Greenhouse Gas Regulation under the Clean Air Act

Does Chevron v. NRDC Set the EPA Free?

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**Abstract**

The EPA is likely to face a legal problem on the path to regulating greenhouse gases under the Clean Air Act (CAA). Actions the agency is taking now will likely set it on a mandatory path to regulation of GHGs under the comprehensive “National Ambient Air Quality Standards” (NAAQS) program—a scheme that almost everyone who has studied the CAA thinks is a poor fit for GHG regulation and which blocks use of arguably more effective schemes within the CAA. Unless the EPA can win a lawsuit challenging an interpretation of the CAA that has stood for more than 30 years, or Congress explicitly takes away the agency’s authority to set a GHG NAAQS with new legislation, the agency will have to navigate the complex NAAQS process—with potentially large effects on the efficiency and effectiveness of GHG regulation.

**Key Words:** Clean Air Act, greenhouse gases, GHGs, NAAQS, §108, *NRDC v. Train*, *Chevron v. NRDC*, endangerment
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1. Introduction

As of this writing in late 2009, Congress is moving slowly towards comprehensive cap-and-trade climate legislation. In parallel, the EPA has moved similarly slowly towards regulation of greenhouse gases (GHGs) under the Clean Air Act (CAA). This regulatory process was set into motion by the Supreme Court’s 2007 decision in *Massachusetts v. EPA*, and has recently resulted in the EPA’s release of a proposed “endangerment finding” that would allow regulation of motor vehicles under §202 of the CAA. Some attention has been paid to one problem this finding may create – the requirement that large numbers of small GHG emitters will be forced to undergo the CAA’s permitting procedures. Whether or not this problem can be avoided, another problem of possibly even greater significance lies ahead: it is highly likely that the EPA will be forced by the CAA down a narrow regulatory path that is a poor fit for the GHG problem.

Unless new legislation is passed that alters its authority under the CAA, the EPA is likely to soon move to regulate “stationary sources” of GHGs—primarily power plants and industrial facilities. The EPA believes it has a variety of options under the CAA for regulating stationary sources, and considerable freedom to choose among them. If true, this would give the EPA the

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1 Clean Air Act, 42 U.S.C §§7401-7671q (hereinafter CAA).


5 ANPR, 44476 (“In this section, we explore three major pathways that the CAA provides for regulating stationary sources, as well as other stationary source authorities of the Act, and their potential applicability to GHGs”);
flexibility to design a regulatory scheme for GHGs that might in many ways approach the efficiency and effectiveness of a scheme created in new legislation.

In this paper, I argue that the EPA likely lacks much of this claimed flexibility, and will probably be forced by interconnections and statutory triggers built into the CAA to set national ambient air quality standards (NAAQS) under §§108-110 of the statute. The interpretation of CAA language on which the EPA relies for the flexibility it claims was explicitly rejected in federal court more than 30 years ago in NRDC v. Train.6 The basis for the EPA’s belief that a court would decide the issue differently now—the intervening decision in Chevron v. NRDC—is likely insufficient.

The NAAQS program that the EPA would be forced to implement is widely believed to be a poor choice for regulation of GHGs. The program is in many ways conceptually inconsistent with the GHG problem, is slow, and precludes regulation under other CAA programs that might be a better fit. As a result, regulation of GHGs under the CAA may be more complex, more expensive, and otherwise more problematic than it would otherwise be.

The implications of this are significant—if the EPA lacks the flexibility it claims to have, pressure on Congress to pass legislation that would supersede EPA CAA authority would increase. The likelihood of drawn-out litigation would increase, and the EPA might be forced by courts to act more quickly than it would like, stretching agency resources and possibly undermining the quality of eventual regulation. The political fallout for courts and the EPA could also be significant if either or both are perceived to be imposing a suboptimal but vast regulatory program in an undemocratic fashion.

2. Structure of the Clean Air Act

The Clean Air Act is among the most complex regulatory statutes in American law. It creates a wide variety of regulatory schemes targeted at different types and sources of air pollution, grants significant discretion to the EPA in implementing these schemes, and divides regulatory responsibility between federal and state governments.7 The majority of the CAA is devoted to regulation of air pollution from two types of sources: mobile and stationary.

6 NRDC v. Train, 545 F.2d 320 (2nd Cir. 1976).

7 For an overview of the structure and function of the CAA, see generally David P. Martineau Jr., The Clean Air Act Handbook (American Bar Association 2nd ed., 2005).
Generally speaking, mobile sources include vehicles and vehicle engines (above all cars), and stationary sources include power plants and industrial facilities.

The mobile source regulatory provisions in Title II of the CAA allow, among other things, setting of federal emissions standards for new vehicles (§202)\(^8\) and regulation of fuel additives (§211).\(^9\)

Stationary sources are regulated under one or more of three regulatory schemes. First, the EPA can set national ambient air quality standards (NAAQS) under CAA §§108-110 which the states are then charged with maintaining through state implementation plans (SIPs) that must be submitted to the EPA.\(^10\) Only 6 pollutants are currently regulated through NAAQS,\(^11\) and none have been added since the 1970s, but the NAAQS are nevertheless the most significant regulatory program in the CAA—the Supreme Court has called the NAAQS “the engine that drives nearly all of Title I [stationary source regulation] of the CAA.”\(^12\)

Second, the EPA can set new source performance standards (NSPS) under CAA §111 that require new and modified emissions sources to implement specified systems for pollution control.\(^13\) States are then charged with regulation of existing sources according to guidelines set by the EPA.\(^14\)

Third, the EPA can regulate “toxic” pollutants (hazardous air pollutants, or HAPs) believed to be particularly dangerous to health or the environment under CAA §112 by imposing strict national emissions standards.\(^15\)

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\(^8\) See CAA §202.

\(^9\) See CAA §211.

\(^10\) See CAA §§108-110.


\(^13\) See CAA §111.

\(^14\) CAA §111(d).

\(^15\) See CAA §112.
2.1 Interconnected Schemes for Regulation of Air Pollution

Among the most important features of the CAA are connections between these regulatory schemes and other elements of the statute. Regulation of a pollutant under one provision of the CAA will likely trigger regulation under other provisions, or at least force the EPA to consider regulation elsewhere. The various provisions of the CAA are best understood not as independent regulatory islands but part of a more-or-less comprehensive framework for attacking the air pollution problem.

One example of these interconnections is the permitting provisions of the CAA. Under the Prevention of Significant Deterioration (PSD) program detailed in §160-169 of the CAA, new or modified emissions sources must undergo a detailed permitting process. This requirement applies to any facility that emits over a certain threshold of a pollutant subject to regulation under the CAA. In practice, this means that the EPA lacks discretion to decide which kinds of emitters have to go through the permit process. As soon as the EPA decides to regulate emissions of a pollutant under almost any provision of the CAA, PSD permitting is required for new or modified facilities that emit that pollutant at levels above the statutory threshold. This mandatory interrelationship will impose substantial economic and administrative costs if and when GHGs are regulated under the CAA, and is the source of substantial concern for the EPA—the agency’s recently proposed “tailoring” rule is an attempt to avoid the PSD permitting requirement for small emitters of GHGs as the agency moves to regulate those pollutants under the CAA.

2.2 Endangerment Provisions

Another important link between various regulatory schemes in the CAA, and ultimately the focus of this Paper, is the presence in many of the schemes of similar threshold language. These similar provisions require the EPA to establish that a pollutant “cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare”, and are therefore termed “endangerment” provisions, requiring an "endangerment finding" before regulation can proceed. Endangerment provisions are found in sections 108 (NAAQS),

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16 See CAA §160-169.
17 CAA §165(a)(3)(C).
18 See generally Proposed Tailoring Rule (cited in note 4).
19 CAA §108(a)(1).
(NSPS),\textsuperscript{20} 202 (vehicle emissions standards),\textsuperscript{21} and 211 (fuel additives)\textsuperscript{22} of the CAA, among others. Many of these endangerment provisions are also framed by mandatory language, such that if the EPA does make a positive endangerment finding, it is compelled to regulate. These endangerment provisions therefore simultaneously act as threshold requirements and regulatory triggers. For example, §202(a)(1) of the CAA provides that:

\begin{quote}
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.\textsuperscript{23}
\end{quote}

The EPA is therefore required to act under §202 of the CAA by issuing emissions standards if it makes a finding that a pollutant emitted from vehicles endangers (or might endanger) public health or welfare. Similar mandatory language surrounds other endangerment provisions elsewhere in the CAA.

The mandatory character of endangerment provisions, their similar language, and their prevalence throughout the CAA create another significant set of interrelationships and triggers in the statute. An endangerment finding in one section of the CAA would superficially seem to trigger regulation not only in that section, but elsewhere as well. If all of the endangerment provisions in the CAA were identical, any endangerment finding would trigger regulation throughout the entire CAA.\textsuperscript{24} In fact, however, no two endangerment provisions are exactly the same. Subtle differences between them mean that, in many cases, an endangerment finding in one section of the CAA will only partially fulfill the requirements of another endangerment provision, or at most create a presumption of endangerment under a different section—but will not automatically trigger a positive endangerment finding (and, therefore, regulation) under other sections. For example, compare the endangerment language under §111(b)(1)(A) of the CAA (NSPS) with that quoted above from §202(a)(1):

\begin{quote}
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
\end{quote}

\textsuperscript{20} CAA §111(b)(1)(A).
\textsuperscript{21} CAA §202(a)(1).
\textsuperscript{22} CAA §211(c)(1)(A).
\textsuperscript{23} CAA §202(a)(1).
\textsuperscript{24} See ANPR, 44419 (cited in note 4).
pollution which may reasonably be anticipated to endanger public health or welfare. [The EPA is then required to issue NSPS for listed categories].

