercise of EPA's authority to regulate air pollutants is linked to a determination by the Administrator regarding the air pollutants' actual or potential harmful effects on public health, welfare or the environment." The CAA's broad definition of welfare, section 302(h), states:

[A]Il language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade 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.⁵⁹

^{55.} Cannon Memorandum, supra note 15, pt. II.A.

^{56.} Id. pt. II.B.

^{57.} Although the Cannon Memorandum does not analyze possible CO, regulation under any specific provision of the Act, it does analyze whether the EPA could establish a marketbased, cap-and-trade program. It concludes that the potentially applicable provisions of the CAA would not support the cap-and-trade program sought by President Clinton. Id. pt. II.C. These provisions relate either to state pollution control programs or to national technologybased regulation of stationary sources. Id. Concerning state programs, the Cannon Memorandum argues that the EPA may require that states regulate specific pollutants but that the "EPA cannot mandate specific emission control measures for states to use in meeting the general provisions for attaining ambient air quality standards." Id. EPA authority to impose a cap-and-trade program on the states would operate only "[u]nder certain limited circumstances where states fail[ed] to carry out their responsibilities under Title I of the Clean Air Act." Id. Concerning a cap-and-trade program on stationary sources, the Cannon Memorandum notes that the EPA has interpreted sections 111 and 112 of the Act as not allowing for "compliance through intersource . . . cap-and-trade approaches." Id. The EPA broadly defined the term "stationary source" to include single facilities with multiple individual pollution-emitting devices." See Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 840, 866 (1984) (upholding this definition). Although this definition allows for intrasource trading, it does not permit intersource trading across plant boundaries. Cannon Memorandum, supra note 15, pt. II.C.

^{58.} Cannon Memorandum, supra note 15, pt. II.B.

^{59. § 302(}h), 42 U.S.C. § 7602(h) (emphasis added).

Because the definition of "welfare" references "climate," regulation of CO₂ would be appropriate under any section of the Act that mandates action to protect welfare. The Cannon Memorandum concludes that "[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." Thus, EPA regulation of CO₂ is conceptually possible, yet not required, under the approach of the Cannon Memorandum.

2. The Fabricant Memorandum. Because the Fabricant Memorandum was written in part in response to the Cannon Memorandum and in part to support a final decision denying a petition to regulate CO₂, the Memorandum is more comprehensive than the Cannon Memorandum, though it nonetheless is easily summarized. The Fabricant Memorandum relies heavily on Brown & Williamson, arguing that because of the CAA's "purpose, structure and history and other relevant congressional actions," coupled with the potential economic significance of regulation, the CAA does not authorize the EPA to regulate CO₂.

As a preliminary matter, the Memorandum notes that several provisions of the Clean Air Act Amendments of 1990 specifically "touch on matters related to global climate change," but that none of these provisions authorizes regulation and that two "expressly preclude their use for authorizing regulation." Fabricant further notes that, at the time of the Clean Air Act Amendments of 1990, Congress was well aware of the problem of global climate change, as evidenced by the development of the United Nations Framework Convention on Climate Change (UNFCCC), which was signed by the President and approved by the Senate in 1992.

The Fabricant Memorandum then proceeds with an analysis under *Brown & Williamson*, positing a number of arguments. First, it

^{60.} Cannon Memorandum, supra note 15, pt. II.B.

^{61.} Fabricant Memorandum, supra note 17, at 9.

^{62.} Id. at 8-9.

^{63.} *Id.* at 5; *see also* Clean Air Act § 103(g), 42 U.S.C. § 7403(g) (mandating that the administrator conduct research into nonregulatory solutions, and that "[s]uch program . . . include . . . [i]mprovements in nonregulatory strategies and technologies for preventing or reducing multiple air pollutants, including . . . carbon dioxide"); *id.* § 602(e), 42 U.S.C. § 7671a(e) ("[T]he Administrator shall publish the global warming potential of each listed [ozone-depleting] substance.").

^{64.} Fabricant Memorandum, *supra* note 17, at 5.

contends that regulating CO₂ under the CAA is logically inconsistent with the structure and purpose of the Act. Second, it explains that Congress has taken subsequent "actions consistent with the view that Congress did not authorize CAA regulation for global climate change purposes. Since Finally, the Memorandum argues that it is unreasonable to conclude that Congress intended for the CAA, a general act, to authorize so significant an action as regulation of CO₂. The Fabricant Memorandum concludes that *Brown & Williamson* precludes the EPA from regulating CO₂ and that the agency properly awaits additional instruction on the issue from Congress.

II. CO₂ AS AN AIR POLLUTANT UNDER THE CLEAN AIR ACT—A *CHEVRON* ANALYSIS

A foundational, though implicit, assumption of the Cannon Memorandum is that if the EPA promulgated a rule regulating CO₂, that rule would be entitled to deference. That is, the legal authority that the Cannon Memorandum claims for the EPA would be meaningless unless upheld in court, because it is certain that any rule would be challenged within moments of promulgation. Assuming a sufficient factual record to support a CO₂ rule, ⁶⁹ the starting point for an analysis of what level of deference courts owe to the EPA interpretation of the CAA is *Chevron U.S.A.*, *Inc. v. Natural Resources Defense Council, Inc.* ⁷⁰ A *Chevron* analysis proceeds in two parts:

When a court reviews an agency's construction of the statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress. If, however, the court determines Congress has not directly addressed the precise question at issue, the court does not simply impose its own

^{65.} *Id.* at 6–7.

^{66.} Id. at 8.

^{67.} See id. at 10 ("In view of the unusually profound implications of global climate change regulation, it is unreasonable to believe that Congress intended 'to delegate a decision of such . . . significance . . . in so cryptic a fashion." (omissions in original) (quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 160 (2000)).

^{68.} Id.

^{69.} See infra notes 106–11 and accompanying text.

^{70. 467} U.S. 837 (1984).

construction on the statute, as would be necessary in the absence of an administrative interpretation. Rather, if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute.⁷¹

Under the two-step *Chevron* analysis, a reviewing court should uphold a hypothetical CO₂ rule that the EPA supported with sufficient findings. Applying *Chevron* to CO₂, Section A posits that the CAA directly addresses the EPA's authority to regulate CO₂. Based on an analysis of the text of the CAA, it is clear that CO₂ fits within the statutory definition of the term "air pollutant" and thus is subject to regulation. However, some commentators have argued that the CAA is ambiguous regarding CO₂. If a reviewing court were to agree, it would proceed to the second step of *Chevron* and analyze the reasonableness of the EPA's construction of the CAA. Section B considers how such an analysis might proceed. This Part does not consider the possible effect of *Brown & Williamson*—a topic reserved for Part III. Whether under step one or step two of *Chevron*, courts should grant deference to and consequently uphold an EPA rule regulating CO₂.