The differences between the two endangerment provisions are subtle but significant. While §202(a)(1) refers to pollutants from vehicles, §111(b)(1)(A) refers to source categories—that is, classes of emitters. While an EPA finding under §202 that a given pollutant from vehicles endangers public health or welfare might be highly relevant to the question under §111 of whether emissions from particular source category endanger public health or welfare, such a finding is not determinative. At most, it forecloses the argument that emissions from source category are not harmful at all, or not pollutants. The EPA could still claim, for example, that emissions from a source category of a vehicle pollutant regulated under §202 are at such a low level that the source category does not meet the endangerment criteria and therefore need not be listed and regulated under §111. Differences among other endangerment provisions may offer similar freedom to make separate endangerment findings and, therefore, regulatory flexibility for the EPA.

One endangerment provision, however, has created problems for the EPA when the agency has attempted to distinguish it from others within the CAA. The endangerment provision in §108(a)(1), the entry-point for the expansive NAAQS regulatory program, is structured in broad language that is very similar to that in other endangerment provisions and, therefore, leaves little room for the kind of discretionary gymnastics described in the previous paragraph. The EPA’s attempts to do so have resulted in litigation and controversy, and the CAA’s apparent inflexibility in this regard presents a serious problem for regulation of GHGs under the Act.

Before discussing the history and character of this problem in detail, however, it is useful to make a brief detour to explain the current status of GHG regulation under the CAA.

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25 CAA §111(b)(1)(A).

26 While an endangerment finding under §202 does not fulfill the conditions of the §111 endangerment provision, some environmental groups do argue that the EPA is required to issue some GHG NSPSs. This is due (they argue) not to the §202 endangerment finding, but to the finding in Massachusetts v. EPA that GHGs are pollutants. Since the EPA has already determined that a wide variety of source categories should be regulated under the NSPS scheme, the environmental groups argue that the agency must issue GHG NSPSs for these categories. They do not argue that the EPA must make an endangerment finding for any new source categories. For a brief discussion of these arguments, see Roger Martella and Matthew Paulson, Regulation of Greenhouse Gases Under Section 115 of the Clean Air Act, Daily Environment Report, Mar. 9, 2009 at 5, available online at <http://www.sidley.com/files/Publication/c789bb2a-7562-4149-8474-036f21dee348/Presentation/PublicationAttachment/3a6fe43a-22d1-4715-9f69-04c17efdbd00/GreenhouseGases.pdf> (last visited Nov. 19, 2009).
3. Regulation of GHGs under the Clean Air Act

Climate change caused by emissions of CO2 and other GHGs has been widely recognized as a serious problem, and has spurred both international negotiations and efforts to create new domestic legislation. The US already has a comprehensive statute for control of air pollution, however—the CAA. The question of whether and how the CAA can or should be used to regulate GHG emissions has spawned much debate and litigation, but in 2009 is finally approaching a conclusion. Unless Congress acts to circumscribe the EPA’s CAA authority, the agency will regulate GHG emissions under the statute—it is already well on its way to doing so for mobile-source emissions. Exactly how this will take place, particularly for stationary-source emissions, remains an open question.

3.1 Massachusetts v. EPA Forces the EPA to Act

The Supreme Court's well-known Massachusetts v. EPA decision in 2008 opened the door for regulation of GHGs under the CAA.27 In the case, Massachusetts and other states sued the EPA seeking to compel the agency to start the process of regulating GHGs under §202 of the CAA (governing mobile-source emissions).28 The (Bush-administration) EPA argued that GHGs were not “pollutants” within the definition of the CAA, and therefore not subject to regulation.29 The Court rejected this argument, overturning the DC Circuit’s holding and finding that GHGs were CAA pollutants.30 This finding brought GHGs within the scope of the CAA not just in §202, but throughout the statute. It did not, however, immediately require that GHGs be regulated under the CAA. As discussed above, the regulatory schemes in the statute have endangerment provisions, requiring an assessment of whether a given pollutant endangers public health or welfare. The Court in its ruling therefore ordered the EPA to act on the endangerment

28 Mass. v. EPA at 504-506.
29 Mass. v. EPA at 513 (“. . . EPA believed it followed that greenhouse gases cannot be “air pollutants” within the meaning of the Act”).
30 Mass. v. EPA at 528-29 (“The statutory text forecloses EPA's reading. The Clean Air Act's sweeping definition of “air pollutant” includes “any air pollution agent or combination of such agents, including any physical, chemical . . . substance or matter which is emitted into or otherwise enters the ambient air ... .” § 7602(g) (emphasis added). On its face, the definition embraces all airborne compounds of whatever stripe, and underscores that intent through the repeated use of the word “any.” Carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt “physical [and] chemical ... substance[s] which [are] emitted into ... the ambient air.” The statute is unambiguous.”).
provision of §202 by making an endangerment finding, making a finding of no endangerment, or at least explaining why such a finding would be impossible.31

3.2 Endangerment Under §202

The Bush-administration EPA did not make an endangerment decision under §202, however, instead issuing an "Advanced Notice of Proposed Rulemaking" (ANPR) in 2008 that, among other things, detailed possible regulatory approaches for GHGs under the CAA and requested comments.32 The Obama-administration EPA has in contrast moved relatively quickly to respond to the Supreme Court's *Massachusetts v. EPA* directive. It issued a proposed endangerment finding for mobile sources under §202 of the CAA in April of 2009.33 As the EPA summarized the proposed rulemaking:

The Administrator is proposing to find that the current and projected concentrations of the mix of six key [GHGs] in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the endangerment finding. The Administrator is further proposing to find that the combined emissions of [GHGs] from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases and hence to the threat of climate change. This is referred to as the cause or contribute finding.34

The mandatory language of §202 described above will require the EPA to regulate mobile source emissions once the endangerment finding is finalized. The EPA formally proposed at least one component of such regulations in September of 2009, announcing plans for new GHG emissions and fleet fuel economy (CAFE) standards.35

In short, therefore, the EPA is well on its way to regulation of GHGs under the CAA. This has significant implications not only for the vehicle and engine manufacturers that will be

31 *Mass. v. EPA* at 533-35.
32 See ANPR (cited in note 4).
33 See Proposed Endangerment Finding (cited in note 3).
regulated under §202 of the statute, but also, because of the interrelationships between provisions in the CAA, for other GHG emitters.36

3.3. Options for Regulation of Stationary-Source Emissions?

*Massachusetts v. EPA*, the proposed §202 endangerment finding, and the EPA's recently-proposed regulations are all directed only at mobile sources of GHGs. In fact, all relate specifically to a single section of the CAA: §202. Emissions from stationary sources, above all from fossil-fuel electricity generating plants, are an even larger source of GHGs. As discussed above, the CAA contains a variety of mechanisms for regulating these stationary sources.

In parallel, of course, Congress is considering comprehensive climate legislation that would likely supersede some of the EPA's authority under the CAA. The Waxman-Markey climate bill that has passed the House would specifically block listing of GHGs under §108 of the CAA, cleanly resolving the problem presented in this paper.37 The Senate Kerry-Boxer bill, at least in its initial version, contains no such exclusion.38 Legislation is currently stalled in the Senate, however, and it is unclear whether or how a final bill would modify the EPA's CAA authority. Until and unless such legislation is passed, the CAA regulatory process for GHGs will continue.

This process is widely understood as the EPA having substantial discretion to choose among the regulatory schemes for stationary sources described above—NAAQS under §110, NSPS under §111, regulation as toxic pollutants under §112, etc. Under this view, the agency would able to select the option that best allows it to design an effective regulatory program for

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36 One of these interrelationships, the triggering of the §108 (NAAQS) endangerment provision, is the subject of this paper. Another is that addressed by the EPA’s Proposed Tailoring Rule (cited in note 4)—the triggering of PSD/NSR permitting requirements for a wide range of GHG sources by the §202 endangerment finding, as briefly discussed in Section 2.1.

37 See H.R. 2454 (American Clean Energy Security Act of 2009, also known as “Waxman-Markey”) §831 (“As of the date of the enactment of the Safe Climate Act, no greenhouse gas may be added to the list under section 108(a) on the basis of its effect on global climate change.”) Note that this would not prevent the EPA from addressing GHGs under other CAA provisions, including §202 (mobile sources) and §111 (performance standards for stationary sources).

stationary GHG sources. The EPA's 2008 ANPR takes this view. It devotes hundreds of pages to a detailed analysis of these and other CAA schemes for regulation of stationary sources, and evaluates the positives and negatives of each (while requesting comment on all of them).\(^{39}\) Scholars and commentators who have analyzed regulation of GHGs under the CAA have also explicitly or implicitly taken the view that the EPA has a choice among regulatory schemes.\(^{40}\)

This view—that the EPA has unlimited or even broad discretion among regulatory schemes for stationary sources—is likely incorrect. Links between different provisions in the CAA circumscribe the EPA's flexibility to regulate stationary sources. As the following sections will show, the EPA very likely will be forced by its §202 endangerment finding to issue a similar finding under §108, which will then trigger regulation of GHGs under the NAAQS framework detailed under §§109-110. The EPA would still retain some discretion in deciding how to implement the NAAQS, but the option of choosing \textit{not} to issue a NAAQS for GHGs will very likely be unavailable.\(^{41}\)

\(^{39}\) See ANPR at 44476-520 (cited in note 4).

\(^{40}\) See, for example, Larry Parker and James E. McCarthy, Congressional Research Service, \textit{Climate Change: Potential Regulation of Stationary Greenhouse Gas Sources Under the Clean Air Act}, Report R40585 (2009) at 1; Inimai M. Chettiar and Jason A. Schwartz, \textit{The Road Ahead: EPA's Options and Obligations For Regulating Greenhouse Gases}, Institute For Policy Integrity, New York University School of Law (2009) at v (available online at <http://www.policyintegrity.org/publications/documents/TheRoadAhead.pdf>); Roger Martella and Matthew Paulson, \textit{Regulation of Greenhouse Gases Under Section 115 of the Clean Air Act}, Daily Environment Report, Mar. 9, 2009 at 1; Schnapf Environmental Law Center, \textit{Potential CAA Authorities for Regulating GHG Emissions}, available online at <http://www.environmental-law.net/article/documents/PotentialCAAAuthoritiesforRegulatingGHGEmissions.pdf> (last visited Nov. 18, 2009); Center for Clean Air Policy, \textit{A Pragmatic Approach to Regulating Greenhouse Gases Under the Clean Air Act} (2009), available online at <http://www.ccap.org/docs/resources/614/Clean%20Air%20Act%20and%20GHGs_CCAP_March%202009.pdf>. All of these sources present the EPA as having a range of options for regulation of stationary source GHGs under the CAA, and most do not address the issue of legal limits on the agency’s discretion at all, explicitly or implicitly assuming that the agency has full discretion. The Chettiar and Schwartz work is an exception to this, and its discussion of limits on the EPA’s discretion is discussed in detail in Sections 5.1 and 5.2 below.

\(^{41}\) Another limitation on the EPA’s discretion is that many of the findings that the agency must make for these regulatory programs are scientific, not pure policy judgments. Endangerment findings are best understood to be judgments of risk from pollutants, driven by scientific understanding of their potential dangers. Since these scientific judgments are nevertheless made by the agency, however, the EPA retains a great deal of flexibility. Such judgments are ultimately only accountable to the political requirements of the executive branch and judicial arbitrariness review. For example, the Supreme Court has held that the EPA is forbidden to consider costs when setting NAAQS: “Were it not for the hundreds of pages of briefing respondents have submitted on the issue, one would have thought it fairly clear that this text does not permit the EPA to consider costs in setting the standards. The language, as one scholar has noted, ‘is absolute.’” (Whitman v. American Trucking Associations, 531 U.S. 457, 464 (2001)).
Whether the EPA has this choice is important. Many observers, and the EPA itself, have
criticized the NAAQS scheme as ill-suited to regulation of GHGs.42 There are three main reasons
for this. First, the NAAQS are in many ways conceptually inconsistent with the GHG problem.43
The program requires the EPA to set a national ambient air quality standard, but it is hard to see
what this standard should be for GHGs. GHGs are ubiquitous and cause little harm today,
however dangerous business-as-usual emissions will be in the future. Should a GHG NAAQS be
set above or below current atmospheric levels? If it were set above current levels, it would imply
that current GHG levels are dangerous to public health or welfare, which would be relatively
difficult to prove. If it were set below current levels, it would similarly imply that no immediate
action is required. The NAAQS program also requires states to create plans showing how the
standard would be achieved, but this seems futile given the global character of the climate
change problem. Unlike the local and regional pollutants currently regulated under the NAAQS,
GHG concentrations are uniform everywhere. States’ contributions to emissions are also
relatively small—even if a state reduced its GHG emissions to zero, it would have almost no
effect on global GHG concentration or on the risk of climate change.

Second, the process of listing a pollutant, setting a NAAQS, and regulating through states
also takes a long time. The EPA is required by the CAA to issue a NAAQS within one year of
listing a pollutant under §108,44 and states then must create and submit implementation plans for
achieving (or maintaining) that standard within three years.45 There would therefore be a delay of
up to four years between listing of a pollutant and its regulation. Even if the NAAQS is set at a

42 See ANPR at 44477-79 (discussing the difficulty of setting a NAAQS level) and 44480-82 (discussing difficulties
for states charged with achieving or maintaining a GHG NAAQS) (cited in note 4). See also Johnathan B. Wiener,
(stating that “regulation of carbon dioxide under the National Ambient Air Quality Standards (NAAQS) and State
Implementation Plans (SIPs) of Clean Air Act sections 109 and 110 would likely fail if carbon dioxide were listed
as a “pollutant” by the EPA under section 108 of the Clean Air Act.”); Brigham Daniels et al, Regulating Climate: What Role for the Clean Air Act?, 39 Env. Law Rev. 10837, 10838 (noting that “most speakers at the conference
[on CAA regulation of GHGs] argued that, if at all possible, EPA should avoid using the NAAQS program” and
detailing objections to using NAAQS to regulate GHGs); Center for Clean Air Policy, A Pragmatic Approach to
Regulating Greenhouse Gases Under the Clean Air Act (2009) at 1 (cited in noted 40).

43 For a more detailed account of the conceptual incompatibilities between the NAAQS and GHGs, see Daniels et
al, Regulating Climate at 10838-39 (cited in note 42). See also ANPR, 44477-86 (cited in note 4).

44 CAA §108(a)(2).

45 CAA §110(a)(1). The EPA can extend this period by 18 months for SIPs applying only to a secondary NAAQS,
bringing the total delay to over five years from the date of listing. See CAA §110(b).
level below that of current atmospheric GHG concentrations (so that the entire US is “in nonattainment”), states have at least 10 years to come into compliance with the standard.\textsuperscript{46} Regulation under the NAAQS therefore might not be effective for a decade or more. This does allow the EPA to avoid at least some of the problematic aspects of NAAQS regulation, and gives Congress more time to act to remedy those problems (or create a new GHG regulatory program). In the meantime, however, the agency would still be prevented from regulating under some other CAA programs that are likely preferable alternatives to the NAAQS.

This preclusion of other CAA regulatory schemes is the third and possibly most serious of the problems caused by NAAQS regulation of GHGs. The text of the CAA specifically makes some regulatory schemes mutually exclusive with the NAAQS, including the §112 toxic pollutants scheme\textsuperscript{47} or, most importantly, performance standards for existing sources in §111(d).\textsuperscript{48} Even those programs that would not be directly precluded by NAAQS regulation might have difficulty operating effectively alongside it. This is perhaps the most significant negative impact if the EPA is forced down the NAAQS path. Regulation through performance standards is a particularly attractive method of CAA regulation of GHGs, and would require use of §111(d) to include existing sources.\textsuperscript{49} This would be impossible if a GHG NAAQS exists. These statutory preclusions come into effect as soon as a pollutant is listed, exacerbating the problem. The EPA cannot use the delays inherent in NAAQS regulation to institute a more effective and/or efficient GHG regulatory program in the short term if elements of that program are precluded by the first stage of the NAAQS process. The result is that the EPA may not be able to effectively regulate GHGs under the CAA in the short term, and will be distracted by the need to set up a NAAQS program that will be of limited value when it is finally implemented.

\textsuperscript{46} If the EPA sets a “primary” NAAQS based on dangers to public health, the states have 5 years to meet the NAAQS, extendable by the agency to 10 years. See CAA §172(a)(2)(A). If the EPA only sets a “secondary” NAAQS, based on dangers to public welfare, states have no specific deadline (only the general requirement that the standard be met “as expeditiously as practicable”). See CAA §172(a)(2)(B).

\textsuperscript{47} CAA §112(b)(2) (stating that “No air pollutant which is listed under section §108(a) may be added to the list under this section” subject to a narrow exception). The existence of this exclusion suggests that the EPA might be able to regulate under a combination of §202 and §112, but not §108-110. §112, with its strict language and low emissions threshold levels, is considered by most to be a poor fit for GHG regulation, however.

\textsuperscript{48} CAA §111(d)(1)(A)(i).

\textsuperscript{49} See, for example, Parker and McCarthy, \textit{Climate Change: Potential Regulation of Stationary Greenhouse Gas Sources Under the Clean Air Act} at 11-12 (cited in note 40) (noting that “Given the difficulties in following the first two paths [NAAQS and §112], much of the attention, including EPA’s, has been on the third path [NSPS]”); Chettiar and Schwartz, \textit{The Road Ahead} at 86-91 (cited in note 40).
All of these problems are distinct from and in addition to those most frequently identified as arising from the §202 endangerment finding and CAA GHG regulation in general—permitting (PSD/NSR) requirements for small GHG sources. It is these permitting problems that the EPA’s proposed tailoring rule is designed to address, not those discussed above arising from NAAQS regulation of GHGs. The tailoring rule, even if it is found by the courts to be legal or rendered unnecessary by Congressional action, will unfortunately do nothing to alleviate the problems identified in this paper.