A. Chevron Step One: Has Congress Spoken to the Direct Question at Issue?

As discussed above, CO₂ facially meets the definition of an air pollutant under section 302.⁷³ Although this should end the matter, some courts have used legislative history to conclude that a statute is ambiguous.⁷⁴ The 1970 CAA was unaccompanied by legislative history relevant to GHGs.⁷⁵ The first meaningful legislative history

^{71.} Id. at 842–43 (footnotes omitted).

^{72.} Reitze, *supra* note 49, at 10,257.

^{73.} See supra note 55 and accompanying text.

^{74.} See, e.g., Dole v. United Steelworkers, 494 U.S. 26, 43 (1990) (White, J., dissenting) ("The Court's opinion today requires more than 10 pages, including a review of numerous statutory provisions and legislative history, to conclude that the Paperwork Reduction Act of 1980... is clear and unambiguous....").

^{75.} It is difficult to prove this negative assertion, but, notably, neither the Cannon Memorandum nor the Fabricant Memorandum cites legislative history generated in 1970. The Fabricant Memorandum finds support instead in the legislative history accompanying the later amendments. See Fabricant Memorandum, supra note 17, at 6 (examining the Clean Air Act Amendments of 1990 and noting that "section 103(g) was revised in conference to include the term 'nonregulatory' to describe the 'strategies and technologies' the subsection was intended to

directly relevant to CO, appeared with the Clean Air Act Amendments of 1990. While considering the Amendments, the Senate considered and rejected language regulating GHG emissions from motor vehicle tailpipes.⁷⁶ Furthermore, when the House and Senate versions of the stratospheric ozone provisions were consolidated, references to CO, originally present in the Senate version were deleted." Professor Reitze argues that "[t]his is strong evidence the Congress did not intend to regulate [GHGs],"⁷⁸ and that "[a] basic rule of statutory construction is that silence by Congress after considering a proposal cannot be the basis for claiming Congress [sic] authorization." Although Professor Reitze's observations indicate that Congress did not intend to provide explicit authorization to the EPA to regulate CO, when it amended the CAA in 1990, one can conclude just as easily that Congress did not intend to affect the EPA's authority at all.⁸⁰ In fact, the legislative history demonstrates that the 101st Congress was concerned with global climate change:

[B]y the time there is scientific proof for every detail of the problem, it will be too late to avoid the most devastating impacts of an intensified greenhouse effect and global climate change. We can illafford to wait for 5 or 10 years of research before we take action to (1) limit the rate and extent of future climate change by reducing atmospheric emissions and concentrations of greenhouse gases, and (2) implement adaptation strategies for coping with the changes to which we are already committed.⁸¹

promote, and that this point was underscored in the conference report" (citing H.R. CONF. REP. No. 101-952, at 349 (1990), *reprinted in* 1990 U.S.C.C.A.N. 3867, 3881)).

^{76.} Reitze, *supra* note 49, at 10,257.

^{77.} *Id.* at 10,258. Professor Reitze notes that the sole exception is a reference to GHGs in section 602(e), which specifies that "the Administrator shall publish the global warming potential of each listed [ozone-depleting] substance, and that this provision "shall not be construed to be the basis of any additional regulation under this chapter." *Id.* (alteration in original) (internal quotation marks omitted) (quoting Clean Air Act § 602(e), 42 U.S.C. § 7671a(e) (2000)).

^{78.} Id.

^{79.} *Id*.

^{80.} *Cf.* Solid Waste Agency v. United States Army Corps of Eng'rs, 531 U.S. 159, 170 (2001) ("A bill can be proposed for any number of reasons, and it can be rejected for just as many others."); FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 163 (2000) (Breyer, J., dissenting) ("The inferences that the majority draws from later legislative history are not persuasive, since . . . one can just as easily infer from the later laws that Congress did not intend to affect the FDA's tobacco-related authority at all.").

^{81.} S. REP. No. 101-228, at 379-80 (1990), reprinted in 1990 U.S.C.C.A.N. 3385, 3762-63.

The legislative history contains no mention of an intention to limit the EPA's authority to combat the causes of global climate change; quite the contrary, the legislative history directs the EPA to preempt a growing social and environmental problem.⁸²

As Judge Leventhal once said, using legislative history is like "looking over a crowd and picking out your friends." Although Professor Reitze points to legislative history favoring his position, other language supports the proposition that Congress intended for the EPA to define air pollutants broadly. Specifically, when directing the EPA to regulate radioactive pollutants, arsenic, cadmium, and polycyclic organic matter in the Clean Air Act Amendments of 1977, Congress noted:

[T]here are numerous other air pollutants which to date have not been subject to regulations under the Clean Air Act. Despite mounting evidence that these pollutants are associated with serious health hazards and despite recommendations from prestigious medical and scientific bodies, the Agency has failed to promulgate regulations to institute adequate control measures for these unregulated pollutants.⁸⁴

The legislative history of the CAA supports either argument, but it certainly does not demonstrate a clear intent by Congress, whether in 1990, 1977, or 1970, to preclude the EPA from regulating CO₂. Although legislative history has its place, even its advocates acknowledge that it should be used with care and primarily in cases involving ambiguous statutes. Here, there is no indication that the CAA's definition of "air pollutant" is ambiguous, and, in fact, Congress was clear that increasing the universe of regulated air pollutants should be a goal of the EPA.

^{82.} *Id.* at 380 ("Failure to act on the greenhouse effect on the basis of current scientific understanding would replicate the mistake made in the early 1980's with respect to destruction of the ozone layer.").

^{83.} Patricia M. Wald, *Some Observations on the Use of Legislative History in the 1981 Supreme Court Term*, 68 IOWA L. REV. 195, 214 (1983) (quoting Judge Leventhal).

^{84.} H.R. REP. No. 95–294, at 36 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1114. The report further stated, "Nor does this section affect EPA's authority or duty to regulate any other presently unregulated air pollutant besides the four named pollutants." *Id.* at 41.

^{85.} Stephen Breyer, *On the Uses of Legislative History in Interpreting Statutes*, 65 S. CAL. L. REV. 845, 847 (1991) (defending the use of legislative history in "cases in which statutory language is unclear (for few other cases raise serious problems on appeal)").

^{86.} H.R. REP. No. 95–294, at 2 (stating that one of the goals of the 1977 amendments was "to create incentives for the regulation of currently unregulated pollutants and unregulated sources of pollution").

To discard the statutory definition of "air pollutant" in favor of a definition that would exclude GHGs based on ambiguous legislative history would be unwarranted. Statutes that authorize regulation of health and safety matters, such as the CAA, "quite routinely contain broad language authorizing agencies to regulate articles or substances if the statutory criteria are met." Furthermore, to override the broad statutory definition would require reliance on legislative history generated not in 1970, when the modern CAA was passed, but in 1977 and 1990, when the CAA was amended. The use of subsequent legislative history has been vehemently criticized and, "even when it would otherwise be useful, subsequent legislative history will rarely override a reasonable interpretation of a statute." Here, the subsequent legislative history available does not prove congressional intent with the clarity necessary to preclude the EPA from regulating CO₃.

B. Chevron Step Two: Would It Be Reasonable for the EPA to Determine That It Has the Authority to Regulate CO₂?

If a reviewing court found that the CAA is ambiguous concerning the EPA's authority to regulate CO₂, the second step of *Chevron* would require that a court uphold the agency rule, if "based

^{87.} Cass R. Sunstein, *Is Tobacco a Drug? Administrative Agencies as Common Law Courts*, 47 DUKE L.J. 1013, 1031 (1998). Professor Sunstein uses the example of the EPA's regulation of the pesticide DDT under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. §§ 136–136y (1994):

[[]I]t is generally agreed that ... FIFRA authorizes the EPA to regulate DDT as a product raising "a substantial question" of human safety, but that this authority does not rest on a judgment that the Congress that enacted FIFRA believed that the EPA could regulate DDT. On the contrary, when introduced, DDT was thought to be unproblematic and entirely safe and hence the enacting Congress did not contemplate that FIFRA would authorize EPA regulation of DDT. The EPA nevertheless possesses just such authority.... Whether Congress believed that the statutory criteria were met when it enacted the relevant legislation is beside the point unless Congress embodied that belief in law.... As the Court wrote in [Oncale v. Sundowner Offshore Services, 523 U.S. 75, 79 (1998)], "statutory prohibitions often go beyond the principal evil to cover reasonably comparable evils, and it is ultimately the provisions of our laws rather than the principal concerns of our legislators by which we are governed."

Id. at 1030-31 (citations omitted).

^{88.} See, e.g., Sullivan v. Finkelstein, 496 U.S. 617, 632 (1990) (Scalia, J., concurring in part) ("Arguments based on subsequent legislative history, like arguments based on antecedent futurity, should not be taken seriously, not even in a footnote.").

^{89.} Consumer Prod. Safety Comm'n v. GTE Sylvania, Inc., 447 U.S. 102, 118 (1980) (refusing to give deferential treatment to subsequent administrative interpretations of the Consumer Product Safety Act).

on a permissible construction of the statute." That is, even if a reviewing court were tempted to rely on legislative history to conclude that the CAA is ambiguous with respect to CO₂, the EPA's determination would be entitled to deference. The question of what level of deference applies to which sorts of agency actions is complex, especially in the aftermath of *Chevron*. This analysis involves two inquiries: (1) would a CO₂ rule issued under the CAA be a legislative rule or an interpretive rule; and (2) what level of deference, if any, applies? Because an EPA rule subjecting CO₂ to CAA coverage would be a legislative rule, a determination that the CAA applies to CO₂ likely would be treated with deference and upheld by a reviewing court.

Whether a hypothetical CO₂ rule would be legislative or interpretive is important because legislative rules receive deference under *Chevron*, whereas interpretive rules receive less deference. [O]nly legislative rules are adopted pursuant to a specific delegation of rulemaking authority, and interpretive rules merely state the agency's view of what the statute already requires. Professor Herz notes that EPA rules establishing NAAQS for certain air pollutants are legislative rules by any definition; they create binding legal duties where none . . . existed before and are promulgated pursuant to express congressional delegation. A proposed CO₂ rule promulgated under the EPA's CAA authority and subject to notice

^{90.} Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 843 (1984).

For a general discussion of the rationale behind reviewing courts' granting deference, see Antonin Scalia, *Judicial Deference to Administrative Interpretations of Law*, 1989 DUKE L.J. 511.

^{92.} See generally Cass R. Sunstein, Law and Administration After Chevron, 90 COLUM. L. REV. 2071 (1990) (suggesting that Chevron deference should not extend to agency interpretations in the absence of congressional delegation of lawmaking authority and noting the uncertain relationship between Chevron deference and other well-established principles of statutory interpretation). For an empirical study on Chevron's impact on reviewing courts, see Peter H. Schuck & E. Donald Elliott, To the Chevron Station: An Empirical Study of Federal Administrative Law, 1990 DUKE L.J. 984.

^{93.} Michael Herz, Deference Running Riot: Separating Interpretation and Lawmaking Under Chevron, 6 ADMIN. L.J. AM. U. 187, 193 (1992).

^{94.} *Id.* at 192–93 (citing Frank Diehl Farms v. Sec'y of Labor, 696 F.2d 1325, 1329 (11th Cir. 1983)).

^{95.} Id. at 192.

^{96.} Id. at 191-92.

^{97.} Id. at 200.

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and comment rulemaking would be a legislative rule and thus entitled to *Chevron* deference.⁹⁸

Although classification of a proposed CO₂ rule as a legislative rule should ensure that the EPA interpretation would receive deference, some scholars suggest that *Chevron* essentially eliminated the distinction between legislative and interpretive rules. ⁹⁹ Whether *Chevron* replaced the distinction between legislative and interpretive rules with a "uniform principal of deference," or was intended "simply as a straightforward application of settled principles," is outside the scope of this Note. What matters here is that, whether analyzed under *Chevron* or under the historical approach exemplified by *NLRB v. Hearst Publications, Inc.*, ¹⁰³ a hypothetical CO₂ rule

98. While a formal CO₂ rule would be entitled to deference, the interpretive memoranda issued by Cannon and Fabricant are not. When an agency issues an interpretation or opinion not based on adversary proceedings, notice and comment rulemaking, or an otherwise authoritative decision of an agency head, then *Skidmore v. Swift*, 323 U.S. 134 (1944), rather than *Chevron*, applies. In *Skidmore*, the Court considered "that the rulings, interpretations and opinions of the Administrator under this Act, while not controlling upon the courts by reason of their authority, do constitute a body of experience and informed judgment to which courts and litigants may properly resort for guidance." *Id.* at 140. This reasoning comports with *Christensen v. Harris County*, 529 U.S. 576 (2000):

[W]e confront an interpretation contained in an opinion letter, not one arrived at after, for example, a formal adjudication or notice-and-comment rulemaking. Interpretations such as those in opinion letters—like interpretations contained in policy statements, agency manuals, and enforcement guidelines, all of which lack the force of law—do not warrant *Chevron*-style deference.

Id. at 587. Furthermore, in *United States v. Mead Corp.*, 533 U.S. 218 (2001), the Court declined to extend *Chevron* deference to a tariff classification ruling issued by the U.S. Customs Service. *Id.* at 221.

99. See, e.g., Cooley R. Howarth, Jr., United States v. Mead Corp.: More Pieces for the Chevron/Skidmore Deference Puzzle, 54 ADMIN. L. REV. 699, 700–01 (2002) ("[T]he rhetoric, if not the result, in Chevron... [was] that... in the presence of statutory ambiguity or silence, courts should defer to any reasonable agency 'interpretation' of its empowering statute."). Professor Howarth notes, however, that, "[t]he Court's post-Chevron deference cases have created qualifications and exceptions to the Chevron doctrine, and some of those have hinted that the interpretation/lawmaking distinction was relevant to the decision of whether to defer to an agency 'interpretation.'" Id. at 701 (footnotes omitted).