A few commentators have argued that a GHG NAAQS could be a useful part of GHG broader regulation,50 and it is true that the NAAQS are not without some advantages. There is precedent, for example, for creating a cap-and-trade style program for pollutants regulated under the NAAQS.51 The prevailing view both within the EPA and among scholars, however, is that air quality standards are a poor fit for GHG regulation, for the reasons discussed above. At best, being forced to regulate through the NAAQS would saddle the EPA (and the country as a whole) with a suboptimal and expensive regulatory scheme. At worst, it would do this while simultaneously crippling the agency’s ability to implement better alternatives.

4. The §108 Endangerment Provision

The source of this triggering link is the breadth of the endangerment provision in §108 of the CAA. §108(a)(1) provides that:

(1) For the purpose of establishing national primary and secondary ambient air quality standards [NAAQS], the Administrator shall within 30 days after the date of enactment of the Clean Air Amendments of 1970 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;

50 See generally Thomas D. Peterson, Robert B. McKinstry Jr., and John C. Dernbach, Developing a Comprehensive Approach to Climate Change Mitigation Policy in the United States: Integrating Levels of Government and Economic Sectors, 39 ELR 10711 (2009); see also Chettiar and Schwartz, The Road Ahead at 78-86 (cited in note 40).

51 See EPA, Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone (the “NOx SIP Call”), 63 Fed. Reg. 57356, 57456-76 (creating an emissions trading system for nitrous oxides through state implementation plans (SIPs) submitted under the NOx NAAQS. This system is among the largest emissions trading programs in the world, and has been widely perceived as being successful at reducing NOx emissions at relatively low cost.)
(B) the presence of which in the ambient air results from numerous or diverse mobile or stationary sources; and
(C) for which air quality criteria had not been issued before the date of enactment of the Clean Air Act Amendments of 1970, but for which he plans to issue air quality criteria under this section.52

The EPA is then required to issue a NAAQS, forcing states to regulate each listed pollutant.53 After making an endangerment finding, the EPA retains control over how and at what level a pollutant will be regulated, but not whether to issue a NAAQS at all—one once a pollutant is listed, a NAAQS must follow.

**4.1 The Link Between §108 and §202**

Parts (A) and (B) of the §108(a)(1) endangerment provision are relatively straightforward. Under (A), the EPA must determine whether a pollutant “may reasonably be anticipated to endanger public health or welfare—a detailed scientific inquiry, but a process that is well established by legal precedent and agency experience. Under (B), the EPA must simply establish whether emissions of this pollutant come from “diverse” sources—a factual, even common-sense observation.

These elements of the §108(a)(1) test are mirrored in the §202 endangerment provision and finding. Under §202, the EPA is currently in the process of determining that a pollutant (GHGs) may endanger public health or welfare, and is emitted from vehicles in the US—a set of diverse sources. The operative language—“reasonably be anticipated to endanger public health or welfare”—is identical in both sections. As the EPA’s statement quoted in Section 3.2 explicitly shows, the EPA in its proposed §202 GHG endangerment finding is unequivocally claiming that GHGs meet this CAA statutory standard.

Therefore, if §108(a)(1) consisted only of parts (A) and (B) there would be no question that the §202 endangerment finding, when finalized, would compel a similar finding under §108. Whether such a finding is in fact compelled therefore depends on the content and interpretation of §108(a)(1)(C).

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52 CAA §108(a)(1).
4.2 The EPA Claims §108(a)(1)(C) Grants Unlimited Flexibility

The EPA’s stated interpretation of this provision is that it grants the agency full discretion to decide whether to list a pollutant (and, therefore, issue a NAAQS) even if that pollutant meets the criteria set out in parts (A) and (B). Specifically, the EPA claims that a pollutant must be listed only if it meets the (A) and (B) tests and the EPA then “plans to issue air quality criteria” (the part (C) test). Since the EPA has discretion over what it “plans,” the agency argues, it therefore has discretion over which pollutants to list.

The EPA relies on this interpretation of §108(a)(1)(C) when it presents regulation under the NAAQS program as a discretionary option in its ANPR, and scholars who have discussed the EPA’s regulatory options for GHGs under the CAA have implicitly relied on the same interpretation.

4.3 NRDC v. Train

This interpretation of §108(a)(1)(C) is not new. As one might expect for the key threshold provision of a major regulatory program, the interpretation of §108 has been considered by the agency in the past and has been the subject of significant litigation. Perhaps contrary to expectations, however, the discretionary interpretation of §108(a)(1)(C) that the EPA is now advancing was rejected by a federal appellate court more than 30 years ago. In NRDC v. Train (1976), the Second Circuit adopted a much narrower interpretation that denied the EPA any discretion under the provision. This interpretation has not been challenged by the agency or any other party since then.

In Train, the EPA offered essentially the same interpretation of §108(a)(1)(C) that it now offers, under very similar circumstances. The agency had already made an endangerment finding under §211 of the CAA to regulate lead as a fuel additive, but was seeking to avoid setting a lead NAAQS. The EPA conceded that the §211 endangerment finding established that lead met the conditions of parts (A) and (B) of the §108(a)(1) test, but maintained that “under §108(a)(1)(C)

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54 ANPR at 44477 (cited in note 4).
55 See id; sources cited in note 40.
56 Natural Resources Defense Council v. Train, 545 F.2d 320,328 (2nd Cir 1976) (“The structure of the Clean Air Act as amended in 1970, its legislative history, and the judicial gloss placed upon the Act leave no room for an interpretation which makes the issuance of air quality standards for lead under s 108 discretionary.”)
57 Id at 324.
of the Act, the Administrator retains discretion whether to list a pollutant, even though the pollutant meets the criteria of [§]108(a)(1)(A) and (B).”58

The Second Circuit, noting that “the issue is one of statutory construction,”59 rejected this interpretation on three grounds: canons of statutory construction, the structure of the CAA, and its legislative history.60 First, the court pointed to the mandatory language in §108 providing that the EPA “shall . . . publish . . . a list . . . “61 This language, the court determined, “would become mere surplusage” if the agency’s interpretation of §108(a)(1)(C) were accepted.62 The EPA’s interpretation, therefore, would violate the traditional canon that courts must give effect to all words in a statute if possible.63 Of course, rejecting the EPA’s interpretation runs the risk of itself creating statutory “surplusage” in the form of §108(a)(1)(C) itself—if it does not give the EPA discretion based on the agency’s “plans,” what does it do? The court therefore took care to establish a role in the statute for (C), agreeing with the court below that it is directed at the initial list of pollutants required by the 1970 amendments to the CAA, of which §108 is a part.64 In other words, §108(a)(1)(C) simply establishes that the EPA did not have to go through the elaborate regulatory process of §108 and §109 for pollutants for which the agency had already issued air quality criteria before the 1970 amendments came into effect (and could therefore more quickly issue NAAQS for those pollutants). Under this interpretation, all three sub-parts of §108(a)(1) are given independent meaning.65

Second, in further examining the EPA’s interpretation of §108(a)(1)(C), the court reasoned from the structure of the CAA as a whole that regulation of emissions sources (under

58 Id.
59 Id.
60 Id.
61 Id (quoting CAA §108).
62 Id.
63 United States v. Menasche, 348 U.S. 528, 538-39 (1955) (stating “It is our duty ‘to give effect, if possible, to every clause and word of a statute’) (quoting Montclair v. Ramsdell, 107 U.S. 147 (1883).
64 Train at 325.
65 An alternative interpretation of §108(a)(1)(C) is that it provides discretion to the EPA to list pollutants that do not (or may not) meet the (A) and (B) criteria, but which the agency nevertheless “plans” to issue criteria and regulate with NAAQS. This interpretation would give the EPA additional authority to regulate independent of (A) and (B), but would not allow the EPA discretion to refuse to regulate once (A) and (B) had been met. This interpretation seems consistent with the Senate Report (on S.4358, 91st Cong., 2d Sess.) cited in Train at 326.
§211, §202, and other provisions) was “a supplement to air quality standards [under §108-110], not an alternative to them.”\textsuperscript{66} This conclusion was supported by citation to Supreme Court interpretations of the structure of the CAA.\textsuperscript{67} This structural understanding of the CAA, the \textit{Train} court believed, undermined the EPA’s position that the statute should be understood to give the agency full discretion over setting NAAQS.