- 100. GARY LAWSON, FEDERAL ADMINISTRATIVE LAW 579 (3d ed. 2001).
- 101. Id.

102. However, Professor Lawson observes that "[t]here is little doubt that the Court in 1984 intended this second, or weak, reading of *Chevron*." *Id*.

103. 322 U.S. 111, 131 (1944), overruled in part on other grounds by Nationwide Mut. Ins. Co. v. Darden, 503 U.S. 318 (1992) ("[W]here the question is one of specific application of a broad statutory term in a proceeding in which the agency administering the statute must determine it initially, the reviewing court's function is limited.").

would receive deference as long as it was reasonable. That is, even under a weaker reading of *Chevron*, "whenever an agency is entrusted with implementing power—whether to be exercised through rulemaking or adjudication—agency interpretations in the course of exercising that power are entitled to respect so long as they are reasonable."

In reviewing an EPA interpretation of the CAA that purported to justify a CO₂ rule, a court would scrutinize the administrative record.¹⁰⁶ If the EPA demonstrated that CO₂ had an effect on climate, regulation could fall under any of the provisions of the CAA that authorize regulation to protect "welfare," as discussed in the Cannon Memorandum.¹⁰⁷ Although it is impossible to speculate on the type of record that the EPA could generate linking CO₂ to impacts on climate, recent CAA cases suggest that a CO₂ rule would be upheld. *Lead Industries Ass'n v. EPA*¹⁰⁸ is particularly instructive. In that case, the court upheld NAAQS for lead that "were the culmination of a process of rigorous scientific and public review which permitted a thorough ventilation of the complex scientific and technical issues

^{104.} This analysis hinges upon the administrator supporting a decision to regulate CO₂ with evidence in the administrative record sufficient to lead a reviewing court to conclude that the decision was reasonable. This task would not be a trivial matter by any stretch of the imagination, and if the findings of the EPA did not present an "adequate basis and explanation," there would be little chance that a CO₂ rule would be upheld. Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 34 (1983); see also supra note 24 (discussing the process by which an agency generates an administrative record to support a proposed rule).

^{105.} Sunstein, supra note 87, at 2093. Professor Sunstein also notes that

[[]i]f this is the basis for *Chevron*, the principle of deference does not extend to interpretations by agencies that have not been granted the authority to interpret the law. For example, agencies that have been entrusted with the power to prosecute violations but not to make rules lack the pedigree that is a prerequisite for deference. It follows that even if an agency has been given the power of interpretation through rulemaking, it is not entitled to deference if it did not exercise rulemaking power in the particular case. It follows even more clearly that mere litigating positions are not entitled to deference. And if this is so, *Chevron* applies only when an agency is exercising the power to make rules or otherwise carrying out legislatively delegated interpretive authority.

Id. at 2093–94 (citations omitted).

^{106.} Although it is certainly possible that the EPA would be unable to find sufficient evidence to prove that CO₂ contributes to global climate change, the growing scientific consensus on the subject makes this possibility unlikely. *See supra* notes 9–11 and accompanying text

^{107.} See supra notes 58–60 and accompanying text. It would be impossible to examine here all the scenarios under which CO₂ could be regulated, given the complexity of the CAA. Thus this inquiry is limited to whether CO₂ could qualify for regulation as a threshold manner. For a brief discussion of the consistency of CO₂ regulation with the CAA as a whole, see *infra* Part III. 108. 647 F.2d 1130 (D.C. Cir. 1980).

presented by this rulemaking proceeding." Chevron itself was a CAA case, which upheld the EPA's broad application of the statutory term "stationary source" to include all individual pollution-emitting devices at the same facility. Some commentators suggest that Chevron may be limited to situations similar to the facts of Chevron. Even so, applying the statutory term "air pollutant" to CO₂ is similar to, and perhaps even more logical than, applying the term "stationary source" to multiple sources at the same facility.

Finally, CAA's complexity and the science underlying a possible EPA determination that CO₂ affects climate indicate that a reviewing court should defer to the EPA, because, "given the difficulties associated with environmental regulation, and the problem of devising workable, effective regulation, an inference that Congress intended the courts to listen carefully to EPA's broad interpretation of the statute seems reasonable." Because a proposed CO₂ rule would undergo rigorous scientific review, which would be assured by the economic interests at stake, a reviewing court should defer to the agency determination even if the court would have interpreted the statute differently.

III. DID CHEVRON REALLY GO UP IN SMOKE WITH BROWN & WILLIAMSON?

Although *Chevron* seems critical to understanding the EPA's authority to regulate CO₂, neither the Cannon Memorandum nor the Fabricant Memorandum specifically mentions the decision. The Cannon Memorandum at least implicitly relies on *Chevron*: its

Batterton v. Francis, 432 U.S. 416, 425 (1977).

^{109.} Id. at 1184.

^{110. 467} U.S. 837, 837 (1984).

^{111.} Stephen Breyer, *Judicial Review of Questions of Law and Policy*, 38 ADMIN. L. REV. 363, 381 (1986).

^{112.} Id. at 381-82.

^{113.} See supra note 104 and accompanying text (explaining that EPA regulation of CO₂ would require substantial support in the administrative record).

^{114.} See infra Part III.B.3.

^{115.} In a case involving the propriety of regulations issued by the Department of Health, Education, and Welfare, the Supreme Court noted that,

[[]i]n a situation of this kind, Congress entrusts to the Secretary, rather than to the courts, the primary responsibility for interpreting the statutory term. In exercising that responsibility, the Secretary adopts regulations with legislative effect. A reviewing court is not free to set aside those regulations simply because it would have interpreted the statute in a different manner.

argument that the EPA has the legal authority to regulate reflects a belief that a reviewing court would uphold the action. In contrast, the Fabricant Memorandum ignored *Chevron* altogether, favoring analysis under *FDA v. Brown & Williamson Tobacco Corp.*¹¹⁶ In fact, some commentators criticize the *Brown & Williamson* decision itself for ignoring *Chevron* and refusing to defer appropriately to the FDA.¹¹⁷ Section A analyzes the interplay between *Brown & Williamson* and *Chevron*, concluding that *Brown & Williamson* did not overrule *Chevron* but rather changed its scope. Section B examines the Fabricant Memorandum's reliance on *Brown & Williamson*. Section B argues that the Fabricant Memorandum's reliance on *Brown & Williamson* is misplaced, because CO₂ does not fit within the relatively narrow confines that the Court established in *Brown & Williamson*.