Third, the \textit{Train} court looked to legislative history, ruling that it also failed to support the EPA’s interpretation of §108(a)(1)(C). From this legislative history, the court determined that the mandatory language of §108 was enacted in response to perceived inaction on the part of states under the previous regulatory scheme (the Air Quality Act of 1967).\textsuperscript{68} As a result, Congress created a strict, mandatory timetable for the NAAQS process under §108-110. This timetable, the court reasoned, showed Congressional intent that listing under §108 be mandatory—if it were not, the court claimed, the timetable would be “an exercise in futility.\textsuperscript{69}”

The most convincing piece of legislative history cited by the \textit{Train} court, however, is a Senate report on the bill that became the 1970 amendments to the CAA which stated that:

\begin{quote}
The agents on the initial list [of pollutants] must include all those pollution agents or combinations of agents which have, or can be expected to have, an adverse effect on health and welfare and which are emitted from widely distributed mobile and stationary sources, and all those for which air quality are planned.\textsuperscript{70}
\end{quote}

In this report, the §108(a)(1)(A) and (B) criteria are clearly established as sufficient conditions for listing of a pollutant, and the (C) criteria—the EPA’s “plans” —as an independent, alternative basis for listing. To the extent that this document should inform interpretation of the CAA, it is powerful evidence for rejecting the EPA’s position.

Based on this and other evidence of Congressional intent, the Second Circuit concluded that the EPA’s discretionary interpretation of §108(a)(1)(C) was incompatible with the legislative history of the 1970 Amendments to the CAA. As the court stated,

\begin{quote}
\textsuperscript{66} \textit{Train} at 327.
\textsuperscript{67} \textit{Train} at 327 (citing \textit{Train v. NRDC}, 421 US 60, 66).
\textsuperscript{68} \textit{Train} at 325.
\textsuperscript{69} \textit{Train} at 327. The court was also able to point to language in the conference report for the 1970 amendments specifically mentioning lead as a pollutant that Congress “expect[ed]” to be regulated under §108-110. See \textit{Train} at 326.
\textsuperscript{70} \textit{Train} at 326 (quoting Senate Report on S. 4358, 91st Cong., 2d Sess.).
\end{quote}
The structure of the Clean Air Act as amended in 1970, its legislative history, and the judicial
gloss placed upon the Act leave no room for an interpretation which makes the issuance of air
quality standards for lead under §108 discretionary. The Congress sought to eliminate, not
perpetuate, opportunity for administrative foot-dragging. Once the conditions of §§108(a)(1)(A)
and (B) have been met, the listing of lead and the issuance of air quality standards for lead became
mandatory.71

4.4 Is Train Still Good Law?

The Second Circuit therefore comprehensively rejected the same interpretation of
§108(a)(1)(C) that the EPA recently offered in the ANPR. The Train court’s holding was never
challenged in more than 30 years since, and the lead NAAQS that the EPA was forced to set by
the decision remains in effect.72 How, then, can the EPA’s current position be justified? In the
ANPR, the EPA offers its defense:

With respect to the third criterion [§108(a)(1)(C)], while there is a decision of U.S. Court of
Appeals for the Second Circuit to the contrary, NRDC v. Train, 545 F.2d 320 (2nd Cir. 1978) (sic),
EPA notes that that decision was rendered prior to the Supreme Court’s decision in Chevron v.
Natural Resources Defense Council . . . Thus, a proper and reasonable question to ask is whether
this criterion affords EPA discretion to decide whether it is appropriate to apply the NAAQS
structure to a global air pollution problem like GHGs.73

In short, the EPA believes that the redefinition of the level of deference shown to agency
interpretations of statutes established by Chevron v. NRDC74 gives it another shot at its favored
interpretation of §108(a)(1)(C). The agency will almost certainly get the opportunity to test this
theory. Once it issues a final §202 endangerment finding, environmental groups will probably
file a citizen suit under the CAA seeking to compel the EPA to issue a GHG NAAQS, much as

71 Train at 328.
72 See EPA, National Ambient Air Quality Standards (NAAQS) (cited in note 11).
73 See ANPR at 44477 fn. 229 (cited in note 4).
the NRDC sued in *Train* to compel issuance of a lead NAAQS. The next section analyzes the EPA’s chances of success in such a suit.

5. Can the EPA Reinterpret §108?—the *Chevron* Question

5.1 Can *Train* Be Distinguished?

The EPA’s claim that it now has a new opportunity to prevail in litigation over the interpretation of §108(a)(1)(C) is surely correct as a procedural matter. First, amendments to the CAA since 1976 have given the DC Circuit exclusive jurisdiction over CAA litigation. The 2nd Circuit’s holding in *Train* will therefore have (at most) persuasive impact, rather than precedential value. Second, the EPA will argue that *Train* and a future case over §108 discretion for GHGs concern different statutory language. New litigation would concern the linkage between different endangerment provisions—§202 and §108 instead of §211 and §108 in *Train*. This is a distinction without a difference, as the language of the §202 endangerment provision fulfills the requirements of §108(a)(1)(A) and (B) in the same way as the §211 provision does, but the agency could at least attempt to argue that this distinction should affect the result. Finally, as the EPA observes in the ANPR, *Chevron* could create a basis for deferring to the EPA’s interpretation of the statute.

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75 Some have argued that environmental groups would refrain from filing such a suit because they prefer that the EPA have flexibility to address GHGs. See Chettiar and Schwartz, *The Road Ahead* at 39 (cited in note 40). While this may be true for some or even most environmental groups, all it takes is one suit to force judicial examination of the issue. The EPA would be unwise to rely on a perceived lack of a plaintiff. Environmental groups should also consider carefully whether they want to take the position that the EPA has discretion over §108 listings. While the optimal answer for GHGs might seem to be yes, these same groups might oppose EPA discretion in other cases in the future. If the EPA’s discretionary interpretation of §108(a)(1)(C) were to prevail, it would be unlikely that the agency would ever be forced to relinquish it again under the current CAA. The Center for Biological Diversity and 350.org have in fact petitioned the EPA to issue a GHG NAAQS, and claimed in their petition that the agency lacks the discretion not to do so (citing *Train*). See Center for Biological Diversity and 350.org, *Petition to Establish National Pollution Limits for Greenhouse Gases Pursuant to the Clean Air Act*, Dec. 2, 2009 at 15 (available online at <http://www.biologicaldiversity.org/programs/climate_law_institute/global_warming_litigation/clean_air_act/pdfs/Petition_GHG_pollution_cap_12-2-2009.pdf>) (Last visited Dec. 7, 2009).

76 CAA §307(b)(1).

77 The somewhat unusual result is that while *Train* would not carry precedential value, a contrary decision would overrule *Train*, since the DC Circuit would have jurisdiction over both that case and any future case regarding the interpretation of §108.
Similarly, the EPA might argue that NRDC v. Train can be distinguished because it deals with the initial publication of the list of criteria pollutants, rather than the revision that listing of GHGs would involve. A recent paper by Inimai Chettiar and Jason Schwartz that includes a brief analysis of a potential challenge to the EPA’s NAAQS discretion points to this distinction as a source of possible relief for the agency. It is true that the relevant language in §108(a) for publication of the list (“shall . . . publish”) is different from that for revisions (“shall from time to time thereafter revise”). The mandatory language in both is the same, however, and the general requirement that the list “include[] each air pollutant” that meets the (A)-(C) criteria still applies. Furthermore, it would make little sense for Congress to have given the EPA no discretion over the initial list but complete discretion over revisions of it—if this were the case, the agency could not only decide not to add new pollutants to the list, it could remove pollutants that it was required to put on the initial list. The result would be full EPA discretion over the entire list, the exact outcome that the Train court rejected. The clearest difference between the initial listing and revision language in §108(a) is that the former contains a strict timetable (30 days), while the latter specifies only “from time to time thereafter”. If the distinction has any value for the agency, therefore, it is that it may provide some discretion over the timing of its listing of GHGs.

While in principle any of these distinctions between Train and a future GHG NAAQS case could support a different outcome, Chevron is by far the agency’s best justification for such a result. The remainder of this section will therefore address the impact Chevron might have.

5.2 A Brief Overview of Chevron

Chevron purported to modify the standard of deference shown by courts to agency interpretations of their own statutory authority. It created a widely cited two-step process for review of such agency interpretations: first, the reviewing court must determine whether the statute in question is ambiguous (Chevron step 1). If the statute is unambiguous, its plain

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78 Chettiar and Schwartz, The Road Ahead at 37 (cited in note 40).
79 CAA §108(a)(1).
80 Id.
81 Chettiar and Schwartz, The Road Ahead at 37 (cited in note 40).
82 Chevron at 842-43 (cited in note 74).
meaning prevails. If the court determines that the statute is ambiguous, it proceeds to ask whether the agency's interpretation is "reasonable" or "permissible" (Chevron step 2). So long as the interpretation is within this range, the court will defer to the agency. Agency interpretations are therefore said to receive "Chevron deference".

A prediction of how the EPA's interpretation of §108(a)(1)(C) will be treated by the DC Circuit (or the Supreme Court on appeal) therefore requires an analysis of whether the interpretation would survive Chevron step 1 and prevail under Chevron step 2. These questions overlap to a large extent. Indeed some scholars have suggested that it would be more useful to treat Chevron as having only a single step, which asks whether the agency interpretation falls within a reasonable/permissible range. This range might be smaller or larger depending on the ambiguity of the statutory language. Other scholars have suggested that, in fact, Chevron may not have changed the level of deference courts show to agency interpretations very much, or that judges' policy preferences may be more important than the nominal level of deference. Despite these revisionist interpretations of Chevron and its importance, it is still useful to begin with a straightforward analysis of the Step 1 and Step 2 questions.

5.3 The EPA's Interpretation of §108 Under Chevron Step 1

A court reviewing the EPA's interpretation of the §108 endangerment provision might find that this interpretation is contradicted by unambiguous meaning of the statute. If so, the agency's position would fail at Chevron step 1 and the court's inquiry would end. This analysis might follow similar lines to that in Train—the court might first look to its traditional tools of statutory construction (rather than interpretation), including the canon against surplusage, and find that the EPA's interpretation is wholly foreclosed by the language of the statute. The D.C.

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83 *Chevron* at 843.


86 See Miles and Sunstein, *Do Judges Make Regulatory Policy?* (cited in note 84).

87 See Thomas W. Merrill, *Textualism and the Future of the Chevron Doctrine*, 72 Wash. U. L.Q. 351 (1994) ("The most general finding of the survey was that *Chevron* had not made a dramatic difference in the frequency with which the Supreme Court deferred to agency interpretations of statutes.")
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Circuit has explicitly held that all three are relevant factors at *Chevron* step 1. The Supreme Court, applying *Chevron* in *Immigration and Naturalization Service v. Cardoza Fonseca*, stated that "traditional tools of statutory construction" allow a reviewing court to determine whether a statute is ambiguous (and therefore passes Step 1). *Fonseca* is a relatively old case by *Chevron* standards, however, and this kind of clean distinction between questions of law, reserved to courts, and questions of application, over which the agency has some discretion, has not generally been applied in more recent cases.

The Supreme Court has nevertheless repeatedly used canons of construction to resolve *Chevron* questions at Step 1. More deeply, *Chevron* refers to "the unambiguously expressed intent of Congress" as the legal force that supersedes agency interpretations of statutes. The canon against surplusage is intended to reveal and preserve this intent. It would therefore seem to be solidly within the class of interpretive tools courts could use to resolve apparent ambiguity and foreclose agency interpretations (as the court in *Train* indeed did). The Supreme Court applied another canon of construction in interpreting §109 of the CAA in *Whitman v. American Trucking Ass'ns* (2001). Justice Scalia stated in the majority opinion that “Congress, we have held, does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes.” Like the canon against surplusage, this principle could also be applied to §108(a)(1)(C), indicating that Congress would have been much clearer had it intended to give the EPA the wide discretion it claims.

The role these canons in *Chevron* step 1 analysis seems even more clearly proper given that they are both aimed at the narrow problem of interpreting statutory language itself, as opposed to the substantive canons (such as that against interpretations that cause Constitutional

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91 *Chevron* at 842-43 (cited in note 74).


Supreme Court precedent also suggests that legislative history and the structure of statutes as a whole are relevant at \textit{Chevron} Step 1. Therefore even if reliance on canons of construction alone is insufficient to satisfy the court that §108(a)(1)(C) is unambiguous, the structural analysis of the CAA and substantial legislative history cited in \textit{Train} may do the job. In \textit{Fonseca}, cited above, the Supreme Court used legislative history along with "traditional tools of statutory construction" to reject the agency's interpretation of a statute, much as the Second Circuit did in \textit{Train}.\footnote{\textit{Fonseca} at 446 (cited in note 89).} In \textit{Dole v. United Steelworkers}, the Supreme Court used legislative history to help establish "the clearly expressed intent of Congress" (quoting \textit{Chevron}) and, based on its determination of that intent, refused to defer to the agency's interpretation of the statute.\footnote{\textit{Dole v. United Steelworkers}, 494 US 26, 40-42 (1990).} \textit{Babbitt v. Sweet Home Chapter of Communities for a Great Oregon} indicates that legislative history is also apparently relevant when it supports agency interpretations of statutes.\footnote{\textit{Babbitt v. Sweet Home Chapter of Communities for a Great Oregon}, 515 US 687, 704 (1995).} Not all judges, of course, believe that legislative history should play a significant role in court decisions. As discussed below, these judges may not be much help to the EPA, however.\footnote{With regard to legislative history, the EPA might argue that it is less relevant in this context than it was in \textit{Train} because Congress foresaw regulation of lead, but could not have foreseen GHG regulation. A similar argument was rejected by the Court in \textit{Massachusetts v. EPA}. See 549 U.S. 497, 528-29.}

The structure of statutes also seems to be relevant for \textit{Chevron} Step 1 analysis. In \textit{Babbitt v. Sweet Home}, the Court engaged in a detailed analysis of the Endangered Species Act. The majority determined that relationships between different provisions of that statute—its internal structure—were relevant to a determination of Congressional intent.\footnote{\textit{Babbitt} at 695, 708} In his dissent in the same case, Justice Scalia relied on inconsistencies he perceived between the EPA's interpretation of the
statute and its structure to explain why he would have rejected that interpretation as "unreasonable[]." 99

In sum, therefore, the three grounds upon which the Second Circuit based its holding in _Train_—canons of statutory construction, statutory structure, and legislative history have all been used in the progeny of _Chevron_ to determine whether statutory language is ambiguous under Step 1. In this respect, _Chevron_ does not appear to have changed courts' approach very much, and the same arguments that were used to defeat the EPA's broad interpretation of §108(a)(1)(C) in 1976 seem to be just as relevant today. The EPA needs to survive _Chevron_ Step 1 to access the new standard of deference that it believes will permit a new interpretation of the §108 endangerment provision. If the same facts that led it to lose in _Train_ enable a court to find that the statute is unambiguous and therefore prevent the agency from getting to Step 2, any additional deference in the face of statutory ambiguity is irrelevant. _Chevron_ will have changed nothing.

The EPA's best defense in Step 1 can also be found in _Train_ itself. The Second Circuit seems to state in that case that §108(a)(1)(C) is in fact ambiguous:

"[w]hile the literal language of 108(a)(1)(C) is somewhat ambiguous, this ambiguity is resolved when this section is placed in the context of the Act as a whole and in its legislative history." 100

Superficially, this statement seems helpful to the EPA—if the _Train_ court, having marshalled all the evidence at its disposal, still determined that the statute was ambiguous, shouldn't a post-_Chevron_ court do the same thing, and permit the agency to reach the deferential promised land of Step 2? Probably not. The Second Circuit's statement should not be viewed as conclusive on the issue of ambiguity. The Second Circuit in 1976 was not using "ambiguous" in its post-_Chevron_ sense, as a talismanic ticket to increased deference. The word was not magic in 1976, and should not carry as much meaning as it would if a modern court were to make a similar declaration. Second, the court's statement is best read only as an indication that the statute is _superficially_ ambiguous. After declaring the statute to be "somewhat ambiguous," the court immediately states that "this ambiguity is resolved" by the structure and legislative history of the act. This analytical move is no different from that which a post-_Chevron_ court would make—if

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99 _Babbit_ at 722 (Justice Scalia, dissenting). Use of the "reasonableness" language indicates that this determination might fit better under Step 2 than Step 1.

100 _Train_ at 327.
legislative history, canons, and structure of statutes are relevant at all under Step 1, it must be when plain language alone is not enough to render a statutory provision unambiguous on its face. If such clearly unambiguous language were necessary for agencies to lose at Step 1, there would be no need to bring up other evidence of Congressional intent at all. In short, the quoted language from *Train* is best read as indicating that the statute is *not* ambiguous once all relevant information is considered. For these reasons, an attempt by the EPA to use *Train* for its own benefit to escape defeat at *Chevron* step 1 would probably fail.

In their commentary on a post-*Chevron* reinterpretation of §108(a)(1)(C), Chettiar and Schwartz argue that legislative history and statutory structure evidence may not be as compelling as they were in *Train*. Some statements in the legislative history couch revisions of the §108 list (as opposed to the initial list) in permissive, rather than mandatory language.101 As discussed in Section 5.1 above, however, the revision language in §108(a) is equally mandatory to the initial listing language, and subject to the requirements of §108(a)(1)(A)-(C). The language cited in the legislative history (e.g., that the EPA “can add to the list periodically”)102 can also be interpreted not as indicating that the agency has discretion to decide not to list a pollutant, but as expressing uncertainty about whether additions will be necessary.103

Chettiar and Schwartz also note that the structure of the CAA, both in the statutory language and in practice, has changed somewhat since *Train* was decided. It is now common practice, they note, for the EPA to regulate emitters of some pollutants by setting NSPS under §111 of the act even though those pollutants have not been listed under §108 and regulated with a NAAQS. While it is true that these “designated pollutants” were not a feature of CAA regulation in 1976 (they are in large part the result of changes to the §111 endangerment provision in 1977 amendments to the CAA), this fact is unlikely to change the result in a case over the link between §202 and §108. There have been no changes to the endangerment

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101 Chettiar and Schwartz, *The Road Ahead* at 37 (cited in note 40).