A. The Effect of Brown & Williamson on Chevron

In *Brown & Williamson*, the Supreme Court struck down FDA regulation of tobacco products as "inconsistent with the intent that Congress ha[d] expressed in the FDCA's overall regulatory scheme and in the tobacco-specific legislation that it ha[d] enacted subsequent to the FDCA."

The *Brown & Williamson* decision rested on three essential points. First, the Court found regulation of tobacco under the FDCA logically inconsistent with the clearly expressed intent of Congress. That is, a "fundamental precept" of the Act was that a drug must be safe. The FDA's conclusion that tobacco products were unsafe would have "require[d] the FDA to

^{116. 529} U.S. 120 (2000).

^{117.} Michael Herz, Reading the Clean Air Act After Brown & Williamson, 31 Envtl. L. Rep. (Envtl. L. Inst.) 10,151, 10,152 n.23 (2001). Professor Herz cites a number of articles written in response to the Fourth Circuit decision in Brown & Williamson Tobacco Corp. v. FDA, 153 F.3d 155 (4th Cir. 1999), which the Supreme Court upheld. See Herz, supra, at 10,152 n.23; see also Joseph A. Fazioli, Recent Case, Chevron Up in Smoke?: Tobacco at the Crossroads of Administrative Law, Brown & Williamson Tobacco Corp. v. Food & Drug Administration, 153 F.3d 155 (4th Cir. 1998), 22 HARV. J.L. & PUB. POL'Y 1057, 1058–59 (1999) ("The Supreme Court, which recently granted certiorari to review Brown & Williamson, should take this important opportunity to reaffirm the Chevron doctrine against the Fourth Circuit's aggrandizement of judicial power." (footnote omitted)); Marguerite Sullivan, Brown & Williamson v. FDA: Finding Congressional Intent Through Creative Statutory Interpretation—A Departure from Chevron, 94 Nw. U. L. REV. 273, 302–03 (1999).

^{118.} Brown & Williamson, 529 U.S. at 126.

^{119.} *Id.* at 142–43.

^{120.} Id. at 142.

remove them from the market entirely,"¹²¹ rather than simply regulate their distribution. But banning tobacco would have "contradict[ed] Congress's clear intent as expressed in its more recent, tobaccospecific legislation."¹²² Second, the Court considered it significant that "Congress ha[d] enacted six separate pieces of legislation since 1965 addressing the problem of tobacco use and human health."¹²³ The Court concluded:

Congress has affirmatively acted to address the issue of tobacco and health, relying on the representations of the FDA that it had no authority to regulate tobacco. It has created a distinct scheme to regulate the sale of tobacco products, focused on labeling and advertising, and premised on the belief that the FDA lacks such jurisdiction under the FDCA. 124

Finally, the Court noted, almost as an afterthought, that "Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion." The Court was not entirely clear on what was cryptic about the FDCA, instead reiterating that regulation of an economically important industry such as tobacco under the FDCA was invalid in light of the strained concept of "safety" and subsequent tobacco-specific legislation.

Reflecting on *Brown & Williamson*, one might conclude that the Court did not ignore *Chevron*—because both the majority and dissent employed a *Chevron* step one analysis—but rather changed the scope of *Chevron*. Professor Herz argues that *Brown & Williamson* essentially clarified three questions raised by *Chevron*. First, *Brown & Williamson* confirmed "that ambiguity itself can be an implicit delegation of decisionmaking authority." He further argues that, in addition to the clarity of the statute, "*Chevron* deference hinges on a policymaking delegation, and while the requisite delegation can sometimes be found simply through Congress's use of vague language, such an implicit delegation will be found only for minor,

^{121.} Id. at 143.

^{122.} *Id*.

^{123.} *Id*.

^{124.} Id. at 156.

^{125.} Id. at 160.

^{126.} Herz, supra note 117, at 10,155.

^{127.} *Id*.

interstitial questions." Finally, he argues that all nine Justices "looked well beyond the language, plain or otherwise, of the provision at issue." These clarifying features of *Brown & Williamson* do not fundamentally alter the *Chevron* analysis described in Part II. In the case of air pollutants, it is clear that Congress delegated to the EPA the authority to define and regulate such pollutants; thus this is not a case of delegation through ambiguity, but rather an explicit policymaking delegation. Furthermore, even if a reviewing court were to look beyond the clear language of section 302(g), the legislative history likely would not furnish evidence that Congress intended to contravene this clear language. ¹³⁰

B. The Fabricant Memorandum's Flawed Reliance on Brown & Williamson

As discussed in Part I, the CAA delegated to the EPA the authority to determine which air pollutants should be regulated, ¹³¹ and on its face an EPA decision that CO₂ is an air pollutant under section 302(g) would be consistent with the statutory definition. ¹³² Therefore, the significant question that the Fabricant Memorandum poses and answers affirmatively is whether, despite the plain language of the CAA, *Brown & Williamson* precludes the EPA from regulating CO₂. *Brown & Williamson* analyzed congressional intent under three broad categories: the consistency of FDA jurisdiction over tobacco with the statutory structure of the FDCA, the preclusive effect of subsequent tobacco-specific legislation, and the importance of the policy decision at issue. ¹³³

The following three Sections analyze each prong in turn. Section 1 argues that regulating CO₂ is consistent with the statutory structure and purpose of the CAA. Section 2 analyzes the effect of GHG-

^{128.} Id.

^{129.} Id.

^{130.} See supra Part II.A.

^{131.} See supra note 33 and accompanying text.

^{132.} Although section 302 does not define the term "air pollution agent," section 302(g) states that "[t]he term 'air pollutant' means any air pollution agent or combination of such agents, *including* any physical [or] chemical... substance... which is emitted into... the ambient air." Clean Air Act § 302(g), 42 U.S.C. § 7602(g) (2000) (emphasis added). That is, air pollution agents include *any* physical and chemical substances emitted into the ambient air; CO₂ is such a substance, and thus CO, is logically an "air pollution agent."

^{133.} See supra notes 119–25 and accompanying text.

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specific legislation enacted after the CAA, arguing that subsequent legislation does not establish a regulatory structure even marginally comparable to the tobacco legislation at issue in *Brown & Williamson*. Finally, Section 3 concludes that, because the EPA is precluded from considering cost under many provisions of the CAA and interpreting cases, potentially harmful economic consequences caused by a hypothetical CO₂ rule are irrelevant. In sum, there is no clear congressional intent under the *Brown & Williamson* rubric that could displace the EPA's clear statutory authority to regulate CO₂.