102 Id (quoting S. Rep. No 91-1196 (1970)).

103 This distinction is admittedly harder to draw with the third quote Chettiar and Schwartz make from the Senate Report: “If the Secretary subsequently should find that there are other pollution agents for which the ambient air quality standards procedure is *appropriate*, he *could* list those agents.” (S. Rep No. 91-1196 (1970)(emphasis added by Chettiar and Schwartz). The court would therefore have to weigh this statement against the other legislative history cited in *Train* and available elsewhere. For the reasons discussed in Section 5.1, however, it seems very unlikely that the court would determine that §108(a) gives the EPA discretion over revisions of the pollutant list, but not the initial listing, the conclusion that this quote from the Senate Report seems to support.
provisions in either of those sections (or that in §211, the subject of Train). The Train court does make general statements that regulation in the CAA by air quality standards (§§108-110) and by performance standards (§202, §211, §111, etc.) are intended to be parallel, not separate programs. These general statements certainly no longer hold with respect to §111, but there is no reason for a court to conclude that the specific exception created by Congress in the 1977 amendments should extend to regulation under §202 or §211, when no changes were made to those sections. If anything, it should increase a court’s confidence that the structure of the CAA indicates that the NAAQS and mobile source regulation are intended to operate together—the 1977 amendments to §111 show that Congress clearly knows how to authorize independent regulation through performance standards, and the fact that §202 and §211 were not changed then or since is evidence by inaction that Congress intended no such independent regulation under these schemes.

The legislative history and the changes in statutory structure identified by Chettiar and Schwartz will be examined by a court, but overall they therefore seem unlikely to significantly weaken either type of evidence in Chevron step 1 analysis.

The result indicated by the analysis presented above—that the Train decision and its legal foundations will prove sufficient for a modern court to declare the statute unambiguous—is the most likely result of new litigation over §108(a)(1)(C). It is nevertheless possible that a court would find some ambiguity and that the agency would therefore survive Chevron step 1 analysis. Some examination of the likelihood of success on Chevron step 2 is therefore useful.

5.4 The EPA’s Interpretation of §108 Under Chevron Step 2

Should the EPA survive Chevron Step 1, its chances for success are much greater. The Supreme Court has never ruled against an agency decision of law in Step 2 (though some appellate courts have made such rulings).104 Step 2 is true "Chevron deference." As some D.C. Circuit judges105 and some scholars106 have observed, Step 2 is difficult to separate from Step 1 ambiguity analysis and traditional APA arbitrariness review of agency decisions (as opposed to

106 See generally Stephenson and Vermeule, Chevron Has Only One Step (cited in note 85).
interpretations of law). Step 2 analysis often includes detailed review of agency decisionmaking processes, much like arbitrariness review. 107 No such decisionmaking process is present for the EPA's interpretation of the §108 endangerment provision, however. This could be evidence that review of this interpretation fits better in Chevron step 1—the Second Circuit's analysis in Train of essentially the same question certainly has much more in common with post-Chevron cases decided on Step 1 grounds than those decided on Step 2 grounds.

If the agency does, however, survive to reach Step 2, the court will have to base its analysis on the same types of evidence discussed above for Step 1. The question under Step 2 is, of course, somewhat different. Where Step 1 may be viewed as an attempt by the court to determine whether traditional interpretive tools can resolve a statute's meaning to a point, Step 2 allows the court to determine whether an agency's interpretation falls within a reasonable or permissible range. 108 Despite this distinction, the facts that tend to show whether the agency interpretation is outside this range are the same as those that can be used to determine if ambiguity exists in the first place. Canons of construction, statutory structure, and legislative history could all narrow the reasonable range of interpretation by excluding certain views of a statute. Indeed, these two inquiries may be so similar that there is no real difference in practice, and the decision of whether to frame a decision in Step 1 or Step 2 may be somewhat arbitrary or driven by exogenous factors. 109

Given the lack of any significant precedent for decisions against agencies on Step 2 grounds, it is generally difficult to foresee the EPA's interpretation of §108(a)(1)(C) being rejected at this stage. Victory for the agency would not be certain, however. The strong evidence for a non-discretionary interpretation of the provision cited in Train is just as relevant in Step 2 as in Step 1, and could be enough for a court to rule against the agency. The dissimilarities between a hypothetical suit over §108(a)(1)(C) and most Chevron step 2 cases also point toward a tendency on the part of courts to resolve such narrow questions of statutory interpretation (or construction, depending on one's point of view) at Step 1. This just doesn't look like a Step 2 case, but even if it is treated as one, the agency might not win it.

107 See, e.g., Ohio v. Department of Interior at 443-458 (cited in note 88).
108 Stephenson and Vermeule, Chevron Has Only One Step at 600 (cited in note 85).
109 Courts might, for example perceive a risk that decisions against an agency on Step 2 would be more likely to be reversed on appeal, or believe that Step 1 decisions declaring statutes to be unambiguous are more politically or rhetorically credible.
5.5 Other Perspectives on Chevron's Impact

Some scholars who have analyzed court review of agency decisions since *Chevron* have come to the conclusion that judges' policy preferences play a significant role, possibly exceeding that of the level of deference nominally shown to agencies.\footnote{See Miles and Sunstein, *Do Judges Make Regulatory Policy?* at 823-827 (cited in note 84).} This analysis shows that "conservative" justices are more likely to invalidate agency decisions than "liberal" justices on the Supreme Court, and that judges are more likely to validate decisions from agencies under ideologically-similar presidential administrations.\footnote{Id.} Viewed from this legal realist perspective, the EPA's chances of securing a new interpretation of the §108 endangerment provision seem even bleaker.

In a suit over the interpretation of §108(a)(1)(C), the EPA would be attempting to defend its interpretation against a challenge from environmental groups, much like it was attempting to defend its preferred definition of "pollutant" against the pro-regulation states in *Massachusetts v. EPA*. Conservative Justices such as Justice Thomas or Justice Scalia, who might arguably prefer a result that did not compel regulation are historically also the most likely to reject agency interpretations in *Chevron* cases, and also the most likely to rule against agencies under Democratic administrations (though this latter data point may have less relevance, since the EPA would be sued from its leftward flank). Similarly, those Justices that might ideologically favor the plaintiffs in such a suit are traditionally highly deferential to agency interpretations.\footnote{The ideological positions in this hypothetical case might be somewhat hard to characterize. If mainstream environmental groups support the EPA’s position, and the plaintiffs appear to be only fringe groups, “liberal” Justices might be relatively more likely to favor the agency position. If this is the case, then those same Justices’ traditional deference to agency interpretations would support, rather than counter their ideological position. As a result, an agency victory might be more likely. If, on the other hand, mainstream environmental groups are the plaintiffs or file briefs in favor of a non-discretionary interpretation of the provision in question (perhaps for strategic reasons, as discussed in footnote 75), these Justices will face the conflicting tendencies described.} If the Supreme Court reviews a DC Circuit decision on this issue, therefore, the chances of cobbling together a 5-vote majority for the agency's interpretation seem remote. Another way of looking at the politics of the court is that the EPA would essentially be asking the majority in *Massachusetts v. EPA* to switch their votes from rejecting an agency interpretation of a term in the CAA to accepting an agency interpretation of a different provision, when both agency interpretations would result in less regulation. Of course the facts would be completely different.
in a §108(a)(1)(C) case, but Sunstein and Miles' research shows that judges' level of deference to agencies is somewhat stable over time. Failing such a shift, the agency would have to hope for an odd coalition of justices that are either ideologically opposed to the result sought by the plaintiffs or exceptionally willing to show deference to agencies.

5.6 A Broader View

This case raises broader issues related to *Chevron* and judicial review of agency interpretations. The first of these is the intersection between *Chevron* and *stare decisis* principles. As mentioned above, the DC Circuit in a hypothetical case over the EPA’s interpretation of §108(a)(1)(C) would be reviewing the issue *de novo*—the Second Circuit’s holding in *NRDC v. Train* would not hold precedential value. *Train* would still have some persuasive value, however, and even if the earlier case had been decided by the DC Circuit, its precedential value given the intervening *Chevron* decision would not be completely clear. The Supreme Court held in *National Cable & Telecommunications Ass’n v. Brand X Internet Services* that “[a] court’s prior judicial construction of a statute trumps an agency construction otherwise entitled to *Chevron* deference only if the prior court decision holds that its construction follows from the unambiguous terms of the statute and thus leaves no room for agency discretion.”113 Thus the precedential value of previous cases appears to hinge on the same ambiguity finding that courts today have to make at *Chevron* step 1. Some scholars have criticized this focus on ambiguity here and in *Chevron* cases generally.114 As mentioned above, pre-*Chevron* courts could not have known that their declarations that a given text was ambiguous or unambiguous would later be given such effect, separate from the rest of their decisions. They similarly could not have used *Chevron* and its extensive progeny to determine what tools and methods were appropriate for determining ambiguity. Some courts might have declared statutes unambiguous using methods that would now be considered outside the boundaries of *Chevron* step 1, and others might have declared statutes ambiguous when full use of the tools now available under Step 1 would have led them to a different conclusion.

With respect to the *Train* court, this dilemma is particularly salient. As discussed above, the court called the language in question “somewhat ambiguous” before ruling that this

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114 See generally Slocum, *The Importance of Being Ambiguous* (cited in note 93).
ambiguity “is resolved” once certain tools are applied (the canon against surplusage, the statutory structure, and legislative history). A court revisiting the issue today could, citing National Cable, simply disregard Train as precedential or persuasive because the Second Circuit declared the statute to be ambiguous. On the other hand, as discussed above, the best reading of the Second Circuit’s statement is that it believed that the statute was not ambiguous. Even if one disagrees with that interpretation, the result is that Train itself is ambiguous on this point, which is profoundly unhelpful. In short, National Cable does little to resolve the stare decisis issue here, and a case relitigating the interpretation of §108(a)(1)(C) may illustrate that its value is limited generally.

A second issue is strategic: if the EPA really believes that, given Chevron, its interpretation of §108(a)(1)(C) is now legally valid, why has it waited 34 years to challenge Train? Surely the agency must have considered regulating some pollutant under §211, §202, or some other CAA provision that would have triggered Train’s presumption of endangerment under §108. The EPA has not even issued NAAQS for any new pollutant since lead was added to the list in the wake of Train. This implies, but does not prove, that the EPA adhered to the non-discretionary interpretation of §108(a)(1)(C) established by Train even after Chevron gave the agency an opportunity to challenge that interpretation (that is, until the agency advanced its new, discretionary interpretation in the 2008 ANPR).

To be sure, agencies are entitled to change their interpretations of statutes and still receive Chevron deference. Similarly, an agency’s refusal to change an interpretation probably has limited legal relevance, if any (though the Supreme Court has held that “longstanding” interpretations are entitled to additional deference, implying a preference for the status quo). Nevertheless the EPA apparently acquiesced to a non-discretionary interpretation of §108(a)(1)(C), then operated under that assumption for more than 30 years. It only recently has

115 Train at 327.
116 See Section 5.3 above.
117 It is possible, of course, that the agency has simply determined that there are no pollutants that it might want to regulate under §202, §211, or other sections that would, under Train, trigger §108. As discussed above, Congress explicitly allowed regulation of pollutants under §111 (NSPS) without regulation under the NAAQS in the 1977 amendments to the CAA. New pollutants regulated by the EPA since Train have been regulated under this provision or under §112 (which contains an exclusion preventing parallel regulation under the NAAQS, See CAA §§112(b)(2)).
shown willingness to challenge that interpretation, and then only when courts’ rejection of its interpretation of a different part of the CAA (in Massachusetts v. EPA) put the agency into an uncomfortable position. Whatever their legal relevance, these facts present the EPA with a rhetorical challenge. It must confront them or the agency will appear to be twisting the meaning of the CAA for its own convenience. Even if that perception has little effect on the outcome of a suit over §108(a)(1)(C), it may damage the credibility of both the agency and the CAA.

6. Conclusions and Implications

With Congressional action on climate change apparently paralyzed while the EPA rapidly moves ahead with its §202 endangerment finding and other moves, CAA regulation of GHGs is rapidly moving from speculation to reality. Though no one believes that the CAA is an ideal tool for the climate change problem, it is widely (though not universally) viewed as a plausible second-best alternative. All those who suggest that CAA GHG regulation is practical, however, explicitly or implicitly assume the EPA has choice among the regulatory schemes in the Act. Almost all also agree that a NAAQS for GHGs would create serious regulatory problems. Congress has recognized the problem as well—the authority to issue a GHG NAAQS is explicitly taken away from the EPA in the Waxman-Markey cap-and-trade bill that passed the House.

If the EPA does not have a choice among schemes and is instead required by law to issue a NAAQS, and if Congress does not act to change the statute and prevent this (either as part of a cap-and-trade bill or in a separate “rifle shot” law), the agency will face significant administrative challenges while being precluded from developing CAA GHG regulations that most claim would be superior to the NAAQS. To be sure, regulation of GHGs through the NAAQS would not necessarily be a total disaster: assuming the problems discussed above could be resolved, the EPA might even be able to administer a cap-and-trade style regulatory program through state SIPs, as it has done for regulation of nitrous oxides. Indeed a small minority of commentators feel that the NAAQS are at least part of their preferred CAA regulatory program

119 See sources cited in notes 40 and 50.
120 See H.R. 2454 §831 (cited in note 37).
121 See, for example, Daniels et al, Regulating Climate at 10838-39 (cited in note 42).
122 See sources cited in note 50.
for GHGs. The prevailing view, however, is that the NAAQS are a very poor fit for regulation of GHG emissions. They are such a poor fit, in fact, that some have argued that even if the EPA were to lose a suit over the interpretation of §108(a)(1)(C), the agency might be saved from having to issue a NAAQS by application of the “absurd results” canon.123 This is the same legal position advanced by the EPA in its “tailoring rule,” in which it is attempting to limit permitting requirements to “major” GHG emitters despite clear CAA language to the contrary.124 While a full analysis of the likelihood of success in either case based on the absurd results canon is beyond the scope of this paper, the canon is rarely applied. It is not really so much a legal “canon” as the agency throwing itself at the mercy of a court. To the extent that it is a legal strategy at all, it is a strategy of last resort.

The slow nature of the NAAQS process is a double-edged sword. The EPA would not have to implement NAAQS-based regulations (through the states) immediately, which would allow some time for other regulations and/or Congressional action to resolve the problems discussed in this paper. At the same time, the agency might be distracted from efforts to regulate GHGs and other pollutants while the NAAQS process continues. More importantly, key regulatory tools that the EPA might use to regulate GHGs under the CAA, above all §111(d) performance standards for existing sources, would be unavailable during this time due to preclusions in the CAA itself.

The EPA is also unlikely to be able to “sneak through” by refusing to address the question. Some environmental groups, seeing delay in regulation of stationary-source GHGs on other fronts, will almost certainly file suit to compel the EPA to issue GHG NAAQS as soon as the §202 endangerment finding is finalized (though other groups might support the EPA’s claim of discretion). The EPA could, of course, prevent this by refusing to finalize the §202 endangerment finding. This seems politically unlikely, and in any case would violate the Supreme Court’s Massachusetts v. EPA directive unless the EPA can explain its refusal. In all likelihood the die has been cast—the EPA will almost certainly have to defend its new interpretation of §108(a)(1)(C) in court.

The EPA might win this suit by claiming that Chevron entitles it to essentially overrule the Second Circuit’s holding in Train. For all the reasons discussed above, however, this seems

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124 See Proposed Tailoring Rule at 55306-07 (cited in note 4).
unlikely. It is possible that such a suit will take so long that Congress will eventually resolve the issue. While Chettiar and Schwartz are somewhat more optimistic (from the agency’s perspective) than I am that a court would be able to distinguish *Train* and accept the EPA’s discretionary interpretation of §108(a)(1)(C), their broader conclusion is very similar the one I reach here—that, as they put it,

[C]hoosing not to issue NAAQS for greenhouse gases may be a risky strategy from both a legal and practical perspective. Moreover, such an action could create a dangerous precedent granting EPA too much discretion on listing other criteria pollutants in the future. A legislative fix to this potential problem may be necessary and appropriate if EPA does not wish to pursue NAAQS for greenhouse gases.125

Recent experience suggests that legislative inertia should not be underestimated when it comes to climate change issues, however. If Congress does not act—either to pass legislation that would supersede the EPA’s CAA authority over GHGs, or a “rifle shot” law126—regulation of GHGs under the CAA is likely to create significant regulatory problems for the EPA and the nation as a whole. The EPA is currently trying to dodge one oncoming regulatory train with its tailoring rule. This may or may not succeed. The agency, Congress, regulated industries, and the policy community should be aware that a second train—lack of NAAQS discretion—is right behind.

The challenge presented by lack of EPA discretion over setting a GHG NAAQS is twofold. First and most obviously, Congress should act to resolve these issues by passing comprehensive climate legislation or by surgical modification of the CAA with a “rifle shot” law. Second, the academic and policy communities should consider the possibility of regulating GHGs under the NAAQS more seriously. While most scholars have rejected the NAAQS relatively quickly, it may turn out to be both the first and only real option for regulation of GHGs under the NAAQS more seriously. While most scholars have rejected the NAAQS relatively quickly, it may turn out to be both the first and only real option for regulation of


126 Such a “rifle shot” might come in one of three varieties. First and most obviously, Congress could remove GHGs from NAAQS consideration, as the Waxman-Markey bill does. Second, the EPA could modify §108(a) to explicitly grant the EPA the discretion that it claims it has to decide whether a pollutant should be listed. Third, Congress could adjust §111(d) so that performance standards for existing sources can be issued even if a pollutant has been listed (either for all pollutants, or for GHGs only). This last option would not solve the conceptual problems of a GHG NAAQS, but would at least allow effective CAA regulation to proceed while those problems are worked out. Note also that “rifle shot” legislation has been proposed for the other significant problem caused by the §202 endangerment finding: triggering of PSD/NSR permitting for small GHG sources (the problem the tailoring rule is designed to address).
stationary-source GHGs under the CAA. The NAAQS have been used to regulate other pollutants more or less efficiently, most notably with the creation of a cap-and-trade system for NOx. Despite the conceptual inconsistencies and other problems presented by NAAQS in the GHG context, it is possible that an effective regulatory program could be set up for GHGs within the statutory limits of the NAAQS. More legal, policy, and economic analysis needs to be done to determine whether and how this might be possible.