1. Is Regulating CO, Logically Inconsistent with the Structure and Purpose of the Clean Air Act? In applying the first prong of the Brown & Williamson analysis, the Fabricant Memorandum argues that regulating CO₂ is logically inconsistent with the structure and purpose of the CAA. The Fabricant Memorandum searches for logical inconsistency under the stratospheric ozone provisions.¹³⁴ It argues that, because of the global nature of the CO, issue, if Congress had intended for the EPA to regulate CO₂ it would have included specific authorization when it enacted the stratospheric ozone provisions. 135 The argument, framed in terms of Brown & Williamson, is that regulating one class of globally present compounds such as GHGs without specific authorization is logically inconsistent with Congress's enactment of specific legislation addressing a completely different class of globally present compounds (compounds that deplete the ozone layer) in the Clean Air Act Amendments of 1990. However, as discussed in Part II.A, there could be many reasons that Congress did not specifically authorize the EPA to regulate CO₂ in 1990; consequently, one cannot conclude that Congress intended for the stratospheric ozone provision to preclude EPA regulation of CO₂. 136

The Fabricant Memorandum further seeks inconsistency in the past practices of the EPA, arguing that the EPA's focus on pollutants of primarily local or regional concern precludes regulation of

^{134.} See Fabricant Memorandum, supra note 17, at 6 ("The CAA provisions addressing stratospheric ozone depletion demonstrate that Congress has understood the need for specially tailored solutions to global atmospheric issues, and has expressly granted regulatory authority when it has concluded that controls may be needed as part of those solutions.").

^{135.} See id. (suggesting that "it would be anomalous to conclude that Congress intended EPA to address global climate change under the CAA's general regulatory provisions, with no provision recognizing the international dimension of the issue and any solution, and no express authorization to regulate").

^{136.} See supra notes 76-82 and accompanying text.

pollutants of global concern.¹³⁷ However, the *Brown & Williamson* majority clarified that its "conclusion [did] not rely on the fact that the FDA's assertion of jurisdiction [over tobacco] represent[ed] a sharp break with its prior interpretation of the FDCA," stating that "an agency's initial interpretation of a statute that it is charged with administering is not 'carved in stone." By the same token, the EPA's failure to regulate GHGs since initial passage of the CAA in 1970 should not preclude it from regulating CO₂.

Perhaps the most powerful argument presented by the Fabricant Memorandum, and supported by Professor Reitze, is that CO₂ may not be regulated under the CAA because the NAAQS system was not designed to address pollutants such as CO₂. The argument is that regulation of CO₂ under the general provisions of the CAA is inconsistent with an underlying premise of the Act—"that actions taken by individual states and by EPA can generally bring all areas of the U.S. into attainment of a NAAQS." CO₂ has a long residence time in the atmosphere (fifty to two hundred years) and is well dispersed across the world. Furthermore "the potential for either adverse or beneficial effects in the U.S. from these concentrations depends on complicated interactions of many variables on the land, in the oceans, and in the atmosphere, occurring around the world and over long periods of time."

However, the history of the CAA and the NAAQS system in particular cannot sustain the argument that the NAAQS system is only appropriate for regulating air pollutants on a local scale. For example, a NAAQS for particulate matter has long existed, 142 despite

^{137.} See Fabricant Memorandum, supra note 17, at 6 (arguing that the general regulatory provisions of the CAA, such as section 109 (establishment of NAAQS), 42 U.S.C. § 7409, "address air pollution problems that occur primarily at ground level or near the surface of the earth").

^{138. 529} U.S. 120, 156–57 (2000) (quoting Chevron U.S.A., Inc. v. Natural Def. Res. Council, Inc., 467 U.S. 837, 863 (1984)).

^{139.} See Fabricant Memorandum, supra note 17, at 7 (arguing that CO₂ is "unlike any pollutant for which a NAAQS has been established, [and that a NAAQS for CO₂] could not be attained by any area of the U.S. until such a standard were attained by the entire world as a result of emission controls implemented in countries around the world"); Reitze, supra note 49, at 10,259–63 ("CO₂, however, cannot be controlled effectively by the [State Implementation Plan] process because ambient tropospheric levels are essentially the same everywhere in the world. The United States contributes only about 22% of the world's anthropogenic GHG releases." (footnote omitted)).

^{140.} Fabricant Memorandum, supra note 17, at 7.

^{141.} Id.

^{142.} See supra note 38 and accompanying text.

well-documented evidence of long-range dispersion of particulate matter, particularly from Asia to the United States. Even air pollutants that have primarily local effects are known to be affected by long-range transport mechanisms. For example, ozone is not emitted directly from automobiles but instead forms as a result of the mixing of hydrocarbons and oxides of nitrogen, some of which have extremely long residence times in the atmosphere and are nearly ubiquitous around the world. 145

Even if regulation of CO₂ under the NAAQS system were inappropriate, it might be permissible under other provisions of the CAA, such as section 202, which authorizes the EPA to regulate emissions from motor vehicles. The Fabricant Memorandum concludes that CO₂ is fundamentally different from the other pollutants that the NAAQS system was designed to address, and thus that regulation of CO₂ under section 109 of the CAA is not consistent with the purpose of the Act. This argument is superficially grounded in the legal argument that statutes should be read as a whole. However, an equally strong canon of statutory construction is that courts are not to discard lightly the "ordinary and obvious" meaning of a statutory phrase. Here, CO₂ fits the "ordinary and obvious" meaning of the term "air pollutant" as defined in the CAA. The

^{143.} Heather U. Price et al., *Photochemistry, Ozone Production, and Dilution During Long-Range Transport Episodes from Eurasia to the Northwest United States*, 109 J. GEOPHYSICAL RES. D23S13, 1 (2004).

^{144.} See id. ("On the basis of observations from the 1997–2002 Photochemical Ozone Budget of the Northeast Pacific (PHOBEA) experiments, we have identified 11 transpacific long-range transport (LRT) episodes, which contain significantly elevated levels of [carbon monoxide], [ozone], and aerosol scattering.").

^{145.} Am. Petroleum Inst. v. Costle, 665 F.2d 1176, 1181 (D.C. Cir. 1981) ("[O]zone is not emitted directly into the air, but is produced by complex chemical reactions between organic compounds (precursors) and nitrogen oxides in the presence of sunlight.... Sources of precursors include automobile emissions of hydrocarbons, chemical plant emissions, and gasoline vapors.").

^{146.} Clean Air Act Amendments of 1970 § 202, 42 U.S.C. § 7521 (2000).

^{147.} Fabricant Memorandum, *supra* note 17, at 6–7.

^{148.} See United States v. Morton, 467 U.S. 822, 828 (1984) ("We do not, however, construe statutory phrases in isolation; we read statutes as a whole.").

^{149.} See INS v. Cardoza-Fonseca, 480 U.S. 421, 432 n.12 (1987):

[[]T]he plain language of this statute appears to settle the question before us. Therefore, we look to the legislative history to determine only whether there is "clearly expressed legislative intention" contrary to that language, which would require us to question the strong presumption that Congress expresses its intent through the language it chooses.

^{150.} See supra notes 54–55 and accompanying text.

Memorandum's contention—that the EPA's past actions concerning localized pollutants that appear lower in the atmosphere constrain the EPA—contradicts the EPA's congressional mandate to protect human welfare, which includes protecting climate. In explicitly using the word "climate," Congress could not have intended to prohibit the EPA from regulating widespread pollutants. The Fabricant Memorandum's argument that the CAA as a whole precludes this reading rests on a policy decision that the NAAQS system is unsuitable for regulation of CO₂. However, the Supreme Court has made clear that challenges based on the wisdom of agency policy must fail.

In Brown & Williamson the Court found regulation of tobacco under the FDCA logically inconsistent with the clearly expressed intent of Congress because a "fundamental precept" of the FDCA was that any drug on the market must be safe. 153 The FDA conclusion that tobacco products were unsafe would "require the FDA to remove them from the market entirely." ¹⁵⁴ However, banning tobacco would "contradict Congress's clear intent as expressed in its more recent, tobacco-specific legislation." 155 Although this logic is reasonable in the case of tobacco, it does not apply to the case of CO₂. The fundamental principle of the CAA, as its title evidences, is to reduce air pollution that poses a threat to human health, welfare, and the environment. CO, regulations would require a record demonstrating that unchecked CO₂ emissions would have a deleterious impact on human welfare and the environment. 156 Therefore, regulating CO, would be entirely consistent with the purpose of the CAA. The Fabricant Memorandum does not cite any CAA provisions that prohibit the regulation of CO₂, and laws passed by Congress since the enactment of the CAA do not explicitly preclude the EPA from regulating CO₂. The logical conundrum

^{151.} See supra notes 58-60 and accompanying text.

^{152.} See Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 866 (1984) ("When a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency's policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail.").

^{153.} FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 142–43 (2000).

^{154.} *Id.* at 143.

^{155.} *Id*.

^{156.} See Clean Air Act § 307, 42 U.S.C. § 7607(d)(3) (2000) ("The statement of basis and purpose shall include a summary of—(A) the factual data on which the proposed rule is based; (B) the methodology used in obtaining the data and in analyzing the data; and (C) the major legal interpretations and policy considerations underlying the proposed rule.").

presented by tobacco regulation—that defining tobacco as a drug would force the FDA to ban tobacco—is not implicated by CO₂ and the CAA.

2. Has Congress Established a Regulatory Scheme for Carbon Dioxide outside the Clean Air Act? The second major rationale that the Brown & Williamson Court gave for invalidating the FDA's tobacco rule was that "Congress ha[d] created a distinct regulatory scheme to address the problem of tobacco and health, and that [the] scheme, as . . . constructed, preclude[d] any role for the FDA." The Fabricant Memorandum argues that subsequent GHG-specific legislation demonstrates that Congress similarly precluded any role for the EPA. 158 Such legislation includes, inter alia, establishing a "national climate program," directing the coordination of international negotiations on climate change, 160 establishing a Committee on Earth and Environmental Sciences to coordinate research, 161 creating a program to research global climate and agricultural issues, 162 and calling "on the Secretary of Energy to assess various GHG control options... and to establish a registry for reporting voluntary GHG reductions."163

While Congress did not expressly preclude agencies from taking regulatory action under other statutes, its actions strongly indicate that when Congress was amending the CAA in 1990, it was awaiting further information before deciding *itself* whether regulation to address global climate change is warranted and, if so, what form it should take.

Fabricant further points out that amendments and bills seeking to control GHG emissions failed to pass, both during and after enactment of the Clean Air Act Amendments of 1990. *Id.* Finally, during Kyoto Protocol negotiations, the Senate passed the Byrd-Hagel Resolution, resolving that the United States should not become a party to any GHG-reduction treaty if it "would result in serious harm to the economy of the United States." S. Res. 98, 105th Cong., 143 CONG. REC. 10,780 (1997). The Fabricant Memorandum argues that, taken together, congressional actions since initial passage of the CAA indicate that the CAA did not provide the EPA the regulatory authority to regulate CO₂. *See* Fabricant Memorandum, *supra* note 17, at 8.

- 159. National Climate Program Act of 1978, 15 U.S.C. §§ 2901–2908 (2000).
- 160. Global Climate Protection Act of 1987, 15 U.S.C. §§ 2951–2953 (2000).
- 161. Global Change Research Act of 1990, 15 U.S.C. §§ 2931–2938 (2000).
- 162. The Food, Agriculture, Conservation, and Trade Act of 1990, 7 U.S.C. §§ 6701–6710 (2000).

^{157. 529} U.S. at 144.

^{158.} See Fabricant Memorandum, supra note 17, at 8:

^{163.} Fabricant Memorandum, *supra* note 17, at 8; *see also* Energy Policy Act of 1992, 42 U.S.C. § 13,384 (2000) ("[T]he Secretary shall transmit a report to Congress containing a comparative assessment of alternative policy mechanisms for reducing the generation of greenhouse gases."); *id.* § 13,385(b) ("[T]he Secretary shall . . . issue guidelines for the voluntary collection and reporting of information on sources of greenhouse gases. Such guidelines shall

Recent CO₂-related acts passed by Congress—which have been targeted at promoting research, recording voluntary GHG emission reductions, and coordinating international negotiations—are in stark contrast to the comprehensive tobacco regulation scheme that Congress has enacted. This tobacco-specific regulation requires that health warnings appear on cigarette packages and on print and outdoor advertisements, prohibits tobacco advertising through electronic media, and conditions grants to states on their prohibiting tobacco sales to persons under the age of eighteen. 164 At least one of these acts was found to preempt state regulation of cigarette advertising based on the "comprehensive scheme" of the federal regulations. 165 The tobacco regulatory scheme that Congress developed over time contains mandatory controls on tobacco sales and advertising and expressly coerces the states to change their tobacco control laws by threatening to withhold federal funds. As the Brown & Williamson Court made clear, Congress passed these laws knowing that the FDA had long denied having the authority to regulate tobacco. 166

In contrast, the limited GHG-specific legislation that Congress has passed since the enactment of the CAA is not comprehensive. The legislation imposes no controls, mandatory or otherwise. Unlike the FDA, which had long denied that it had the legal authority to regulate tobacco, the EPA apparently had no official opinion on the issue until Administrator Browner testified before Congress, precipitating the drafting of the Cannon Memorandum. Finally, it is doubtful that the GHG-specific acts passed by Congress, whether taken individually or together, would preempt regulation of CO₂ by individual states. Congress likely did not intend to preclude any possible EPA regulation of GHGs by mentioning CO₂ only in general terms in a few acts.

establish procedures for the accurate voluntary reporting of information on . . . reductions in greenhouse gas emissions achieved as a result of—(i) voluntary reductions ").

^{164.} FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 143-44 (2000).

^{165.} Lorillard Tobacco Co. v. Reilly, 533 U.S. 525, 570 (2001) ("Congress enacted a comprehensive scheme to address cigarette smoking and health in advertising and pre-empted state regulation of cigarette advertising that attempts to address that same concern, even with respect to youth.").

^{166.} See Brown & Williamson, 529 U.S. at 159.

^{167.} See supra notes 13–15 and accompanying text.

^{168.} For a general discussion on preemption and global climate change issues, in particular involving California, see Ann E. Carlson, *Federalism, Preemption, and Greenhouse Gas Emissions*, 37 U.C. DAVIS L. REV. 281, 299–303 (2003).

3. Does the Potential Economic Impact of a Carbon Dioxide Rule Preclude the EPA from Promulgating Regulations? In addition to being consistent with the structure of the CAA and unaffected by subsequent congressional actions, CO₂ regulations would also satisfy the third prong of the Brown & Williamson test—that courts will not infer authority to make decisions of the utmost "economic and political significance" from cryptic delegations. The Fabricant Memorandum claims in part that regulation of CO₂ should be prohibited because of the economic importance of the problem. It argues that because of the "unusually profound implications of global climate change regulation" it is unreasonable to conclude that, in enacting a general statute such as the CAA, Congress intended to regulate CO₂. The Potential Profound implications of global climate CO₂. The Potential Profound implications of global climate change regulation it is unreasonable to conclude that, in enacting a general statute such as the CAA, Congress intended to regulate CO₂.

Although potential CO₂ regulations could undeniably have a significant effect on the U.S. economy, the EPA is prohibited from considering the cost of regulatory compliance when setting NAAQS.¹⁷² Furthermore, it is questionable that CO₂ regulations would have more severe economic consequences than those resulting from the regulation of pollutants for which NAAQS already have been established. For example, courts have upheld NAAQS for lead¹⁷³

[R]egulation to address global climate change would have even greater potential significance than the regulation of tobacco.... To the extent significant reductions in U.S. CO₂ emissions were mandated by EPA, power generation and transportation would have to undergo widespread and wholesale transformations, affecting every sector of the nation's economy and threatening its overall economic health.

Id.

171. Id.

^{169.} See Fabricant Memorandum, *supra* note 17, at 9 ("In view of the unusually profound implications of global climate change regulation, it is unreasonable to believe that Congress intended 'to delegate a decision of such economic and political significance... in so cryptic a fashion." (omission in original) (quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 160 (2000))).

^{170.} Specifically, it argues:

^{172.} See Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 471 (2001) ("The text of § 109(b), interpreted in its statutory and historical context and with appreciation for its importance to the CAA as a whole, unambiguously bars cost considerations from the NAAQS-setting process, and thus ends the matter for us as well as the EPA.").

^{173.} See, e.g., Lead Indus. Ass'n. v. EPA, 647 F.2d 1130, 1184 (D.C. Cir. 1980):

The national ambient air quality standards for lead were the culmination of a process of rigorous scientific and public review which permitted a thorough ventilation of the complex scientific and technical issues presented by this rulemaking proceeding. Interested parties were allowed a number of opportunities to participate in exploration and resolution of the issues raised by the standard-setting exercise. EPA, and ultimately the public whose health these air quality standards protect, have benefitted from their contribution. To be sure, even the experts did not always agree about the answers to the questions that were raised. Indeed, they did not always agree on what the relevant questions were. These disagreements underscore the novelty and complexity of the issues that had to be resolved, and both the EPA and the

and ozone¹⁷⁴ despite their potential to affect the economy severely and adversely.¹⁷⁵ Furthermore, the *Brown & Williamson* decision considered the economic significance of tobacco regulation as a supplemental, rather than a primary, factor in the analysis, as indicated by the decision's relatively brief treatment of economics compared to its analysis of statutory consistency and congressional preemption. Even assuming *arguendo* that the EPA could consider costs when setting NAAQS, the two main rationales that the Court relied upon in rejecting the tobacco regulations are absent. Unlike tobacco, regulation of CO₂ is consistent with the structure and purpose of the CAA, and subsequent congressional action did not create a comprehensive scheme of CO₂ regulation that would preclude EPA action.

CONCLUSION

Although regulation of CO₂ may or may not be wise as a policy matter, it is clear that Congress granted the EPA broad authority to regulate air pollutants. Under a straightforward reading of the CAA, CO₂ meets the statutory definition of an air pollutant. Neither the legislative history of the CAA nor the legislative history of its amendments indicates that Congress intended to modify or reduce the EPA's authority to apply the statute to CO₂. Absent conclusive evidence of legislative intent to the contrary, a proposed rule applying the CAA to CO₂ would warrant deference from the courts. Finally, the EPA's current reliance on *Brown & Williamson* to argue that it does not have the authority to regulate CO₂ is misguided, because

participants in the rulemaking proceeding deserve to be commended for the diligence with which they approached the task of coming to grips with these difficult issues.

We have accorded these cases the most careful consideration, combining as we must careful scrutiny of the evidence in the record with deference to the Administrator's judgments. We conclude that in this rulemaking proceeding the Administrator complied with the substantive and procedural requirements of the Act, and that his decisions are both adequately explained and amply supported by evidence in the record.

174. See, e.g., Am. Petroleum Inst. v. Costle, 665 F.2d 1176, 1181 (D.C. Cir. 1981) ("The petitions for review... challenge the primary and secondary national ambient air quality standards for ozone promulgated by the Environmental Protection Agency.... We uphold the ozone standards because they are proper under the Act and such procedural errors as did occur do not require invalidation of the final standards.").

175. In fact, the Supreme Court upheld the NAAQS for lead even though the "technology forcing" requirements of the CAA mandated the use of pollution control technologies that were economically infeasible. *Lead Indus. Ass'n*, 647 F.2d at 1149.

none of the three factors analyzed in that decision is present in the case of CO₂.

Even though courts would likely uphold a CO₂ rule supported by sufficient findings, the Bush administration is in no hurry to promulgate CO₂ regulations, as evidenced by its refusal to regulate CO₂ in motor vehicle exhaust¹⁷⁶ and its eagerness to misapply *Brown* & *Williamson* to deny that the EPA has the authority to act.¹⁷⁷ Although environmentalists may question the wisdom of postponing regulation, the decision to regulate is a policy decision properly within the purview of the executive branch, especially because, in this case, the CAA does not seem ideally suited to address the global climate change issue. Given that climate change is a truly global issue, an international solution is ideal, either in the form of the current Kyoto Protocol¹⁷⁸ or in some new international accord. Although an international solution is preferable, the EPA's authority to regulate CO₂ under the CAA remains a legally viable, if partial, solution to the global climate change issue.

^{176.} Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,922, 59,933 (Sept. 8, 2003).

^{177.} Despite Vice President Gore's interest in global climate change, the Clinton administration was also not eager to regulate CO₂. For a general review of climate change policy under the Clinton administration, see Amy Royden, *U.S. Climate Change Policy Under President Clinton: A Look Back*, 32 GOLDEN GATE U. L. REV. 415 (2002).

^{178.} Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 37 I.L.M. 32.